ORGANIZATION OF URBAN AGRICULTURE IN MITCHELLS PLAIN, CAPE TOWN

by

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A thesis submitted in fulfilment of the requirements for the degree of Magister Artium in the Department of Geography, Environmental Studies and Tourism, University of the Western Cape.

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DECLARATION

I, Tinashe P. Kanosvamhira, declare that “Organization of urban agriculture in Mitchells Plain, Cape Town” is my own work, that it has not been submitted before for any degree or examination in any other university, and that all sources used or quoted have been indicated and acknowledged by complete references.

__________________________________  __________________________
Tinashe P. Kanosvamhira                                   Date
ACKNOWLEDGEMENTS

I would like to thank God for the gift of life and the capacity to pursue my dreams.

I am forever grateful to Professor Tevero who recognised the research potential in me a few years ago and awarded me an opportunity to develop these skills under his guidance and mentorship. I appreciate his valuable and constructive suggestions during the planning and development of this research work.

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I appreciate all the time sacrificed by all the individuals who participated in this study.

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Finally, I wish to recognize the invaluable support that I received from my friends who made my academic journey quite memorable.
## ABBREVIATIONS & ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CoCT UAU</td>
<td>City of Cape Town Urban Agriculture Unit</td>
</tr>
<tr>
<td>DOA</td>
<td>Department of Agriculture</td>
</tr>
<tr>
<td>IBM</td>
<td>International Business Machines</td>
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<tr>
<td>NEFSALF</td>
<td>Nairobi and Environs Food Security, Agriculture and Livestock Forum</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>SCAGA</td>
<td>Siyazama Community Allotment Garden Association</td>
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<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SEED</td>
<td>Schools Environmental Education and Development</td>
</tr>
<tr>
<td>SFL</td>
<td>Soil for Life</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>UAP</td>
<td>Urban Agriculture Policy</td>
</tr>
<tr>
<td>UFiSAMo</td>
<td>Urban Agriculture for Food Security and Income Generation in South Africa and Mozambique</td>
</tr>
<tr>
<td>UVPP</td>
<td>Urban Vegetable Promotion Project</td>
</tr>
<tr>
<td>VUFA</td>
<td>Vuka Uzezenzele Urban Farmers Association</td>
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ABSTRACT

Cape Town has arguably the most diversified urban agriculture sector across the country. Nevertheless, the desired gains of urban agriculture are barely realized. The organization of urban agriculture, specifically the nature in which urban farmers are organized in relation to supporting actors, is identified as a significant factor in influencing the success of the activity. Surprisingly, the literature on the organization of urban farmers and supporting actors in Cape Town is scanty. It is on this basis that this study aimed to investigate the organization of urban farmers and their relationship with supporting actors in Mitchells Plain. Informed by the social capital theory, a case-study approach was employed where both the qualitative and quantitative methods of data collection and analysis were utilized to meet the study objectives. A random sampling technique was used in the selection of the 60 respondents for a questionnaire survey. Purposive sampling was employed to select the key informant respondents which included knowledgeable urban farmers, Non-Governmental Organization officials, a Research official and a Provincial Department of Agriculture official. Secondary data collection was achieved through a systematic review of scholarly literature and policy documents. The statistical software IBM SPSS 25 was employed to process and analyze quantitative data through descriptive and inferential techniques. For qualitative data, thematic analysis was conducted to process the transcribed interviews whilst a hermeneutic approach was used to analyze secondary data. The study findings show that urban farmers are organized into loose and largely fragmented informal networks within Mitchells Plain. Although these forms of networks in their current state are beneficial to household farmers, community farmers require more formal networks to operate optimally and receive resources beyond non-governmental organization assistance. Moreover, the study discovered a lack of meaningful coordination of activities between the supporting actors involved in urban farming initiatives which militate against the success of urban agriculture activities in the community. Consequently, the study recommends that supporting actors need to develop functional partnerships to enhance the impact of urban agriculture activities. Also, community farmers are encouraged to affiliate with formal networks while household farmers simply need to enhance informal networking amongst themselves to improve activity coordination and resource access from supporting actors.

Key Words: urban agriculture; urban farmer networks; social capital theory; organization; mixed methods; linkages; Mitchells Plain, Cape Town.
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CHAPTER 1: INTRODUCTION

1.1 Background
A recent survey indicates that Cape Town houses a population of approximately 4,004,793 (CoCT, 2016a), which is a significant 7.08% increase from the 2011 figure of 3,740,026 (CoCT, 2012). Unfortunately, when the rate of urbanization outpaces the speed of economic growth it results in unemployment and subsequent urban poverty. Accordingly, poverty remains a pressing problem for Cape Town (CoCT, 2013). Official statistics peg the unemployment rate at 24% and while this figure is well below the national average, youth unemployment is estimated at 47% (Haysom et al., 2017). The situation is further compounded by the largely tertiary driven economy which favors skilled labor hence offers limited opportunities for the semi-skilled and unskilled workforce (Haysom et al., 2017). Consequently, a majority of individuals are driven into the informal sector economy due to its low barriers to entry. Urban poverty is multi-dimensional in nature and manifests in several ways (CoCT, 2013). One of the key manifestations of poverty is the lack of access to food (CoCT, 2013), therefore, informal activities present a way through which the urban poor can counter food insecurity (Swanepoel et al., 2017). Current estimates suggest that the informal sector in Cape Town has grown rapidly in the last five years providing employment for approximately 186,000 individuals (Haysom et al., 2017).

Within this context, urban agriculture is a form of informal livelihood that has often been adopted by a number of individuals as one of several stratagems to augment household food security and income (Rogerson, 1993; Materechera, 2018). Despite its omnipresence, the capacity of the practice to contribute towards food security and income remains contested in South Africa (Haysom et al., 2017). On one hand, proponents maintain that urban agriculture is a viable livelihood strategy with the potential to provide food security and generate income (Rogerson, 1993; Van Averbeke, 2007). On the other hand, critics such as Webb (2011) disregard this notion. Critics maintain that there is a lack of an empirical base to endorse urban agriculture (Thornton & Nel, 2007; Webb, 1998). Despite these contestations, Olivier & Heinecken (2017a) argue that Cape Town has the most diverse urban agriculture sector with both state and non-state actors actively involved in promoting the practice. For instance, the City of Cape Town has a long history of supporting urban agriculture within its borders (Rogerson, 2010) and endorsed the practice through the Urban Agriculture Policy of 2007.
(Battersby & Marshak, 2013). Additionally, the Provincial Department of Agriculture (DOA) in the Western Cape has been instrumental in providing support to the sector (Swanepoel et al., 2017). Similarly, Non-Governmental Organizations (NGOs) are also dominant in the urban agriculture sector across the metropolis (Olivier & Heinecken, 2017a). Notwithstanding, the economic benefits of urban agriculture in Cape Town remain modest (Slater, 2001; Crush et al, 2011; Haysom et al, 2017). However, there is a consensus that the ‘relatively small material benefits derived from urban agriculture … should not be viewed as a reason for ignoring its overall importance’ (Maswikaneng et al., 2002:21) hence support for the practice has continued.

Various reasons have been promulgated in the academic arena to explain the low returns on urban agriculture initiatives, for instance, prohibitive policies, water constraints, poor training and monitoring and inadequate support (Battersby et al., 2014). Yet, one often less acknowledged and documented challenge is the organization of urban farmers and supporting actors (Schmidt et al., 2015). From a broader perspective, Larbi et al. (2014) argue that the organization of urban farmers in relation to supporting actors significantly affects the success of urban agricultural activities. More eloquently, Schmidt et al. (2015:153) state that ‘the degree and extent to which urban farmers organize and pool their resources, protect their interests, and collaborate is vital to the successful and efficient functioning of urban farming’. The organization of urban farmers has been recognized as a necessary strategy to ensure that they have improved access to resources from both state and non-state actors (Bellwood-Howard, 2015; Schmidt et al., 2015). Moreover, Voleniková & Opršal (2016) suggest that this organization facilitates lobbying for developmental change. Therefore, the success of urban agriculture not only lies in the ubiquity of support but also significant is the organization of the urban farmers in accessing this support and influencing favorable change.

In spite of this consensus among scholars, the empirical literature on the organization of urban farmers and supporting actors in Cape Town remains scanty. Firstly, missing in the Cape Town empirical debates is an examination of the coordination between urban farmers, state actors and non-state actors. Moreover, available literature fails to sufficiently interrogate the factors which facilitate the networking of urban farmers in accessing resources and formulating desirable change. Most of the literature on urban agriculture in Cape Town focuses on the impact of urban agriculture on livelihoods, in terms of food security, income generation, social and environmental benefits (Reuther & Dewar, 2006; Crush et al., 2011).
Against this backdrop, this study shifts the focus by exploring the organization of urban farmers and their relationship with supporting actors in Mitchells Plain, Cape Town. This research is in line with the postulation by Frayne, McCordic & Shilomboleni (2014) who argue that there is a need to acknowledge context since contextual variables influence local urban agricultural practices and responses. Furthermore, to the researcher’s knowledge, the study is the first of its kind to attempt to quantitatively explore urban farmer’s networks and their dynamics which is crucial information for policymakers in Cape Town. In essence, urban farmer organization is vital as it improves urban agriculture (Schmidt, 2012) which can simultaneously result in the fulfilling of the Sustainable Development Goals (Game & Primus, 2015). The researcher adopted the social capital lens to explore how urban farmers, supporting organizations and the community are all connected in Mitchells Plain. This theory takes into account the urban farmers and actors involved which enabled the researcher to describe the multidimensional interactions which influence the current state of urban agriculture in the study area.

1.2 Problem Statement
Cape Town is arguably the torch bearer in terms of supporting urban agriculture activities in South Africa (Rogerson, 2010; Olivier & Heinecken, 2017a). This is reflected by the prevalence of support from the provincial government, local government and NGOs. Nevertheless, urban farmers continue to realize modest benefits from the practice (Slater, 2001, Haysom et al., 2017). This scenario compelled the researcher to investigate what complexities (if any) exist on the ground that hinder the possibility of acquiring the desired gains of urban agriculture. Given the various players involved in the sector, there is a need to understand the influence of difference synergies which exist between the various stakeholders (Smit, 2016). Specifically, it is important to examine the relationship between urban farmers with major actors. In this case, this study is framed in the context of the social capital theory which suggests that the nature of relations between various stakeholders has a huge influence in project implementation and success (Nieman, 2006); therefore, there is a need to understand these relationships. To date, to the best of the researcher’s knowledge, no investigation has been carried out which attempts to comprehensively examine the organization of urban farmers and their linkages with NGOs and state institutions in Cape Town. A number of previous studies on urban agriculture focus on the socio-economic contribution of urban agriculture, its environmental impact, and generally review the policies
and legislation towards the practice (Schmidt et al, 2015) and South Africa is no exception. Surprisingly, most of these studies fail to adequately examine urban farmer organization and interlinkages with supporting actors and the subsequent impact on the activity. This presents a crucial drawback because, without an appreciation of the nature of the often complex underlying interactions between the players involved and their relationship with the beneficiaries, projects are often futile. On this backdrop, this research explores how the organization of urban farmers influences the capacity of the activity in Mitchells Plain, Cape Town. By taking into account the urban farmers and actors involved the researcher was able to examine the multidimensional interactions which influence the current state of urban agriculture in the study area. Accordingly, this research will provide an important foundation towards the formulation of location-specific urban agriculture interventions capitalising on the already existing networks in the study area which development practitioners can exploit.

1.3 Rationale
Despite the continued interest in urban agriculture in South Africa, the current debate on this subject as observed by Tembo & Louw (2013) continues to be highly contested and complex. Numerous studies have been undertaken, and an ever-expanding body of literature exists on the economic benefits of urban agriculture in Cape Town (Crush et al., 2011), and more recently on the non-economic benefits (Slater, 2001; Battersby & Marshak, 2013; Olivier & Heinecken, 2017a). To the researcher’s knowledge, there is a dearth of information on urban farmer organization across Sub-Saharan Africa (Schmidt et al., 2015) and South Africa (Malan, 2015). Focusing on Cape Town there is no study that investigates the organization of urban farmers and supporting actor influence. Therefore, by adopting a social capital theory lens, this study goes beyond the usual literature on urban agriculture by exploring the organization of urban farmers in the study area and how this is influencing the performance of the sector. The focus on the organization of the activity is significant as it provides an opportunity to explore the linkages between state actors, non-state actors and the urban farmer. For example, Haysom & Battersby (2016) in a review paper titled ‘Why urban agriculture isn’t a panacea for Africa’s food crisis’ argued that one of the ways through which urban agriculture could be improved was through improved synergies between key stakeholders. Battersby et al. (2014) are of the opinion that competing agendas affect the capacity of different stakeholders in coordinating urban agriculture activities. Nevertheless, no empirical studies have explored these propositions.
Therefore, this study attempted to empirically interrogate this viewpoint further in a Cape Town context. The study strives for the improvement of urban farmer conditions in the context of increasing poverty levels and the drought conditions being experienced in the Western Cape Province. Against this backdrop, this research will proffer stakeholders, particularly the local government, the provincial government, as well as non-governmental organizations valuable data which may enhance the coordination of their activities and improve the conditions of urban farmers given the various aforementioned mitigating factors. Enhancing urban farmer organization will result in the improvement of urban agriculture activities which has a number of multiplier effects such as the fulfilling of the SDGs. For instance, improving urban agriculture practices can result in the realization of SDG 1, 2, 3, 11 and 13 given the high rates of urbanization and unemployment, poverty and food insecurity within the Sub-Saharan African cities (Crush et al., 2011). Further, the data collected is intended to aid NGOs and the government to appreciate the demographics of urban farmers in Mitchells Plain and to identify their level of networks. This information can be exploited by these state and non-state institutions to provide appropriate support of urban farmers in the study area.

1.4 Aim
To examine how urban farmers organize themselves and interact with supporting actors to perform urban agricultural activities Mitchells Plain.

1.5 Specific objectives
1. To investigate the socio-spatial characteristics of urban farmers in Mitchells Plain.
2. To examine how urban farmers in Mitchells Plain have organized themselves as producers of fresh food for own consumption and the market.
3. To examine the challenges that urban farmers face in organizing and networking and how they are responding to these challenges in Mitchells Plain.
4. To assess the interactions between urban farmers and the community in Mitchells Plain.
5. To investigate the linkages between urban farmers and supporting organizations and how these linkages promote or hinder urban agriculture in Mitchells Plain.
1.6 Study Area

The study was carried out in Mitchells Plain, a large township (Figure 1.1) on the Cape Flats of Cape Town harbouring a population of approximately 310 485 citizens (StatsSA, 2013). Geographically the Township lies between 34°3′2″S latitude and 18°37′5″ longitude and is located 20 kilometers to the south-east of the city center. Mitchells Plain was created to alleviate housing shortages in Cape Town in the 1970s. Originally it was designed as a model ‘dormitory suburb’ for ‘colored people’¹ and was occupied by middle-income coloreds. The emergence of Mitchells Plain was a direct result of the implementation of the Group Areas Act of 1950 apartheid legislation (Rono & Cottle, 2014). This Act meant that the government had to search for new land to relocate colored people that were forced out of District Six following its proclamation as a white only area under the apartheid era. Though located away from white settlements it was simultaneously isolated from the black and Indian communities as well (DPLG, 2011). By the late 1990s, large areas of Mitchells Plain deteriorated into ghettos and informal settlements sprouted. Today it is home to over 91% of ‘generally low-income and working class’ colored residents (Haysom et al., 2017:7). Consequently, the research area was deemed suitable for the study because the findings can be generalized with caution to some parts of the city where urban agriculture is utilized in similar socio-cultural contexts, for instance, Khayelitsha, Nyanga and Gugulethu (Karaan & Mohammed, 1998; Tembo & Louw, 2013).

¹ The apartheid regime resulted in racially separated development. The term ‘colored’ borne from this regime was used to refer to mixed-race people.
Mitchells Plain is located on a generally flat and sandy area and has several open spaces (DPLG, 2011). Rono & Cottle (2014:1) note that the study area is located on ‘a coastal region categorized by a flat and infertile, beach-like sandy terrain’. To put it more simply, the soil type presents a significant hindrance to urban cultivators in the area due to the scarcity of nutrient-rich soil. As a result, this presents a significant challenge for urban farmers in the area as they require a significant amount of agricultural inputs to realize any output (Battersby et al., 2014). The quality of the soil coupled with the annual wrath of gale force winds experienced in the area ‘provide the perfect horror for any garden enthusiast’ (Rono & Cottle, 2014:1). Moreover, while open spaces are available in the area they are seen as viable sites for development hence contestations over land use are prevalent (DPLG, 2011).

Mitchells Plain like the rest of Cape Town falls under the Mediterranean climate receiving winter rainfall ranging between 500mm to 700mm annually. Historically Cape Town is not a water-rich area (Maclear, 1995) hence faces drought and water scarcity conditions.
occasionally (CoCT IDP, 2017). As a result of climate variability, ‘the viability of the local food system is coming under severe pressure’ (Haysom et al., 2017:28). The unreliable rainfall patterns and subsequent water restrictions (CoCT IDP, 2017) mean that urban agriculture is not excluded from this assertion. Rono & Cottle (2014) eloquently detail the water challenges urban farmers face in Mitchells Plain - the study area of this research. However, an extensive groundwater resource underlies most of the areas found in the Cape Flats (Maclear, 1995). Maclear (1995) acknowledges that this presents an important opportunity for water harvesting through the drilling of boreholes. Some of the exploratory boreholes are being used to recover water for horticultural purposes to augment the main water supply. However, Pietersen et al. (2011) insist that the long-term continuous use of underground water without a significant recharge is barely a sustainable solution to the problem.

Some of the major challenges the area faces are that of spatial marginalization, high crime rate, overcrowding and limited access to public amenities (DPLG, 2011). In fact, the Mitchells Plain Township has been identified as a high priority area for action against crime and drug abuse (Thompson, 2016). A total of 63% of households in Mitchells Plain fall within the low-income bracket of which 16.5% have no income (CoCT, 2016b). Consequently, some of its residents engage in urban agricultural activities at a household level to augment household income and food security (Swanepoel et al., 2017). Non-governmental organizations have been active in the area to assist residents in engaging in urban agricultural activities in an attempt to improve their livelihoods. One example is the Schools Environmental Education and Development (SEED) an NGO which currently supports a hundred household farmers in the area into farming based on permaculture principles (Battersby et al., 2014). The Western Cape government (Swanepoel et al., 2017) and local government (Battersby et al., 2014) also offer support to urban farmers in the area. From a broader perspective, the socio-economic conditions in Mitchells Plain (high rates of poverty and unemployment) reflect many similarities with other communities across South Africa hence the relevance of conducting the research in the area.

1.7 Structure of thesis
This research is organized into 6 main chapters. The structure of the study for this study is as follows:
Chapter 1- Introduction: This chapter will provide a background and rationale for the study and convey the research question, aims and objectives of the study.

Chapter 2- Literature Review and Theoretical Framework: The chapter will present a review of the literature on urban farmer organization in Sub-Saharan Africa. Consequently, this chapter will uncover the salient aspects of previous research and identify the gap(s) in literature and how the study will attempt to fill in the existing gap(s) which exist in urban farmer organization in the region. This chapter will also introduce the social capital theory, the theoretical framework of the study and argue for its suitability.

Chapter 3- Methodology: The mixed methods design adopted during the collection of data will be explained in this section and the suitability of this research design will be argued. Data collection instruments utilised, sampling methods, data presentation and analysis will also be critically examined in this chapter.

Chapter 4- Urban farmer organization and networking: This chapter will focus on presenting the findings of the first 3 objectives of the study. The findings will be explained in the context of the theoretical framework adopted as well as existing empirical literature. This will then be followed by a discussion which highlights how urban farmer organization influencing urban agriculture activities in the study area.

Chapter 5- Urban farmers, the community and supporting actors: This chapter will focus on presenting the findings of the last two objectives of the study. Once again the findings will be discussed in the context of the social capital theory adopted as well as existing empirical literature.

Chapter 6: Conclusions and Recommendations: This chapter will sum up the study by giving a brief outline of the discussions in the whole study, giving concluding remarks and interpretations deduced and recommendations.
CHAPTER 2: LITERATURE REVIEW & THEORETICAL FRAMEWORK

2.1 Introduction
The aim of this chapter is to situate the study within a broader body of literature on the organization of urban farmers. The review will provide an overview of empirical studies on the organization of urban farmers in Sub-Saharan Africa (SSA). First, literature will be reviewed at a regional scale of SSA, then finally at a localized scale of Cape Town. The rationale for reviewing literature from an SSA context is because the region faces one of the highest urbanization rates in the world (Frayne, Crush & McLachlan, 2014). Unfortunately, Frayne, Crush & McLachlan (2014) note that this hyper-urbanization is characterized by increasing levels of unemployment deepening the levels of ‘food and nutrition insecurity in urban areas’. Given this situation, Sithole et al. (2012) believe that this will result in a call for changes in urban developmental policies to improve food security in urban areas. In this respect, urban agriculture is likely to continue gaining increased attention across SSA. Furthermore, there needs to be a clearer link of the Cape Town literature to a wider body of literature in the Sub-Saharan region to avoid a parochial analysis. Perhaps, it is important to underscore that the Sub-Saharan region consists of 46 countries. Hence, not all countries and cities thereof were able to be reviewed; instead, countries/cities where urban agriculture is topical were favored. Such cities in the region include Lusaka (Rakodi, 1988; Simatele et al., 2012), Harare (Drakakis-Smith et al., 1995; Mbiba, 2000), and Dar es Salaam (Halloran & Magid, 2013) among others. Overall, this chapter will present major arguments and gaps in the literature, thereby indicating ways through which this study will contribute to the broader stock of knowledge on urban farmer organization in SSA.

Finally, this chapter involves a discussion of the Social Capital Theory, the theoretical framework which provided the operating lens for this study. First of all, for the purposes of clarity, conceptualization of definitions employed throughout this report will be made from the outset.

2.2 Urban agriculture terminology and key actors.

2.2.1 Urban agriculture
Smit in Bellows & Nasr (2010:20) explains that ‘there are many different interpretations for what they [the words ‘urban agriculture’] actually mean’. Stewart et al. (2013), attributes this
difficulty to the differences in urban farming systems across the globe, characterized by variations in respect to local social, economic, political and geographic conditions. Perhaps the most popular definition of urban agriculture was proposed by Mougeot (2006) as it is cited in countless research articles (Stewart et al., 2013; Rogerson; 2010). Mougeot defines urban agriculture ‘as the growing, processing and distribution of food and non-food plant and tree crops and the raising of livestock directly for the urban market both within and on the fringe of an urban area’ (Rogerson, 2010: 373).

The definition provided by Mougeot (2006) suggests that urban agriculture can include a number of activities hence the prevalence of a number of similar definitions. For example, Mwalukasa (2000: 150) defines urban agriculture as the ‘carrying out of farming activities in built-up areas where open space is available, as well as keeping livestock in built-up and in peri-urban areas.’ Hence the broad nature of Mougeot’s definitions facilitates the formulation of a number of definitions which to some extent is responsible for the lack of a consensus on an acceptable definition.

Another challenge has to do with the location of the practice on two different notions (Stewart et al., 2013). First, Bryld (2003:80) suggests that the major problem with conceptualizing the definition of urban agriculture lies in defining what is ‘urban, in a development context’. While most scholars locate urban agriculture as either in or around cities, there is no consensus on the actual boundaries where urban area starts of stops (Bryld, 2003). This is further exacerbated by the continuous urban sprawl in developing countries such that formerly rural areas encroach into the city (Robineaua & Duguéa, 2018). This creates problems in relating to the concepts of urban and peri-urban agriculture. The second aspect of location relates to the actual site of the practice (Stewart et al., 2013). Various definitions try to relate to this location by identifying whether the activity is on or off-plot, home or community garden among other possibilities. For example, according to Mougeot (2006) urban agriculture can take place on rooftops, backyards, roadsides, underneath electricity tension lines, beside railway line tracks, within utility rights of way, on vacant areas of industrial estates, steep slopes and riverbanks and on the grounds of schools, hospitals, prisons and other institutions. Bryld (2003) concludes that urban agriculture is a dynamic concept; hence policymakers need to be mindful of this when formulated policies regarding the activity.
Although there are several definitions of urban agriculture, the following key features characterize the activity; the activity involves the growing of crops and rearing livestock in or around an urban area. Secondly, urban agriculture is practiced both within the urban boundary and its periphery despite the difficulty in defining what this constitutes of. Essentially what the aforementioned discussion shows is that the definitions of urban agriculture will continue to evolve (Mougeot, 2005). For this reason, the researcher deemed it suitable to adopt the definition provided by the City of Cape Town. The city defines urban agriculture as ‘the production, processing, marketing and distribution of crops and animals and products from these in an urban environment using resources available in that urban area for the benefit largely of residents from that area’ (CoCT, 2007:3). This definition tries to encompass the major components of the practice and as such is usually used ‘by international role-players and partners in urban agriculture’ (CoCT, 2007:3).

2.2.2 Classification of urban agriculture activities

Following the adoption of the urban agriculture definition by the City of Cape Town, the researcher saw it suitable to adopt the types of urban agriculture as conveyed by the City’s Urban Agriculture Policy of 2007. The city categorises urban agriculture into four groups depending on the type and scale of operation. These include small emerging farmers, micro-farmers, community-based farmers and home-based agriculture (CoCT, 2007). The last two are the concern of this research. This is because these were the dominant type of agriculture as to be further explained in the methodology chapter. Home-based activities refer to the growing of vegetables or rear of animals through the exploitation of interstitial space surrounding their yards (CoCT, 2007). For this reason, it is usually practiced on a small scale and on a part-time basis to supplement household food security (Reuther & Dewar, 2006).

On the other hand, community-based urban agriculture is on a larger scale and usually practiced by two or more individuals who produce food collectively for themselves or an institution. Similar to home-based agriculture, community farmers engage in the activity on a part-time basis to augment household food security (CoCT, 2007) although in some cases produce is sold to generate income.

The City of Cape Town defines micro-farming as a type of urban agriculture conducted on a full or part-time basis to generate income. Micro-farming can either be conducted individually or as a group. Unlike home-based activities and community gardening, the scale
of operation is much higher. Micro-farming is usually located on small pieces of land (CoCT, 2007). Finally, small emerging farmers consist of urban farmers who aspire to be full-time farmers. Unlike the first three categories, small emerging farming is regarded as formal and business oriented. Once again it can be practiced in groups or as an individual.

### 2.2.3 Urban farmer/urban gardener dichotomy

The terms urban farmer and urban gardener are usually used synonymously (Olivier, 2015). In fact, other terms include producers, cultivators among others (Olivier, 2015). For instance, Battersby & Marshak (2013) refer to their research respondents practicing urban agriculture at the household level as gardeners. Similarly, Maswikaneng et al. (2002) use the terms home gardeners and community gardeners when describing their survey respondents. On the other hand, Swanepoel et al. (2017) refer to individuals practicing urban agriculture as household farmers. Therefore, it is clear that there is no consensus as to the most appropriate term in each case. Generally, the definition of an urban farm depicts that it is a matter of scale and sometimes motivations (Mougeot, 2006). For instance, farms are closely associated with space. Naturally, farming on a larger piece of land is connected with motivations related to the generation of income. Nonetheless, some individuals cultivating on small land around their households may also be able to utilize space and sell produce to generate income (Galhena et al., 2013). Similarly, individuals cultivating on a large open space can produce primarily for household purposes as well. Therefore, these terms are not universal and depend on a number of contextual factors.

For purposes of clarity, this study refers to all individuals engaging in urban agriculture as urban farmers regardless of whether it is at household level or in a community space. Where appropriate, a distinction is made between individuals practicing urban agriculture at the household level and those engaging in it at the community level. In such cases, household cultivators are referred to as household farmers while those engaged in community gardening are referred to as community farmers. Naturally, the cultivation space will be referred to as farms.

### 2.2.4 Urban farmer groups

Wilbers et al. (2007) refer to urban farmer organizations as urban producer organizations or urban organizations. They note that there are various definitions which are offered on what constitutes an urban farmer group. Wilbers et al. (2007) identify three different types of urban
farmer groups namely; first line, second line, and the third line organizations. First-line organizations are defined as those that have members of a specific group or groups of the community. This definition means that even if two urban farmer group farms unite together they are still considered a first line organization. Second-line and third-line groups operate from local and national levels respectively. Similarly, they further classify urban farmer groups as either a primary or secondary group. Primary being those formulated at the grassroots level, for example, a garden or farmer in a community whereas secondary is a combination of two or more primary groups.

Wilbers et al. (2007) further categorize the urban farmer groups as either socially oriented, economically oriented or politically oriented. Nonetheless, they are not oblivious to the fact that the distinction is not as clear-cut as suggested due to the malleability of such groups. Socially oriented groups are described as those that include vulnerable groups that usually start farming on church or school land to improve household diversity and if possible generate an income.

In contrast, Voleníková & Opršal (2016) categorize urban farmer groups according to formality. Voleníková & Opršal (2016:82) distinguish between the two types of urban farmer groups in legal terms. On one hand, informal groups are referred to as urban farmers ‘as the first step in community institutionalization’ and formal groups as cooperatives. In other words, the distinguishing factor between the two is whether the group is formally registered and recognized with the appropriate authority.

Another categorization is offered by Castro & Santandreu (2007) who separate urban farmer groups into either self-organized organizations or sponsored organization. Self-organization is portrayed as urban farmer groups formed by the interest of members of a particular community in response to a specific need. They are highly self-driven and possess support from the group members; however, they may suffer from limited external support. Castro & Santandreu (2007) note that they face a challenge in accessing resources and establishing linkages with strategic partners. On the other hand, sponsored urban farmer groups include those that are initiated by an external organization (local government, church, NGO). By this very nature, they have access to resources and partnerships which are largely facilitated by the initiating organization.
From the above discussion, it is clear that scholars classify the organization of urban farmers using different yardsticks. However, there are a number of significant points which can be picked up from the several classifications. Primarily, urban farmer associations can be either formed independently or through the influence of external stakeholders. Secondly, urban farmer groups usually form from a local level hence terms such as primary organizations, producer groups, and first-line organizations which are more or less synonymous. These small-scale farmer groups are then expected to work together with other groups and organizations, resulting in an inter-group association, producer network or second line associations. Following this multi-dimensional criterion, in the case of the Mitchells Plain farmers can be said to be a primary group if the group consists of farmers specifically from the Mitchells Plain community. Further, if the primary group is affiliated with a group from a wider area then that becomes a second line organization. Formality or informality in this case simply means whether the urban farmer group is a recognized group by the relevant authorities. Finally, it will be also necessary to determine whether the group was self-organized or formed with the assistance of an external organization.

2.2.5 Key actors in urban agriculture
Smit et al. (2001) distinguish the types of actors into six groups which are farmers associations, NGOs, government, institutions (university research centers), private firms and international development agencies. They maintain that these actors influence the organization of urban agriculture through the process of regulating, facilitating, providing, and partnering. The government is able to regulate urban agriculture through a variety of laws, rules, regulations, and programs. For instance, the municipal government of Cape Town regulates the activity through the Urban Agriculture Policy of 2007 (later revised) and Food Gardens Policy. Providing is defined as the provision of resources and inputs by the various actors. Facilitation is portrayed as the easing of access to various resources through brokering relationships with various players from both the public and the private sector. Finally, partnering as the name suggests involves the collaboration between various actors to improve or facilitate urban agriculture activities. One example is when a school is able to provide a piece of land to a group of farmers for farming purposes (Smit et al., 2001).

On the other hand, Battersby et al. (2014), in a food system and food security report of Cape Town, distinguished supporting actors for urban agriculture as either state or non-state actors.
In this report, state actors are portrayed as government operating at either the provincial or local level whilst non-state actors are depicted as NGOs. Similar to Battersby et al. (2014), Olivier (2015) divides the key actors into government, non-governmental organizations but adds a third group he calls the donor. He argues that the government is significant since it provides the legal framework around which the practice is conducted. Such a framework is necessary for ensuring that urban agriculture does not produce undesired effects such as pollution and land degradation. He notes that the government can be involved in various levels i.e. from a national, provincial or local level. Notwithstanding, he argues that a legal framework is not enough to ensure the development of urban agriculture which is where non-governmental organizations come in. NGOs have the necessary skills to link urban farmers with the funds and required resources. Finally, he postulates that the work of NGOs would never be possible without the input of a third group, the donor. According to him, donors are able to provide capital for the advancement of urban agriculture through the work of NGOs as well as the advancement of knowledge through research.

The above-mentioned categorizations suggest that the various actors involved in urban agriculture are numerous. Smit et al. (2001) suggest that there exist a number of actors, ranging from NGOs to private firms, hence it was necessary to prioritize the actors to be examined for this study. This is so because it is impossible to include all the actors’ involved in the sample due to budgetary and time constraints. This in part explains why Battersby et al. (2014) and Olivier (2015) select actors they deem as relevant to the practice. For these reasons, this research adopted the conceptualization of supporting actors by Battersby et al. (2014). Therefore, only the state (government) and non-state actors (NGOs) operating in the study area were identified and included in this study. This approach ensured that meticulous research was conducted focusing on the important actors rather than conducting a cursory study focusing on an array of supporting actors.

2.3 The organization of urban farmers in Sub-Saharan Africa
In recent years, there has been an increasing recognition that urban farmer organization is crucial in the enhancement of urban agriculture activities in the Sub-Saharan region (Schmidt et al., 2015). In fact, urban farmer organization was identified as a fundamental need in the success of urban agriculture at a conference of Local Government ministers from Southern and Eastern African counties held in 2003 (MDPESA, 2003 in Mougeot, 2005). Moreover,
Smit (2016) and Schmidt (2012) argue that urban farmer groups and organizations are important governance actors within the urban food system. Urban farmer organization involves the union of urban farmers into groups and can exist at various scales (Mougeot, 2005). For example, a farmer organization can exist at a community farm level, municipal or national level (Wilbers et al., 2007). Essentially this union of farmers enables them to work collectively towards a shared vision which offers them a number of benefits as well (Simatele & Binns, 2008).

Perhaps the most crucial advantage of such unions is in that they enable urban farmers to improve the policy environment within which they operate. In other words, urban farmers are more likely to influence sustainable planning if they are united and present a better-articulated viewpoint (Simatele & Binns, 2008). This is important in the context of the usually prohibitive policy environments within which urban farmers operate across most African cities (Hampwaye, 2013). Traditionally, it has been argued that most local government’s attitude towards the practice of urban agriculture remains negative across most SSA cities (Voleníková & Opršál, 2016; Simatele et al., 2012; Sithole et al., 2012; Halloran & Magid, 2013). As a result, when urban farmers join together under a unified voice they are more likely to influence favorable policy design through lobbying (Mougeot, 2005).

Besides this crucial advantage, concomitant benefits of farmer organization extend to reduced production costs through jointly procuring inputs, easy access to credit, improved processing and marketing produce and information exchange (Voleníková & Opršál, 2016; Hellin et al., 2009). In essence, all these advantages are possible given that urban farmers are united hence can benefit from economies of scale as well as present a more unified bargaining voice from policymakers and stakeholders. Such initiatives are very much difficult to accomplish within an urban setting if urban farmers are not united (Wilbers et al., 2007), therefore, it is crucial that urban farmers conduct their activities as a unit (Voleníková & Opršál, 2016).

While the benefits of urban farmer organization are clear as explained in the aforementioned discussion, the information on urban farmer organization in Africa is scarce (Schmidt et al, 2015). A large and growing body of literature has investigated urban agriculture around the themes of food security and income generation (Olivier & Heinecken, 2017; Schmidt et al., 2015). This has been driven by the belief that urban agriculture can contribute to food security and income generation within the context of increasing urbanization, unemployment

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and food insecurity in the urban centers (Smart et al., 2015). Moreover, the ecological benefits of urban agriculture have been addressed as well (Schmidt et al., 2015). According to Smit (2016), the literature on urban governance and urban food systems remains limited. Specifically, urban farmer organizations are actors involved in urban food systems hence play an important role in urban food resilience. The literature on urban farmer organization in SSA is fragmented and fails to present a consolidated picture of the phenomenon (Schmidt et al., 2015). In other words, there are not enough studies which focus on this theme despite its realized importance in improving urban agriculture activities and contributing to sustainable cities. More eloquently, Maconachie et al. (2012) argue that little attention is given to the role of urban farmer organization in influencing the activities involved in urban agriculture. As a result, policymakers are not able to make informed decisions when implementing urban agriculture activities. Essentially, urban farmer organization is crucial as it improves urban agriculture (Schmidt, 2012) which can simultaneously result in the fulfilling of Sustainable Development Goals (SDGs) (Game & Primus, 2015). For instance, improving urban agriculture practices can contribute to decreasing poverty and hunger (SDG 1, 2), creating sustainable food production patterns (SDG 12) and can result in the integration of environmental values in development (SDG 15). The fulfilment of these goals is essential given the high rates of urbanization and unemployment, poverty and food insecurity within the Sub-Saharan African cities (Frayne, Crush & McLachlan, 2014; Crush et al., 2011). Against this background, this literature review section will appraise the available studies on urban farmer organization across the Sub-Saharan region highlighting some of the key gaps and debates.

2.3.1 Urban farmer organization and policy development
As already noted perhaps the most important role urban farmer organization plays is improving the voice of urban farmers in influencing policy environment (Mougeot, 2005). This is possible since the urban farmers are able to present a more consolidated voice which increases their recognition and bargaining power amongst authoritative actors in the sector. One such platform at which urban farmers can disseminate their objectives is through multi-stakeholder forums. Multi-stakeholder forums present a platform where urban farmers are able to voice their concerns amongst supporting actors (Kanosvamhira, 2018). For example, urban farmer associations have been instrumental in turning the tide against prohibitive legislation in Ghana (Lee-Smith, 2013). Lee-Smith reports that a multi-stakeholder forum
consisting of urban farmer associations, the private sector and research institutions was formed in Accra (Ghana) in 2004. As a result of the urban farmers’ involvement in bargaining for improved legislation, the municipality amended its by-laws to new legal frameworks which accommodated urban agriculture activities.

Similar to Accra, Cabannes (2011) reports that urban farmer organization has been instrumental in influencing the policy environment in Freetown (Sierra Leone). Particularly, the major problem in Free Town was access and land tenure security (Maconachie et al, 2012). As a result of the involvement of the urban farmers' associations in an urban agriculture forum, they were able to influence the related policy development in their favor. Cabannes (2011) reports that the Freetown Urban and Peri-Urban Agriculture Forum consisting of urban farmers and key institutions ensured that farmers could be allocated land for their urban farming activities. Moreover, the influence of the forum ensured that the government and the local municipality worked together in identifying land for urban agriculture purposes. Once, again the impact of urban farmer organization is clearly portrayed in this case. In South Africa, Cape Town, the Vukuzenzele Urban Farmers Association (VUFA) participated in a Food Summit which was part of the stakeholder process leading to the formulation of the Urban Agriculture Policy of Cape Town in 2007 (Small, 2007).

Finally, the Nairobi and Environs Food Security, Agriculture and Livestock Forum (NEFSALF) is reported to have influenced policy developed in Nairobi (Kenya) (Lee-Smith, 2013). This forum consists of urban farmer organizations, public sectors and the private sector institutions. Through the forum, the urban farmers were able to articulate their needs to the Ministries of Agriculture and Livestock. Moreover, as a result of the involvement of the united urban farmers, many results ensued. For instance, the city was selected to launch the second phase of the National Agriculture and Livestock Extension Program in 2006. Further, urban agriculture was incorporated into several policy framework documents such as the National Land Policy of 2010 and the Urban Areas and Cities Act 2011. The Nakuru municipality managed to develop integrated urban agriculture by-laws to facilitate urban agriculture activities within the municipal borders.

Conversely, in cities where urban farmers have not organized, it is a cumbersome task for them to influence the policy framework, as a result, the legislation remains rather prohibitive. For instance, the policy environment for urban agriculture activities in Lusaka (Zambia)
remains prohibitive (Simatele et al., 2012). In response to that, Simatele & Binns (2008) argue that urban farmers in Lusaka need to be better organized to ensure that they present a more articulated voice to influence favorable policy change in the city. Furthermore, in some cities like Maputo (Mozambique) urban farmers are well organized into associations which are well structured, however, there is no multi-stakeholder network which exists. As a result, urban farmers continue to operate in an environment characterized by duplication of activities by supporting actors.

The above-mentioned examples from across the region demonstrate how well-organized farmers can be influential in improving the policy framework affecting them through multi-stakeholder forums. In fact, Gore (2018) notes that urban farmer groups are the most crucial in influencing policy development. The Maputo scenario highlights that urban farmer organization is inadequate if the farmers do not have a proper platform to project their views. Nonetheless, urban farmers stand a better chance of influencing a favourable policy development if they are unified (Mougeot, 2005). The union of farmers increases their voice and recognition amongst important governance actors such as the government within the urban food system. Operating as a fragmented unit of individual urban farmers makes producers vulnerable to both economic and social injustices which impede the success of their activities (Simatele & Binns, 2008).

2.3.2 Formality dynamics and urban farmer organization

It has been demonstrated that urban farmer organization enables urban farmers to counter a number of obstacles they face within the urban environment (Mougeot, 2005). More formalised urban farmer’s associations are more likely to be successful in their activities due to improved visibility amongst stakeholders (Wilbers et al., 2007). A case in point is a survey conducted by Schmidt et al. (2015) across two urban areas in Tanzania to explore the organization of urban farmers. The objectives of the study are achieved through semi-structured interviews of farmer associations and interviews with government officials in Moshi and Dar es Salaam. The paper reported the prevalence of urban farmer associations in Dar es Salaam and Moshi. Moreover, these associations were formally structured and generally formulated on the premise of a specific aim. Although the urban farmer groups were presented with challenges such as land tenure security they were able to counter such problems collectively as they had an increased bargaining power with the municipality. Schmidt et al. (2015) hold that urban farmer’s associations in Tanzania play an active role in
promoting urban agriculture for its members. This finding is attributed to the improved relationships the Dar es Salaam urban farmers had with supporting actors. Furthermore, the urban farmer associations are able to collaborate with various supporting organizations which aid the development of the sector. Nonetheless, the survey fails to interview NGOs which are a significant actor in the sector (Schmidt, 2012) and could possibly influence the urban farmer organization.

Halder et al. (2018) conducted a study on urban agriculture in Maputo (Mozambique). The largely qualitative study employed stakeholder mapping, farmer meetings and scenario workshops to meet the study objectives. In Chapter 5 of the report, Halder et al. (2018) indicate that urban farmers in Maputo are well organized into 32 associations. Moreover, they are well structured and run on a democratic basis which ensures that a president is elected to govern the association for a 5-year term. As a result of the formalised nature of the urban farmers, they are able to take advantage of a number of resources from the municipality. For instance, they have access to extension services and also hold regular meetings with the municipality to voice out their concerns.

The findings reported by Schmidt et al. (2015) and Halder et al. (2018) are similar when compared to studies that were done by other scholars such as Maconachie et al. (2012) pertaining to formal urban farmer organizations. Maconachie et al. (2012) conducted a study exploring the increase in urban farmer associations’ activity in Free Town (Sierra Leone). The researchers employed semi-structured interviews and focus group discussions which targeted the urban farmers’ associations to answer the objectives of the study. Like Schmidt et al. (2015) the interviews fail to cater to other influential governance actors such as NGOs. However, the study discovered that the proliferation of urban farmer associations in the city was a strategy employed by urban farmers to overcome obstacles. The scholars report that chief amongst these obstacles was the issue of land tenure insecurity and challenges in marketing their produce. As a result of being formally organized, urban farmers were able to deal with land tenure insecurity constraints. In fact, Lee-Smith (2013) reports that registered farmer organizations in the city are able to be allocated land with secure tenure of up to 5 years. Moreover, they were able to counter marketing challenges and access support from NGOs and government in the form of training and subsidized inputs. Once again the study does confirm that the organization of urban farmers is beneficial essentially when it is recognised by the stakeholders in the area.
In the same vein, Voleníková & Opršal (2016) confirm that without recognition or formalisation it is often difficult for urban farmers to overcome the challenges they face. Voleníková & Opršal (2016) conducted a study investigating the contribution of urban agriculture towards livelihoods in Ndola (Zambia). The chiefly qualitative study which employed observation and key informant interviews with officers, in-depth semi-structured interviews and focus groups reported interesting findings. The study reported that urban farmers in the low-income residential township of Chipulukusu worked together despite not being formally registered as a cooperative with the local municipality. Therefore, this confirms the assertions of collective action without formal organization as argued by Hellin et al. (2009). Notwithstanding, the study also reports that urban farmers were faced with various constraints, such as limited access to markets, low participation from the community and low level of savings. Consequently, ideas were looming of an improved organization of the farmers through their official recognition and the establishment of a co-operative registered with the Ministry of Agriculture and Cooperatives. In other words, the authors arrive at a conclusion that the community-based farmers in the township should be formalised in an attempt to gain better recognition and support from the local municipality.

In a similar case, a survey funded by the Food and Agriculture Organization, Egyir (2007) reported that urban farmer groups in Accra, Ghana (75%) are largely informal in nature. In other words, the groups are neither registered nor recognized hence cannot take advantage of benefits such as training and subsidized inputs from state and non-state actors. According to this study, the major reasons behind the failure of urban farmers in uniting formally include a lack of trust among urban farmers, perceived lack of democracy within urban farmer organizations and lack of funds to register the organization formally. The lack of trust is an indication of low social capital across the different urban farmers in Accra. Due to a lack of trust, inter-group associations suffer the same predicament as the formal organizations face challenges such as the failure of members to pay memberships fees (Egyir, 2007). Therefore, Egyir (2007:21) recommends that the organizations of urban farmers should be formalized since ‘formal alliances would ensure more effective bargaining and negotiations with urban authorities and other groups’. Therefore, the first stage would be to improve the level of trust among farmers which can then foster the formation of more formal organizations of urban farmers.
On the other hand, Hellin et al. (2009) have argued that collective action can exist in the absence of a formal organization. In other words, a farmer organization can occur in its informal nature. For example, Jacobi et al. (2005) reported that community farms do exist in informal groups in different communities in Dar es Salaam (Tanzania). They report that the level of organization within some of these community farmers enables them to access extension services and inputs. Furthermore, the farming groups perform social functions which include credit and savings, access and financial assistance with weddings and funerals which show social cohesion among its members. Similarly, Sithole et al. (2012) conducted a qualitative enquiry to determine the impact of community farms in the high-density suburbs of Magwegwe North, Nketa and Nkulumane of Bulawayo (Zimbabwe). This study reported that there is a strong urge for community member’s involvement in urban agriculture. The research reports that the combined efforts of the farm members allowed them to access markets. Sithole et al. (2012) report that the primary market for the surveyed farmers extended from surrounding households to shops. Therefore, such producer groups are able to engage in collective action without necessarily being registered or recognised by the relevant authorities.

Moreover, shifting focus to South Africa, there is a prevalence of a number of primary producer groups across South Africa (Thornton, & Nel, 2007; Jacobs, 2009) through the practice of community farming. The dominance of this form of collective action is attributed to the prevalence of community farms as a response to poverty and food insecurity in urban areas. For example, Thornton & Nel (2007) conducted an action research in Peddie (Eastern Cape) with the aim to illustrate how urban agriculture has a potential role to play in addressing food security focusing on the Masizame Community Garden Project (MCGP). The 15-member farming group was established in response to the need for income generation and cheaper food for vulnerable households in the community. Findings from the study revealed how they were able to conduct their activities united and improve resource access (Thornton & Nel, 2007). Together, the cases of Dar es Salaam, Bulawayo and Peddie pointed out above indicate that urban farmers are able to perform collective action despite not being registered formally.

In view of all that has been mentioned so far, it is clear that there are some contestations in terms of the most appropriate form of organization. Some scholars generally argue that if urban farmers are organized formally they are more likely to succeed since they are more

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recognised. Nonetheless, some studies show that this is not necessarily the case since the collective action can occur without necessary being formalised. Such studies imply that perhaps what is important is for the farmers to be recognised by the supporting actors to ensure that their needs are met. Finally, the scales of urban farmer organization vary extensively. While most studies tend to focus on primary line organizations a few focus on secondary line organizations. The next section of the review will examine the different scales of urban farmer organization.

2.3.3 Types of urban farmer organization

Wilbers et al. (2007) identify three different types of urban farmer groups namely; first line, second line, and the third line. First-line organizations are defined as those that have members of a specific group or groups of the community. This definition means that a community or group farm can be considered as a first-line organization. Moreover, even if two urban farmer group farms within the same area unite together they are still considered a first line organization. A case in point is the Siyazama Community Allotment Garden Association, (SCAGA) in Cape Town (South Africa) which consists of urban farmers who farm collectively in a designated group farm (Small, 2007). Second-line and third-line groups operate from local and national levels respectively. Accordingly, the urban farmer associations in Maputo fall under this criteria as they represent urban farmers from various locations and municipalities across the city (Halder et al., 2018). Similarly, Wilbers et al. (2007) further classify urban farmer groups as either a primary or secondary group. Primary being those formulated at the grassroots level, for example, a garden or farmer in a community whereas secondary is a combination of two or more primary groups.

Surveys such as those conducted by Maconachie et al. (2012), Cabannes (2011) and Schmidt et al. (2015) have focused on urban farmer organization at both first-line and secondary-line level. In other words, the focus of these studies extends beyond simple group farming projects as they stretch their investigations to examine the relations which exist even between the urban farmer associations themselves. For instance, Maconachie et al. (2012) identify 63 associations in the study area with each urban farmer group ranging from between 10 to 168 individuals. In the same way, although the number of associations is undisclosed by Schmidt et al. (2015) it is clear that they examine more than a single urban farmer association. As a result, these studies clearly examine associations beyond the grass-roots level of community
farming groups and as such produce significant findings as highlighted in various sections of this chapter.

On the other hand, most of the studies which focus on urban farmer organization mostly look at it from a community farm perspective. In fact, farmer organization is not always the central focus of most of these studies. For instance, Thornton (2009) conducted a study that investigated land right issues and community based urban agriculture at the Masizame Community Garden Project in Peddie (South Africa). Incidentally, he addresses issues of land tenure security and how this affected the stability of the group. A lot more studies are similar to this as they address the issue of urban farmer organization slightly. As a result, such studies are not adequate to present rich information on urban farmer organization.

Given the above discussion, it is clear that only a few studies focus specifically on the theme of urban farmer organization. A few studies examine urban farmer associations beyond first-line organization as in the case of Dar es Salaam and Free Town. Most studies focus on urban farmer organizations at community farming level or group farms such as Small (2007) and Thornton (2009). In fact, in most cases, this is not the focus of the study but urban farmer organization is usually addressed by chance and as a smaller component of the overall study. As such studies do not attempt to examine relationships which exist between urban farmers beyond the community farms in question. Not much information is generated from such studies as this is generally not the central focus of the studies. In this respect, there is clearly, a dearth of information on urban farmer organization which precisely focuses on urban farmer organization across the region.

2.3.4 Supporting actor influence on urban farmer organization

Castro & Santandreu (2007) identify two types of urban farmer organizations namely self-organized and sponsored organizations. Self-organization is defined as urban farmers who come together in a union without the involvement of any external influence. Conversely, sponsor farmer organizations refer to groups whose formation has largely been influenced by stakeholders such as local government or NGOs. It follows that each form of farmer organization possesses its advantages and disadvantages. This has been the bone of contention amongst scholars in determining how much of stakeholder involvement is required in the formulation and union of urban farmer organizations (Kanosvamhira, 2018).
Schmidt (2012) draws our attention to the effects of sponsored urban farmer organization as observed in the Urban Vegetable Promotion Project (UVPP) in Dar es Salaam (Tanzania). According to Schmidt (2012), the UVPP was a Dutch-funded project which attempted to improve urban farmer organization in Dar es Salaam. The sponsor attempted to achieve this through the provision of training on organizational and technical skills of local extension officers before they organized the urban farmers into groups across the city. Nevertheless, the initiative was unsuccessful after the project was concluded in 2001. As a result, many of the urban farmer groups that had been started were characterized by dwindling membership as they failed to sustain themselves. Moreover, the local district councils failed to continue supporting the urban farmer groups in terms of extension services. This report coincides with Castro & Santandreu (2007) as it highlights that the program was operational due to the presence of resources and partnerships which are largely facilitated by the initiating organization. Nonetheless, the sustainability of the urban farmer organizations was threatened as soon as the project was over.

Stakeholder involvement is not always harmful; perhaps the manner in which it is involved is crucial (Kanosvamhira, 2018). A case in point is Ishani & Khanbhai (2007) who conducted a study on the emergence of the inter-group urban farmer association in Nairobi (Kenya). The study explored stakeholder involvement in facilitating urban farmer group development. The authors report that the urban farmer organization has been enhanced by the NEFSALF stakeholder forum. This forum was convened by a local NGO and consists of the government, urban farmers and the private sector. It has served as a dialogue platform for all the actors involved in addressing urban agriculture and food security in the city (Lee-Smith, 2013). Lee-Smith (2011) maintains that the forum encouraged urban farmers to formulate a related network with its own governance structure. Consequently, urban farmer groups sprouted at local levels so as to access the inter-group platform. It is reported that this platform has managed to improve the access to training and the networking of urban farmers across the city. Lee-Smith (2011) notes that a total of 1000 Nairobi urban farmers were able to access training services from the government between 2005 and 2011. More importantly, it has been able to impart knowledge to other farmers even beyond the city’s borders. However, Ishani & Khanbhai (2007) note that the forum operates at a city level and urban farmer groups at lower levels are generally informal. This implies that there may not be enough representation of the needs of urban farmers across the city. Therefore, urban farmers
at lower levels still have to be efficiently organized to ensure that they access benefits from the NEFSALF (Ishani & Khanbhai, 2007).

Similarly, Schmidt et al. (2015) report that some of the urban farmer groups in Moshi (Tanzania) were initiated by the local municipality. Essentially, the municipality’s involvement was through the extension officer who encouraged the formulation of urban farmer groups with a specific aim in mind, for example, to conduct workshops or apply for funding. The extended benefits of the involvement of the municipality are probably why urban farmer groups in Moshi reported a good relationship with the local municipality. The cases of Nairobi and Moshi above provide evidence that stakeholder involvement is not always futile instead it can result in the enhancement of urban farmer organization.

On the other hand, self-organized urban farmer organizations are self-driven and possess support from the group members hence may be more likely to succeed (Castro & Santandreu, 2007). However, such urban farmer groups tend to suffer from a lack of external support in terms of resources (Schmidt et al., 2015). This is because they face challenges in accessing resources and establishing linkages with strategic partners due to limited connections with such actors. For instance, Schmidt et al. (2015) note that urban farmer groups in Dar es Salaam are more self-organized and were initiated without outside help. Consequently, they reported a fraught relationship with the municipality. Nevertheless, urban farmers groups in the city reported linkages with other urban farmer organizations as well as NGOs operating in the area. In this instance, it is clear that although self-organized groups may have challenges receiving support from supporting actors’ they still do possess the capacity to initiate their own relationships with supporting actors such as NGOs.

The evidence presented in this section suggests that scholars have divergent views when it comes to the involvement of supporting actors in nurturing urban farmer organizations. However, it is clear that supporting actors are a necessary stakeholder in the urban farmer organization. The bone of contention lies in the manner and extent to which they are to be involved. As seen in the provided cases, there is a variation in the success of urban farmer organization in terms of support from the relevant actor. This suggests that contextual variables are crucial in affecting the manner and extent to which supporting actors can be involved in urban farmer organizations. As a result, more case-specific studies are required to ensure that the most appropriate form of involvement is adopted which suits the particular
case. The next section focuses on the obstacles urban farmers are faced with in organizing across the region.

2.3.5 Obstacles to urban farmer organization

The previous parts of this literature review have focused on the different forms of urban farmer organization, the influence of supporting actors, but now it will focus on the challenges urban farmers face in organizing.

Primarily, the lack of policies, laws, and regulations to support urban farmers implies that there is ‘no service provision provided for urban agriculturists as long as it remains illegal’ (Bryld, 2003:84). Moreover, the situation becomes problematic when policies and laws are discordant, for instance, the already mentioned cases of Tamale and Bulawayo where the activity remains technically illegal (Bellwood-Howard et al., 2018; Moyo, 2013). In cities across Southern Africa, local governments such as the municipality of Harare continue being criticised for their failure to support the practice (Kutiwa et al., 2010). As such, urban farmers may fail to access resources such as training and subsidized inputs despite attempting to organize to access these. The success of urban farmer organization is to a larger extent reliant on the institutional framework within which they operate (Schmidt et al., 2015). Although there has been an improvement in accommodating urban agriculture by some governments (Hampwaye et al., 2007), the level of planning and policy ‘lag far behind practice’ (Schmidt, 2012:132). Resultantly, the existence of urban farmer groups is threatened by the lack of institutional support in the form of legislation and policy.

Schmidt et al. (2015) argue that insecure land tenure is a challenge, resulting in the prevalence of insecure and informal land tenure arrangement. Traditionally, land tenure security has been identified as a problem (Binns & Lynch, 1998), and still continue being a problem for urban farmers across Africa (Hubbarda & Onumah, 2001; Schmidt et al., 2015). The situation is especially exacerbated by accelerated urbanization and development which ‘have forced agriculture to compete for land with other urban land uses’ (Schmidt et al., 2015:158). Bryld (2003:82) concurs with this view by stating ‘land used on urban agriculture is [perceived as] an obstacle to urban housing provision’. In Tamale (Ghana), Bellwood-Howard et al. (2015) argue that access to land for urban and peri-urban agriculture is also triggered by chiefs who allocate plots to developers. This is particularly noteworthy considering that approximately 90% of all the land in Ghana is owned by chiefs (Bellwood-


Howard et al., (2015:16). Urban farmer associations in Free Town also listed land tenure security as a major constraint they faced (Maconachie et al., 2012). In Bulawayo (Zimbabwe) the lack of entitlement to land curtails the level of investment in farm equipment by urban farmers (Moyo, 2013). Thornton (2009) reports that the origins of the MCGP which was characterized by a number of challenges chief amongst these being land tenure security. At some point, the group of farmers were evicted after acquiring land from a local church and developing it for farming purposes. As a result, the urban farming group had to cease farming activities and disperse (Thornton, 2009). In the context of urban farmer organization, the above cases show that land tenure security presents a significant challenge as production practices are dynamic forcing urban farmers to relocate to another piece of land for production. In other words, urban farmers are never in a single place long enough to cultivate relationships which facilitate urban farmer organization.

Schmidt et al. (2015) report that the spatial fragmentation of urban farmers makes it difficult for them to self-organize. While urban farmers are widespread they are usually spatially fragmented across the urban landscape hence the opportunity to interact frequently is denied. This situation is exacerbated among urban farmers who cultivate on individual plots stifling any urban attempts to organize. This scenario makes the self-organization of farmers difficult in urban areas as compared to their rural counterparts (Schmidt, 2012). For instance, Jacobi et al. (2005) report that cultivation exists in open spaces throughout Dar es Salaam where more than one farmer operates, however, the individuals do not necessarily work together in such instances.

Moreover, Schmidt (2012) notes that the diversity of urban farmers with respect to socio-economic status makes it improbable for farmers to share the same interest. The diverse socioeconomic background translates to various needs which make it difficult for urban farmers to share a single vision. Urban agriculture was traditionally identified as a livelihood for the urban poor and particularly recent migrants into the town (Binns & Lynch, 1998). This implies that the migration of different people from different area translates to people with an array of social, economic and cultural characteristics in the city. However, research has dispelled this traditional notion of urban farmers being recent migrants as increasing evidence shows that even the economically stable can engage in the practice. Regardless, this creates a variation with respect to the socio-economic status which works against farmer self-organization (Schmidt et al., 2015). A case in point is Martin et al. (2000) who revealed that
most of the urban farmers even within community farms in Cape Town preferred to work individually rather than collectively. Therefore, it becomes a challenge for a heterogeneous group of people to self-organize around a unanimous single vision. In fact, when these are formed different farmers may have varying agendas.

Finally, when urban farmers are able to organize issues of group instability come at play (Wilbers et al., 2007). Wilbers et al. (2007) argue that urban farmer groups are still prone to disintegration and internal conflicts. If urban farmer groups are failing at a lower level, then it translates to the failure of inter-group associations. For example, Bellwood-Howard et al. (2015) argue that a lack of effective organization results in internal disputes which diminish trust among the groups. Their study, on urban farmer groups in Tamale (Ghana), revealed that the Northern region vegetables farmers’ union, a local urban farmer group is now characterized by dwindling membership and unwillingness of members to contribute dues due to lack of trust. As already noted by Wilbers et al. (2007), this lack of trust exists from a primary level and is only amplified at higher levels. Focusing on South Africa, Moller (2005) conducted a research on the motivations of farming among urban farmers in Eastern Cape. Probing on why residents did not engage in collective farming initiatives, respondents reported that they were discouraged by ‘negative experiences with communal efforts which had failed due to lack of a driving force or clashes between groups using shared facilities’ (Moller, 2005:67). In other words, collective farming initiatives appear to be more difficult to initiate and sustain as opposed to individual gardens hence the preference of the latter (Moller, 2005). Similarly, Martin et al. (2000) conducted a survey in South African cities which discovered that urban farmers preferred to work individually despite being a member of a farming group. Some of the reasons reported for this preference included time constraints, lack of trust, preference for independence and the belief that farming was simply a subsistence form of production. The latter scenario highlights some of the dynamics which are present within urban farmer groups across South Africa. Unfortunately, the failure of urban farmers to work together affects the formation of farmer organizations which may be instrumental in lobbying for development in the sector.

2.3.6 Knowledge gap

This section attempts to present a snapshot of the organization of urban farmers across SSA. Ultimately, it is gleaned from the aforementioned discussion that the extent of self-organization by urban farmers is vital to the success of urban agriculture. Effective farmer
organization can be influential in developing favorable policies surrounding urban agriculture as in the case of Accra and Nairobi. Further, it is clear that there are few studies which focus essentially on urban farmer organization. Only scholars such as Maconachie et al. (2012), Schmidt et al. (2015) and Cabannes (2011) have focused on this theme specifically. This is indicated by the level at which they look at the phenomenon. That is to say, they focus on urban farmer organization at higher levels such as municipal level although some of these studies are flawed in terms of their methodology. For instance, a major criticism of the work by Maconachie et al. (2012) and Schmidt et al. (2015) is that they fail to include key supporting actors such as NGOs in their interviews. Nonetheless, most studies fail to look at urban farmer organization beyond community farm level. As such the focus on urban farmer organization takes a rather peripheral focus and is addressed implicitly. As a result, currently, there is inadequate information on urban farmer organizations across the region to provide policymakers with informed decision making on how best these can be strengthened.

In terms of formality, there seems to be a debate on the most appropriate form of urban farmer organization. In some cases, while urban farmer groups may be registered they are still not as effective as unregistered groups. Urban farmer groups can be informal but are still recognised by supporting stakeholders such as the NGOs. Consequently, there should be less emphasis on issues of formality instead the general recognition of these urban farmer groups should take central focus. Finally, there is a lot of contestation on the manner and extent of supporting actor involvement in the nurturing of urban farmer organizations. The involvement of supporting actors has been met with varied success across different contexts hence conclusions and recommendations passed should be specific to that particular context. In other words, contextual variables have to be factored in before generalising the most effective manner in which supporting actors can be involved. The foregoing discussion indicates that there is a need for more studies around the subject of urban farmer organization as it is clear that despite the dearth of studies the highlighted gaps and contestations need further clarification through empirical enquiries. Therefore, this research will contribute to the literature by addressing these knowledge gaps. The next section presents the organization of urban agriculture in Cape Town.

2.4 Urban Agriculture in Cape Town

Cape Town is the second largest city in South Africa with a total population of approximately 4,004,793 citizens (CoCT IDP, 2017). The city is the second economic hub of the country
and its economy has grown faster than other cities over recent years (CoCT IDP, 2017). This growth is attributed to the dominance of a tertiary industry as opposed to other cities dependent on the volatile mineral sector (CoCT, 2016a). Notwithstanding, the unemployment levels are increasing (Battersby, 2011) and it ‘faces a myriad of social and economic challenges’ (Battersby & Marshak, 2013:447). In other words, despite the abolition of the apartheid system ‘poverty is one of the most defining features of life in the post-apartheid city’ (Rogerson, 2003:131). Based on a survey conducted by the African Food Security Urban Network in 2008 at least 80% of residents in Cape Town were food insecure (Crush et al., 2012). In this context, one of the interventions the municipality and provincial government have adopted to address poverty and food insecurity has been through the support of urban agriculture projects (Battersby & Marshak, 2013; Swanepoel et al., 2017).

Traditionally Cape Town has supported urban agriculture and endorsed the practice through the crafting of the Urban Agriculture Policy (UAP) (Visser, 2006). The purpose of the policy is to facilitate ‘an integrated and holistic approach for the effective and meaningful development of urban agriculture in the City of Cape Town’ (CoCT, 2007:2). Moreover, the policy attempts to enhance household food security and income generation for disadvantaged households. The policy also seeks to improve stakeholder partnerships (CoCT, 2007). The Policy envisaged the establishment of the Urban Agriculture Unit, which serves as the main implementing body for the Policy (CoCT, 2007). Several scholars have commended the city’s urban agriculture policy (Rogerson, 2011:184; Rogerson, 2010:374; Olivier & Heinecken, 2017a:169), however, criticism has been expressed as well (Wilbers & de Zeeuw, 2006; Frayne et al., 2009; Battersby et al., 2014).

Wilbers & de Zeeuw (2006:5) argue that the economic dimension of the UAP ‘gets extra attention’ at the expense of other dimensions which include social and ecological aspects. Battersby & Marshak (2013) eloquently articulated this through a qualitative study which revealed that the UAP did not reflect the social dimensions expressed by urban farmers in Cape Town. Furthermore, Battersby et al. (2015) note that a revised version of the policy was drafted in 2013 but it has not yet been made public to date. This delay may reflect problems in dialogue and failure to reach a consensus among stakeholders involved. Nevertheless, non-state actors continue supporting urban agriculture initiatives across the municipality (Olivier & Heinecken, 2017a).
Martin et al. (2000) argue that Cape Town has the most diversified urban agriculture sector with overwhelming support from non-governmental organizations. These non-state actors are precisely at the forefront of enhancing the development of urban agriculture as they are able to provide urban farmers with resources such as inputs, training, and link them to markets (Olivier & Heinecken, 2017a). This section will flesh out the state and non-state actors in urban agriculture initiatives across the city.

2.4.1 Actors
Olivier & Heinecken (2017a:168) have dubbed Cape Town as ‘the only South African city with an urban agriculture policy’. Rogerson (2010:374) describes Cape Town as a municipality that offers the ‘best practice’ local policy for supporting urban agriculture’. Battersby et al. (2015) note that the introduction of the Urban Agriculture Policy and establishing the Urban Agriculture Unit in 2007 was aimed at regulating the development of urban agriculture through better coordination of various stakeholders in implementing urban agriculture activities (Visser, 2006). The policy attempts to ensure that there is improved access to inputs, resources, land and extension services for urban farmers (CoCT, 2007). Most importantly it notes that the policy attempts to support the poorest of the poor (CoCT, 2007). It divides the type of beneficiaries into four main groups namely, home gardeners, group gardeners, micro-farmers and small emerging farmers. The beneficiaries who receive the most support are group farmers on the premise that there is a need to ensure maximum impact of the interventions.

Battersby et al. (2014) report that between 2010 and 2013 the City of Cape Town supported 201 community farms comprising of 1849 beneficiaries. Since these projects normally target low-income households they are usually located in low-income areas with high unemployment rates such as the Cape Flats (Olivier, 2017). Additionally, Battersby et al. (2015) report that the city Strategic Development Plan for the Development of Urban Agriculture in the City of Cape Town (2013/14 -2015/16) developed 7 keys areas to translate the UAP into action. These areas focus on, awareness and advocacy, policy and legal frameworks, research and knowledge development, multi-stakeholder participation, production, marketing and youth engagement. The City also passed the Food Gardens Policy in 2013 to counter food insecurity through food gardens (Battersby et al., 2015). Haysom et al. (2017) argue that the Food Gardens Policy ‘has effectively eclipsed the Urban Agriculture Policy’. Consequently, the work done by the City of Cape Town Urban Agriculture Unit
(CoCT UAU) has been reduced (Haysom et al., 2017). In a broader perspective, all these policies by the local government show that it supports the practice and organization of urban agriculture, however, it is important to underscore the role of the Western Cape Department of Agriculture as well.

The Department of Agriculture acknowledges the capacity of urban agriculture contributing to household food security (DAFF, 2012). According to Swanepoel et al. (2017), the Western Cape Department of Agriculture engages in several initiatives to address food insecurity in Cape Town. These include offering support in terms of inputs and extension services for household gardens, community and school garden (Swanepoel et al., 2017). Battersby et al. (2014) reported that since 2008 the Western Cape Department of Agriculture (DOA) has supported 114 community gardens in Cape Town. However, the Provincial DOA only provides assistance ‘particularly when projects are starting up’ (Kirkland, 2008:114).

Nevertheless, a number of scholars have criticised the approach of the municipality and the Provincial Department of Agriculture on urban agriculture in the city. For instance, Battersby & Marshark (2013) argue that the City of Cape Town frames urban agriculture strictly on economic terms and leaves other social benefits. Such a scenario results in implementing projects in line with economic objectives which may not necessarily reflect the objectives of the project beneficiaries. Slater (2001) illustrated this by examining the social impacts of urban agriculture among female farmers in Khayelitsha, Langa, and Crossroads. Her results revealed that farming was a source of empowerment for women in the area. She recommended that the benefits of urban agriculture should not be framed strictly in economic terms by policymakers. Similarly, Battersby & Marshak (2013:459) concluded that the framing of urban agriculture by the city ‘did not accurately represent the motivations for and benefits derived from urban agriculture in Cape Town’. They concluded that ‘only by acknowledging and validating the social benefits of urban agriculture can the economic benefits be realized’ (Battersby & Marshak, 2013:460). Most recently Olivier & Heinecken (2017a:179) confirmed that despite the economic benefits of urban agriculture in the city, ‘it is a meaningful and enriching activity that bonds families and communities and builds important bridges of trust and reciprocity’.

Secondly, Haysom & Battersby (2016) in their review paper ‘Urban agriculture the answer to Africa’s food crisis?’ postulate that the success of urban agriculture is hindered by a lack

http://etd.uwc.ac.za/
of coordination between the state and non-state actors. More specifically, Battersby et al. (2014) hold the view that NGOs do have viable urban agriculture projects and the Local government should work closely with them so as to improve the viability of state projects. Regrettably, there is limited coordination which arises from competing agendas among key actors (Battersby et al., 2014).

In addition, Haysom & Battersby (2016) maintain that the situation is exacerbated by a lack of monitoring and evaluation of government initiatives. They state that monitoring is relatively weak by municipalities and this means lessons are not being learned from failing programs. For example, Battersby et al. (2014) noted that during a survey of community farms in Cape Flats that they could not obtain enough data on selected farms due to the lack of record keeping (monitoring) by the Provincial DOA. They recommended that the government improve the monitoring of projects so as to ensure that they are ultimately a success. Therefore, due to limited government involvement in the actual groundwork (monitoring and training) NGOs play a crucial role in supporting urban farmers in Cape Town (Olivier, 2015:56).

Olivier & Heinecken (2017a) note that NGOs have been the main instigators in the development of urban agricultural activities in Cape Town. Battersby et al. (2014) observe that some of the biggest organizations include Abalimi Bezekhaya and Soil for Life (SFL). According to Spiro (2016), NGOs such as Abalimi Bezekhaya who have been in operation since 1982 spurred on the belief that urban agriculture promotes food security, improves income generation and conserves the environment. The organization currently supports 4 558 members (Olivier & Heinecken, 2017a), from the poor communities of Khayelitsha and Nyanga to initiate and sustain food farming projects. Karaan & Mohamed (1998) note that through donor funds, the organization is able to subsidize inputs, improve infrastructure and market opportunities for urban farmers.

Similarly, SFL is another organization that has improved urban agriculture activities throughout Cape Town. SFL has an official Memorandum of Understanding with the City of City (Battersby et al., 2014) and currently has 1930 members (Olivier & Heinecken, 2017a). The relationship between SFL and the City of Cape Town is an example of how the Urban Agriculture Policy has ensured improved relationships between state actors and non-state actors. van Der Merwe (2003) observed that the organization supports both household farms
and large community projects. However, the organization has stopped initiating community farming projects due to the high attrition rates and a lack of substance (Battersby & Marshak, 2013). The home farming project supports home production mindful of the limited space usually available for production in low-income households. This project has allowed a number of low-income households to have access to training and inputs capacitating them to engage in home farming projects. The organization reports that 3930 home farmers residing in low-income areas have been trained between 2009 and 2016 (Soil for Life, 2017).

In a study carried out across urban farmers in Cape Town, Olivier & Heinecken (2017a) observed that NGOs play vital functions in improving urban agriculture activities in the area. Firstly, they note that such organizations are able to connect cultivators to the private sector market thereby creating a source of income. A case in point is the Harvest of Hope project implemented by Abalimi Bezekhaya which allows community farms to supply products to consumers through the selling of fresh vegetable boxes (Spiro, 2016). Kirkland (2008:118) reports that individually urban farmers would not be able to access the market but NGOs like Abalimi Bezekhaya has facilitated such a development through the Harvest of Hope initiative. Secondly, the study revealed that NGOs enable farmers to access the public sector. In this regard, non-governmental organizations are able to assist in accessing resources from the local and provincial government.

Besides these direct links, Martin et al. (2000:20) observe that NGOs in the Cape Flats play a role in diversifying the income generating opportunities of urban farmer groups. Their survey findings reflect that NGOs were able to facilitate urban farming group’s involvement in generating income ‘through information, training and linking with donors and publicity’. Therefore, citing the aforementioned examples from Abalimi Bezekhaya and Soil for Life it is clear that NGOs provide important links between urban farmer groups and stakeholders such as the government and the private sector (markets and donors).

2.4.2 Urban farmer organization in Cape Town

At a local level, there is no literature that focuses on urban farmer organizations in Cape Town. In fact, the only mention of urban farmer organization at this level is found in the grey literature specifically by Small (2007) who focuses on the Vuka Uzezenzele Urban Farmers Association (VUFA). According to Spiro (2016), the association consists of urban farmers across the region of Cape Town and was formulated to manage issues that urban farmers
face. Similarly, the Philippi Horticultural Area (PHA) Food and Farming Campaign consist of small-scale farmers who came together to campaign against any developmental initiatives across the Philippi agricultural land (van der Merwe, 2016). Although the literature on urban farmers’ organization at a secondary level does not exist there are a number of studies which focus on urban farmer organization at local levels such as community farms.

Substantive literature has focused on urban farmer organizations at community farm level although this is not always the central focus. For example, SCAGA is an example of a community garden where urban farmers are able to conduct their activities together. However, Small (2007) reported that the farm suffered due to group stability. He indicated that the farm suffered from several sustainability issues such as farmers terminating membership and having disputes among themselves. In fact, Reuther & Dewar (2006) further argued that farmers in SCAGA members simply abandoned the activity if they found employment. Tembo & Louw (2013) also evaluated program implementation was viewed by stakeholders in relation to the expectations of project beneficiaries among the Fezeka (Gugulethu) and SCAGA (Khayelitsha) farms. Once again, issues of sustainability are highlighted within this research since the aims of beneficiaries and NGOs were not in line. From a broader perspective, Martin et al. (2000) argue that most of the urban farmers within these community farms in Cape Town prefer to work individually rather than collectively due to issues such as laziness amongst some members. Ultimately all these dynamics affect the ability of the farmers to effectively organize themselves at the grassroots level. In other words, although urban farmers may be constantly meeting in the same farm it is not enough for them to form bonds which ensure successful collective action and subsequent organization. As a result, limited collective action a community farm level affects any opportunity for the breeding of primary and secondary line producer groups.

Battersby & Marshak (2013) conducted a qualitative study investigating the benefits of urban farming amongst urban farmers in Vrygrond and Seawinds. Although the primary focus was on the perceived benefits some issues relating to urban farmer organization where implicitly presented. This study discovered that one of the major NGOs had stopped supporting community farming due to the high attrition rates involved. Community farm members failed to take ownership of the community farm which hindered the sustainability of the farms such that the NGO wasted its time and resources. Essentially, this implies that farmers in
community farms face challenges in organizing and supporting actors had stopped attempting to support any of their initiatives.

Also, some studies allude to the influence of supporting actors in urban farmer organization. NGO presence has been instrumental in stimulating collective action among urban farmers. A case in point is the Harvest of Hope initiative which has improved the marketing opportunity of urban farmers (Spiro, 2016). Through this project urban farmers in Nyanga and Khayelitsha are able to supply produce to the Harvest of Hope enterprise a community-supported agriculture system which sells the produce to consumers throughout the city (Dyer et al., 2015). As a consequence, urban farmers within the various urban agriculture projects work together to ensure that the required amount of produce is met. Therefore, this presents an example of collective action instigated by the NGO.

2.5 Theoretical Framework: Social Capital Theory

The research framework and evaluation were based on the rich theoretical field of the social capital theory which enabled the researcher to understand how farmers and supporting organizations in Mitchells Plain are connected (or not). The concept of social capital began gaining prominence across the social sciences in the 1900s (Woolcock & Narayan, 2000). One of the earliest mentions of social capital was Lyda Hanifan (Liou & Chang, 2008). Today it is impossible to come up with a single homogeneous definition that satisfies the academic arena. This in part explains why the social capital theory still has not yet attained full theoretical status and the variations of methods in measuring it (Lollo, 2012). This section will attempt to explore the varying dimensions of the social capital theory including its background, the various definitions, its categorization as well as its limitations. Moreover, the concept will be contextualized to the South African setting highlighting its suitability for this study.

2.5.1 Problems of definition

The concept of social capital is largely characterized by various definitions which stem from the use of the concept across various disciplines such as economics, sociology, business, education, and political science (Megyesi et al., 2015). However, Liou & Chang (2008) suggest that despite a lack of a unanimous definition, there is a general consensus that 'social networks are assets'. Woolcock & Narayan (2000:225) suggest that the aphorism ‘It's not what you know, it's who you know’ best sums up the concept of social capital. In order to
conduct the research, a substantive definition was required. To this effect, various definitions proposed by some of the prominent promulgators of the concept will be proposed here. Lollo (2012) posits that the idea of Social Capital was introduced by Lyda Hanifan in 1916 and thereafter there have been various promulgations of the concept across various disciplines. Despite the various torch bearers of the concept, Tzanakis (2013:2) argues that ‘the theoretical formulations on social capital of Bourdieu, Coleman, and Putnam have greatly contributed to the currency of the concept’. For this reason, this section will attempt to explore how these three proponents defined and envisaged the concept.

The term of social capital was proposed by sociologist Pierre Bourdieu (1986) in an attempt to distinguish between economic capital, cultural capital and social capital (Liou & Chang, 2008). Bourdieu & Wacquant (1992:119) defined social capitals as ‘the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition’. Bourdieu relates social capital to the magnitude of a network and the volume of preceding accumulated social capital harnessed by an individual (Bourdieu, 1986). Specifically, Bourdieu understood that social capital did not just end with forming a relationship (Schaefer-McDaniel, 2004). He believed that it was more important to understand how the relationships functioned so that they could be beneficial to the parties involved. Moreover, Bourdieu introduced the concept of cultural capital. He defined cultural capital as information pertaining to certain cultural beliefs, traditions and behavior that promote success in life (Schaefer-McDaniel, 2004). According to him this form of capital could be passed on from parents to their children through spending economic resources on materials such as books. Bourdieu was concerned with understanding the relationship between these two forms of capital (social and cultural) and how they reproduced social inequalities in society. In this regard, unlike other promulgators, Bourdieu’s work used social capital to ‘explain the cold realities of social inequality’ (Gauntlett, 2011:2). Most of his studies attempted to display how differences in social status were influenced by different levels of people’s cultural capital and how this affects resource access (Feldman & Assaf, 1998). Ultimately, he suggested that groups with a stronger cultural background mirror this in their resources of economic capital. In other words, Bourdieu believed that the standing of an individual was dependent on past accumulation of social capital which influences economic capital. Therefore, he argued that group involvement was a necessary tool to address social
inequality (Feldman & Assaf, 1998). He identified the level of social capital in a group as a function of the size of the network of connections (Bourdieu, 1986). Accordingly, an individual can improve the accumulation of resources (economic, cultural, or symbolic) depending on who they are connected to. Tzanakis (2013) argues that Bourdieu’s theory has been criticized on the premise of being reductionist in nature by positing economic capital as the ultimate source and basis of exchange for other forms of capital. Portes (1998) concurs that Bourdieu overemphasizes on the fungibility of different types of capital which all amount to their reduction to economic capital. However, it is commended for recognizing that social capital can also be ‘a nasty exclusionary device’ (Gauntlett, 2011:3). Schaefer-McDaniel (2004) argues Bourdieu’s approach was crucial as his works attempted to ensure that people appreciate how networks operate so as to counter the negative attributes of the concept. Feldman & Assaf (1998) argue that after Bourdieu’s work Robert Putnam and James Coleman have been credited with propelling the concept of social capital to prominence.

Coleman defined social capital as ‘a variety of entities with two elements in common: They all consist of some aspect of social structures, and they facilitate certain action of actors whether persons or corporate actors within the structure’ (Coleman 1990a:30). According to Gauntlett, (2011) Coleman depicted social capital in a broader view where different kinds of communities could utilize it to their advantage. Coleman as a sociologist stressed the importance of family and school systems as examples of typical settings for investigating the social capital concept. First, in terms of a family environment, Coleman observes that family systems comprise of financial capital, human capital and social capital (Coleman 1988, 1990a). In this case, financial and human capitals refer to financial and cognitive abilities of the parent, while social capital refers to interpersonal skills (Schaefer-McDaniel, 2004). Similar to Bourdieu, Coleman acknowledged that social capital is defined by function (Coleman 1990b). In other words, social capital for Coleman is any social relationship that can be used as a resource. However, it is important to note that Coleman envisaged social capital as an unstable feature that could change at different times and situations (Schaefer-McDaniel, 2004). Second, Coleman examined social capital in a school setting (Porte, 1998). He argued that in a school setting, improving social capital between teachers, parents and the pupils was a prerequisite for academic success (Coleman, 1990a). Schaefer-McDaniel (2004) contends that while these relationships appear obvious, there are also bi-directional in nature. This implies that to fully exploit social capital in a school setting, one should appreciate the
multi-dimensional interactions that occur among students, parents and teachers. He believed that understanding these interactions was a prerequisite for academic success (Coleman 1990a). Moreover, he argued that the so often overlooked role of parents was important. He observed that parents could be actively involved in school activates which would improve the strength of relationships and ultimately academic success (Coleman 1990b). In sum, Coleman’s understanding of the concept suggests that social capital ‘is a type of positive group externality’ (Durlauf & Fafchamps, 2005:1643). Coleman argued that the concept of social capital could be applied across different environments provided that there was an improved relationship between the subjects involved. Only through this understanding could social capital translate into success.

On the other hand, Putnam a political scientist regarded social capital ‘as a set of horizontal associations between people which foster cooperation for the mutual benefit of the community’ (Feldman & Assaf, 1998:2). Putnam (1993) conducted a study on social capital by learning how trust, norms and civic participation relate to the economic success of a number of Italian societies. In his work on various Italian societies, he argued that when social capital increased so did the level of social cohesion in that society. Like Coleman, Putnam argued that collective communities possess greater social capital (Gauntlett, 2011). Yet, in contrast to Bourdieu, Putman solely conveyed social capital as a public good (Schaefer-McDaniel, 2004). Putnam’s works show that he viewed social capital as a resource which could be exploited by collectives in attaining resources. In other words, Putnam’s definition of the concept encompasses social capital at the community level. Unlike Coleman and Bourdieu, Putnam’s interpretation of the concept has therefore been referred to as a collective asset for community development (Schaefer-McDaniel, 2004). For this reason, Putnam’s theory has received more attention from the academic discourse on community development (Schaefer-McDaniel, 2004). Accordingly, Putnam’s theory became the dominant concept of social capital from which the three levels of social capital: bonding, bridging, and linking (synergy) sprung (Schaefer-McDaniel, 2004).

To sum up, the three concepts provide the literature with crucial theoretical frameworks of social capital (Schaefer-McDaniel, 2004). First, Putman conveys social capital as a community asset. Bourdieu defines it as ‘social assets’ which improve access to resources. On the other hand, Coleman defines it as a resource that may occur within or outside a family and aids in acquiring human capital. Clearly, despite the failure to have a unified definition,
all the perspectives possess common features. The different perspectives emphasize that social capital is intangible hence the need for social relationships to access it. There is an implicit acknowledgement that social relations affect how a society or state operates. There is also recognition of how stable relationships amongst members enhance the collective action and resource acquisition. Finally, all perspectives suppose that social capital can be increased. That being said perhaps Putman's definition is the most suitable as it envisages the concept from a community level which is the focus of this study.

Accordingly, drawing from the various aforementioned theoretical standpoints on social capital the researcher adopted the theory as conveyed by Putman. Therefore, social capital for this research was defined as the links, values, and understandings shared within a community that enables individuals or groups to work together. The essence of social capital, as observed by Putman, lies in the capacity of using the networks which aid in mobilizing individual resources to achieve a common objective. This becomes an important consideration for urban farmers in Cape Town who operate within an intricate network of supporting actors. Consequently, the social capital theory as envisioned by Putman was invaluable in providing a theoretical underpinning to explore these linkages. Through the use of the more specific forms of social capital, it was utilized as an explanatory factor for collective action among urban farmers in Mitchells Plain and their relationship to state and non-state actors.

2.5.2 Forms of social capital

To obtain a rudimentary appreciation of the types of social capital it would be necessary to provide a bit of background of where it spans from. As already noted, researchers including Putman offer the different types of social capital, however, these stem from the categorization of social capital. The social capital theory has been categorized based on the scale of operation (Megyesi et al., 2015). Krishna & Shrader (1999) divide social capital into two levels namely: the macro (national level) and the micro (individual/household/neighborhood level) scales. They further place another group in-between the two to include the meso-level (institutions). Krishna & Shrader suggest that the micro level consists of two kinds of capital which included cognitive and structural social capital. Cognitive capital is portrayed as the ‘less tangible side of social capital that refers to values, beliefs, attitudes, behavior and social norms’ (Krishna & Shrader, 1999:10). Structural capital includes formal and informal local institutions that improve community development. Based on the aforementioned categorizations this research adopted the micro-level approach as a focal point of analysis.
since it combines both the individual and community-based approaches which are all instrumental in the context of urban farmers’ relationships and external linkages.

The works by Woolcock (1998) of social capital on policy implication culminated in a further classification of social capital based on the micro-level and meso-level approach previously mentioned. He further categorized social capital into two forms namely embeddedness and autonomy. At the micro-level, he refers to embeddedness as ‘intra-community relationships based on shared identity and solidarity’, whereas autonomy ‘relies on loose networks extending beyond the community’ (Megyesi et al., 2015:92). At the macro-level, he defines embeddedness as state-society relationships while autonomy is more aligned with laws and regulation. Megyesi et al. (2015) observe that the distinction between embeddedness and autonomy at micro-level was eventually promulgated as bonding, bridging and linking which have been accepted as the forms of social capital.

According to López-Gunn (2015), there is now a general agreement on the types of social capital as envisaged by Woolcock (2001). Woolcock (2001) identifies bonding, bridging and linking as the three forms of social capital. Moreover, these definitions have been endorsed by the World Bank to distinguish between the different forms of social capital. Therefore, bonding, bridging and linking types of social capital were the domains of classification for this research.

Woolcock (2001) defines bonding as the horizontal, relationships which occur in a homogenous group, for example, a family or a neighborhood. He suggests that in such a scenario the members are grouped together because they have something in common for instance they may share identities, history or similar views. In this regard, bonding brings together individuals who are already acquainted with one another. In the context of urban farmers, it becomes important as it facilitates the first line of networking amongst urban farmers in the same area for example street groups. Through this network, they can communicate, share ideas, challenges and proffer advice to one another as farmers.

By contrast, bridging social capital attempts to link members of distant groups to enable the mobilization of external resources (Woolcock, 2001). This definition implies that bridging capital manifests between people who do not know each other well within the same community or town (Nieman, 2006). Such people include associates, distant friends, or colleagues. In such an environment cooperation generates trust between the individuals
fostering collective action and resource mobilization. In fact, López-Gunn (2015: 1141) argues that bridging is crucial as it triggers innovation ‘by increasing exposure to a wider range of information and resources’. As a result, it is important in Cape Town given the water crisis which may drive urban farmers to engage in innovative ways of dealing with the water situation. Saegert et al. (2001) identify institutions such as churches and schools as significant institutions in increasing bridging capital in a community. This is because such institutions present a platform where members of the society can meet and interact despite their various backgrounds. The authors believe that such platforms enable the sharing of ideas and possible resource mobilization.

Meanwhile, Szreter & Woolcock (2004:655) define linking as the linkages ‘between people who are interacting across explicit, formal or institutionalized power or authority gradients in society’. Nieman, (2006) notes that the relationships generated by this form of social capital extend beyond the community and encompass institutions outside of the community borders. Woolcock (2001) argues that linking is a necessity in ensuring that the community can access additional resources such as information and access to training. This implies that linking is applicable to communities where the resources required may not necessarily be found within the community borders hence the need to obtain them elsewhere. According to Nieman (2006), it takes deliberate effort from the public institutions in building this form of social capital. The author notes that effective coordination is required to ensure that relationships are formed with the local communities. In other words, the responsibility in part lies with the institutions to ensure that underdeveloped is addressed in the communities.

2.5.3 Criticism of the Social Capital Theory
As with any theory, the social capital theory faces criticism in the academic arena. Haynes (2009) based on an extensive literature review provides a summary of the major weaknesses of the theory. First, as already mentioned the concept of social capital has varied definitions across different disciplines (Portes, 1998). Unfortunately, this has culminated in varying methodologies in studies conducted creating problems in comparing study findings (Krishna & Shrader, 1999). To counter this discordance standard assessment tools have been developed as a basis for social capital measurement and employed by the World Bank so as to ensure uniformity in methodologies to enable comparisons to be conducted (Krishna & Shrader, 1999). Hence the research instruments developed for this research were in line with the widely accepted social capital dimensions and standardized tools.
Haynes (2009) observes that despite the presence of vast literature, the proponents of social capital fail to provide a coherent concept of the theory. The concept has been used across various disciplines, therefore, it follows that it is heterogeneous. Nevertheless, Portes contends that ‘as a label of sociability, social capital has… a place in theory and research provided that its different sources and effects are recognised and that their downsides are examined with equal attention’ (Portes, 1998:22).

There has been wide criticism over whether social capital is a capital at all (Haynes, 2009). For instance, Bowles (1999) observes that despite the concept referring to important relations, literature conceptualises the term in a manner different from other forms of capital hence should be abandoned. Similarly, Fischer (2005) notes that all the terms used in the explanation of the concept are misleading, therefore, should be replaced by simpler definitions. He explains this by providing alternative words, for example, membership, sociability and trust. In response to this, Sobel (2002) argues that the concept and its variables can be used because they build on existing literature. In other words, it is baseless to dispel the concept based on the choice of words used.

Additionally, Haynes (2009) observes that most critics argue that there are limited studies which emphasise the negative side of social capital. This is misleading as it presents social capital as an all positive concept which is not necessarily the case (Haynes, 2009). Surprisingly, the literature suggests that the promulgators of the concept were well aware of the dark side of social capital. In fact, the works by Putman allude to the negative consequences of social capital, for instance, exclusion (Haynes, 2009). Today, there are endless empirical inquiries which focus on the negative aspects of the practice (Villalonga-Olives & Kawachi, 2017).

In sum, despite the various contestations surrounding the social capital theory it continues being used across various disciplines due to its principles (Megyesi et al., 2015). In fact, Liou & Chang (2008) note that the World Bank has adopted the theory and endorsed its use across various development programs. Schuller et al. (2000) conclude that the diversity of the concept is fundamental in social sciences because it draws from various disciplines and provides links between different levels of analysis. Therefore, despite some limitations as with any theory, the concept is likely to continue gaining traction in the academic arena.
2.5.4 Linking social capital, urban agriculture and social development

Durlauf & Fafchamps (2005) argue that the proliferation of the social capital approach is based on an attempt to improve socio-economic development. In fact, Durlauf & Fafchamps note that the very works of Putman in Italy argued that Northern Italy was more developed than Southern Italy due to the varying levels of social capital. The major discussions in the literature point to the notion that social capital ‘is the solution of collective action problems’ (Durlauf & Fafchamps, 2005:1648). This indicates that social capital has been important in developmental debates for a long time such that many structures are under the influence of social capital (Mehrabanfar & Manesh, 2014). For example, Liou & Chang (2008) note that the World Bank adopted the theoretical concept to promote economic development in countries experiencing economic challenges with recorded success in India. Further, scholars have recognized that social capital is vital in resources management. A case in point is a study carried out by which concluded that social capital was instrumental in the management of groundwater in Spain (Robineau, 2015). Similarly, Pretty & Ward (2001) argue that social capital along with natural, human, physical and financial capitals are fundamental for sustainable development. The importance of social capital lies in that it is usually aids in the accumulation of other forms of capital. Acharya et al. (2010) contend that if bonding, bridging and linking types of social capital are met the economic and social well-being of a community significantly improves. In this respect, the concept of social capital is seen as capable of improving developmental initiatives weaved by policymakers.

In a South African context, Nieman (2006) argues that public institutions and welfare organizations identifying and utilizing should exploit existing social capital when implementing any developmental programs. He notes that the government of South Africa is cognizant of this fact which is demonstrated by the Department of Welfare’s (now the Department of Social Development) publication of the White Paper for Social Welfare in 1997. He contends that this White paper emphasizes the social development concept of all programs by all welfare institutions. This implies understanding the concept of social capital is crucial for developmental practitioners when implementing community development initiatives. Nieman (2006) asserts that participation, networking and training are necessary for the success of community development initiatives. Therefore, it follows that all welfare providers (state and non-state) should be mindful of this concept in implementing their activities.
The municipality of Cape Town views ‘urban agriculture as a way to address some of the economic and social imbalances’ in the city (Battersby & Marshak, 2013:457). Similarly, NGOs in Cape Town use urban agriculture as a means to counter poverty and malnutrition in urban communities (Tembo & Louw, 2013; Karaan & Mohamed, 1998; Olivier & Heinecken, 2017a). In this respect, urban agriculture is a community development initiative utilised by the NGOs and government in Cape Town. Therefore, it follows that the supporting organizations as practitioners must be aware of the social capital concept and how best they can exploit it to ensure the success of their initiatives. Consequently, following the argument by Nieman (2006) social capital elements need to be interwoven in developmental programs pursued by supporting organizations to realize success. Olivier & Heinecken (2017a) acknowledge the importance of social capital in the context of urban agriculture. For instance, Saegert et al. (2001) note that institutions such as churches and schools play an important role in enhancing bridging social capital in a community. In an urban agriculture context, Olivier & Heinecken (2017a) argue that NGOs play a similar role of bridging by engaging in activities which facilitate urban farmers to meet other supporting organizations. Such platforms enable urban farmers to be acquainted and present an opportunity for the exchange of ideas and the establishment of beneficial communication amongst themselves.

Similarly, NGOs are responsible for improving the linking capital of various communities to ensure that they access resources from public institutions such as the government (Olivier & Heinecken, 2017a). Olivier & Heinecken (2017a) note that this is particularly important in Cape Town where urban farmers find it problematic to approach the municipality directly to obtain desirable results. Therefore, the failure of urban farmers directly approaching the government presents a significant problem. As already mentioned linking social capital can only be increased if there is improved coordination between the welfare providers (Nieman, 2006). This suggests that a lack of synergies amongst actors involved presents a pitfall in the success of urban agriculture initiatives (Haysom & Battersby, 2016).

To sum up, from the above-mentioned discussion one can appreciate the applicability of the social capital theory as an analytical lens for the research. Not only does the theory provide an important insight into the relationship between the urban farmers but equally important is the relationship urban farmers have with supporting actors. Additionally, the complexity of these linkages was simplified through this lens. It enables the multi-dimensional nature of relationships among different parties to be dissected and examined. Without the adoption of
the social capital theory obscure but essential nuances could have been easily overlooked. The approach ensured that the researcher could appreciate the organization of urban agriculture in Mitchells Plain from a holistic perspective.

2.6 Conclusion
This chapter began by presenting the various definitions used in this study for clarity purposes. This was then followed by a literature review section which presented a snapshot of the organization of urban farmers across SSA. Ultimately, it is gleaned that the extent of self-organization by urban farmers is vital to the success of urban agriculture. The organization of urban agriculture in Cape Town was then explored highlighting the various actors involved in the urban agriculture sector. Finally, the theoretical lens for the study was justified. The social capital theory was deemed appropriate as it enables the multi-dimensional nature of relationships among different supporting actors to be dissected and examined. The following chapter focuses on the methodology.
CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction
This chapter provides a description and justification of the research methodology employed in exploring the organization of urban agriculture in Mitchells Plain, Cape Town. The chapter starts by presenting details on the research philosophy. This is followed by a discussion of the research design and methods of data collection employed. This chapter also explains the sampling design, in general, which included both probability and non-probability sampling techniques. Finally, the chapter focuses on validity and reliability issues of the study, limitations of the study as well as ethical protocols observed throughout the course of the data collection exercise.

3.2 Research Philosophy
Research is based on fundamental philosophical assumptions which influence the research methods appropriate for generating knowledge (Gray, 2013). In order to conduct and evaluate any research, it is important to know what these underlying assumptions are. Mkansi & Acheampong (2012) posit that the two principal philosophical perspectives in research are positivism and interpretivism although various other forms have sprouted from these. Guba & Lincoln (1994) note that due to a lack of consensus among scholars on the most appropriate philosophy none is considered superior to another hence they are applicable in different situations. Additionally, they contend that based on the merits and demerits of each philosophical stance researchers can adopt different worldviews simultaneously.

Holden & Lynch (2004) argue that the positivist thinkers assume that knowledge consists of world reality independent of social construction, thus, can be measured through observation. In other words, positivism hinges on the adoption of scientific methods and systematizes the generation of knowledge through quantitative techniques to describe variables and the relationship between them. Scotland (2012:11) argues that by viewing individuals as passive and controlled by circumstances ‘positivistic generalizations ignore the intentionality of the individual, thus actions are not fully understood’. Therefore, this presents a significant limitation of the positivist approach.

On the other hand, Scotland's (2012) maintains that interpretivists believe that world reality is shaped by people's experience of the world, consequently, reality will be subjective and differ from one individual to the next. According to Denzin & Lincoln (2005), interpretivism
proponents derive their constructs through the in-depth examination of the phenomenon of interest. This worldview is underpinned by observation and interpretation of events, thus, the emphasis is on describing the phenomena specific to the area.

Following the above discussion, this research adopted both philosophies as they were considered complementary to each other. Firstly, the quantitative data had to be collected for the study. Such data were significant in attempting to quantify the identified variables. Secondly, the study had a foot in the interpretivism camp as well. The target population consisted of various key informants hence this presented an opportunity to understand the issues under question from multiple perspectives. Adopting both philosophical perspectives enabled the researcher to add meaning to what might otherwise have been simply quantitative data collected from urban farmers. This systematic adoption of both worldviews is what Goles & Hirschheim (2000) term the ‘pragmatic stance’.

Pragmatists argue that the research question determines the research philosophy employed, therefore, it follows that one method may be more suitable to answer specific questions (Guba & Lincoln, 1994). This may result in a situation whereby different philosophies answer different objectives within the same study. To sum up, the over-riding concern was that the research philosophy adopted should be relevant to the research question, which prompted the researcher to adopt a pragmatic stance. The full explanation of the research methodology and research design will detail how the pragmatic worldview was incorporated into the research.

3.3 Research Design

The researcher employed an analytical case-study research design. According to McLeod & Elliott (2011) case studies can be defined as in-depth investigations of a single person, group, event or community. The selection of the case-study design follows the postulation by Frayne, Mc Cordic & Shilombolei (2014) who acknowledge the need to recognize contextual variables since they influence local urban agricultural practices and responses. Since it is difficult to generalize about urban agriculture given the variations in context (Smart et al, 2015) it was crucial for the researcher to be cognizant of these contextual elements. For this reason, it was envisioned that this would be the most appropriate design since the focus was on urban farmers in the Mitchells Plain community. Case studies allow substantial detail to be collected which is not easily obtainable through other research designs (Kothari, 2004;
Robineau & Dugué, 2018). Consequently, the data collected was a lot richer and of greater depth ensuring data analysis went beyond mere descriptive exploration. This is because there was a need to obtain a deeper appreciation of the issues faced by different stakeholders in relation to urban agriculture in the study area. Moreover, this design permits the use of both qualitative and quantitative approaches (Kothari, 2004).

The pragmatist viewpoint prompted the researcher to employ a mixed methods approach to answer the objectives of the study. Otherwise referred to as triangulation (Easterby-Smith et al, 2002), mixed methods involves the adoption of both qualitative and quantitative designs to answer the research questions (Creswell, 2003). Guba & Lincoln (1994:105) argue that ‘both qualitative and quantitative methods may be used appropriately with any research paradigm’. This is because no method is superior to the other; hence, each possesses its strengths and limitations (Creswell, 2003). In this respect, the overarching reason for adopting a mixed approach was to minimize the flaws of each design. Moreover, the research question contained both deductive and inductive elements hence required a mixture of both qualitative and quantitative techniques to sufficiently address the research objectives. While the quantitative design enabled the researcher to collect statistical data surrounding the phenomenon (Creswell, 2003), qualitative design unveiled how social meaning was constructed (Denzin & Lincoln, 1994) which was crucial given the analytical case study design adopted. Consequently, triangulation enabled the researcher to determine whether the data collected from various sources lead to the same conclusion, thereby improving the reliability of the argument. Mixed methods presented an avenue to understanding the complex interactions that exist between the various stakeholders in the study area.

3.4 Methods of data collection

Crotty (1998:3) defines research methodology as the plan of action behind the selection and use of certain methods. In other words, methodology deals with issues of ‘why, what, from where, when and how data is collected and analyzed’ (Scotland, 2012:6). This research employed a cocktail of both qualitative and quantitative research instruments which include structured questionnaires, in-depth interviews, and document analysis. According to Kothari (2004), the methods of data collection selected depend on a range of factors inclusive of the type of research as well as budget among others. In this respect, this section seeks to elaborate not only why a particular instrument was selected but most importantly why it was the most suitable.
3.4.1 Quantitative methods

3.4.1.1 Questionnaires

Primary data were solicited through the use of a questionnaire which was administered through face to face interviews with the urban farmers (Appendix I). The first section of the questionnaire sought to collect socio-spatial data of the individuals. This is because the livelihood options of individuals are determined by these social and economic circumstances they live in (Swanepoel et al., 2017). Therefore, an analysis of these indicators is fundamental for policymakers to initiate development planning. The remaining sections gathered information relating to all the objectives of the study. These included sections on the organization of urban farmers, relationship with their community, linkages to supporting organizations and challenges urban farmers face in self-organizing. During the formulation of questions control questions were also included. According to Kothari (2004), this is vital to check whether the information solicited is correct. The questionnaire largely consisted of close-ended questions to facilitate the ease of data analysis. A few open-ended questions were also included in the questionnaire to elicit the respondent's views on certain issues. Although these may have been difficult to analyze they provide meaningful explanations to the related quantitative responses (Bailey, 1987), hence the researcher was able to augment some close-ended responses. Furthermore, the responses to open-ended questions enabled the researcher to identify knowledgeable respondents for the in-depth interviews.

Face to face questionnaire administration is expensive and time-consuming (Denzin & Lincoln, 1994), however, it ensured a higher response rate from the respondents. Moreover, this method enabled the researcher to observe and record the non-verbal cues of the respondents. Non-verbal cues such as averted gaze and raised eyebrows were important as they enabled the researcher to clarify certain questions, which is not possible through other forms of questionnaire administration. For instance, Neuman (2000) argues that sometimes respondents answer questions without any knowledge if self-administered, therefore, this mode of administration countered this obstacle as the researcher was able to explain questions respondents did not understand. Finally, this mode of administration also gave the researcher an opportunity to observe some of the respondent's farms. Prior to the main survey, a pilot study was undertaken to pre-testing the questionnaire at a different location after which it was adjusted accordingly. As a precaution, the researcher was accompanied by an Afrikaans speaking research assistant during the data collection process.
3.4.2 Qualitative methods

3.4.2.1 Semi-structured interviews

Kothari (2004) defines an interview as a purposeful conversation between the interviewer and an interviewee. This technique enabled the interviewer to engage with the interviewee in a manner that facilitated a thorough exchange of information. Semi-structured interviews were employed with all key informants. The Provincial DOA senior extension officer, SEED field officer, SFL Field Officer, UFisAMo Research Officer, VUFA vice-chairperson and selected knowledgeable urban farmers were purposefully selected as interviewees (see Table 3.1). In-depth interviews ensured that rich and comprehensive information was acquired from the key informants on their involvement with urban farmers in Mitchells Plain and how the different stakeholders relate to each other. For instance, the Provincial DOA senior extension officer is the designated overseer of urban agriculture projects in the province. Hence, it was imperative to comprehend how the DOA was involved in urban agriculture initiatives in the study area.

Semi-structured interviews were also conducted with selected knowledgeable urban farmers in the second phase of data collection. After quantitative data were solicited from the questionnaires knowledgeable farmers were identified and scheduled for an interview. The interview was designed to explore and explain the major themes identified in the questionnaire survey. This exercise was crucial to probe further into issues which emerged from the preliminary data analysis of the questionnaire survey. Appointments were made before interviews were conducted. The face to face interviews were conducted at a place and time suggested by the key informant following a structured template (Appendix VI). The majority of the interviews were conducted at either the home farms or community farms of the respondents during the day. This meant that the interviews were conducted in a familiar and relaxed setting also allowing the researcher to observe the farms of the respondents.

Oakley (1974) acknowledges that in-depth interviews produce richer information as opposed to scheduled interviews with limited indicators, hence their suitability to the case-study research design adopted. Moreover, this technique enabled the researcher to discover different perceptions held by the actors involved in urban agriculture in the study area. Since in-depth interviews can also be utilized to evaluate policy (Harvey, 2017), the researcher was able to assess the impact of specific policies such as Cape Town's Urban Agriculture Policy of 2007 on urban agricultural activities in the study area. Additionally, the semi-structured
template of the in-depth interviews gave the researcher room to probe on pertinent issues such as the coordination of activities between state and non-state actors. Finally, this technique dovetailed well with the preliminary literature review and document analysis which the researcher augmented with the in-depth interviews.

Table 3.1: Selected key informants and the rationale for their selection

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Reasons for the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agriculture Senior Extension Officer (Appendix II)</td>
<td>To obtain information on the role the DOA in assisting urban farmers in Cape Town and Mitchells Plain. To obtain information on synergies the DOA maintains with other supporting actors and the challenges faced.</td>
</tr>
<tr>
<td>SEED &amp; SFL Project Officer &amp; (Appendix III)</td>
<td>To obtain information on how the NGO was assisting urban farmers in Mitchells Plain, as well as how it coordinates its activities with other players.</td>
</tr>
<tr>
<td>UFiSAMo Research Officer (Appendix IV)</td>
<td>To obtain information on how the NGO was assisting urban farmers in Mitchells Plain, as well as how it coordinates its activities with other players.</td>
</tr>
<tr>
<td>VUFA vice chairperson (Appendix V)</td>
<td>To gather the extent of operation of the organizations' activities in the study area.</td>
</tr>
<tr>
<td>Urban farmers (Appendix VI)</td>
<td>To explain trends observed after preliminary questionnaire data analysis.</td>
</tr>
</tbody>
</table>

Source: Author, 2018

3.4.2.2 Secondary data analysis

MacDonald & Headlam (1986:9) define secondary data analysis as ‘the review of existing information’. The authors argue that such data is invaluable to research as it can bring new insights through careful interpretation. Secondary data in the form of peer-reviewed articles, policy documents and non-governmental organization newsletters contributed to the commentary and analysis throughout the research. Journal articles, the internet, and books
equally provided an important source of secondary data. Karaan & Mohamed (1998) argue that conducting an extensive literature search prevents the research from being myopic. Therefore, a review of the literature from the various aforementioned sources provided an important frame of reference for this study. Secondary data were obtained from the key informants particularly the non-governmental organizations which provided insight into the background of their activities in the study area as well as their operational framework. Most of the secondary data were obtained online, for instance, the City of Cape Town Urban Agriculture Policy of 2007. Likewise, the websites of the NGOs working in the study areas were visited to gather information on the organization's aims, activities and methods of operation among other information. The information collected from these sources was checked through interviews with the key informants as a basis to clarify, confirm and authenticate the information. In a broader perspective, secondary literature enabled the researcher to cultivate a rudimentary appreciation of the policies and legislative framework surrounding urban agriculture in the city.

3.5 Sampling design
The study targeted 60 urban farmers in Mitchells Plain and key informants as the unit of analysis. Unfortunately, transect walks could not be conducted by the researcher due to security and safety concerns. Mitchells Plain is a high crime area (Thompson, 2016), therefore, it was risky for the researcher to navigate the township without assistance. Consequently, NGOs working in the area were used as an entry point to access the urban farmers. This means that the urban farmers who had no ties with the identified NGOs were excluded from this study. NGOs supporting urban farmers were identified through an active network the researcher was a part of.

The researcher was able to attend a series of urban agriculture workshops. Several actors involved in supporting urban agriculture were present at these workshops. Not only was the researcher able to identify and establish communication with active NGOs in attendance but the organizers of the workshop had compiled an extensive list of supporting organizations of urban agriculture in Cape Town which the researcher was able to access. The researcher's participation in these workshops enhanced his rudimentary appreciation of the active supporting organizations in the study area. The list of supporting actors in Cape Town was equally useful in identifying and establishing communication with other NGOs which were not present at the workshops. Furthermore, several follow-up meetings were conducted.
presenting additional opportunities to establish communication with NGOs particularly those operating in the study area. The researcher eventually became a part of the multi-stakeholder dialogue platform for urban farmers in Cape Town which improved his relationship with the stakeholders. Two NGOs were identified from the series of workshops. Therefore, selecting the sampling units was stratified with respect to urban farmers trained by a particular NGO.

After establishing links with the two NGOs active in the study area the next stage was to obtain a farmer register for the urban farmers trained by a particular NGO. Permission was requested and granted by the NGOs to access their databases and interview some of their members. For the first NGO, SEED, the register consisted of urban farmers who were members of the Food Freedom project which consisted of about 100 active members during the time of the study. This cohort included urban farmers who had been trained since the inception of the project. This was important as it meant the sample would contain members who have been trained at different times which meant that they had adequate time to apply their skills as well as establish networks amongst themselves and with other actors. The second NGO, SFL, provided a register for urban farmers who maintained close ties with the organization. The two NGOs were able to provide the registers for their respective cohort which was used as the sampling frame for the study.

The next stage involved the determination of the sample size from each cohort. To achieve this a recommended sample size of 30 units was employed for each cohort (Freund & Williams 1983 in Nyariki, 2009). Nyakiri (2009:94) notes that this sample size is applicable provided ‘the population size is known or roughly so’. Accordingly, the selected sample size was applicable since the total number of urban farmers was determined from the farmer registers provided by the NGOs. It is important to note that Nyariki (2009) holds that when using this sample size, one must factor in the possibility of non-response. This is why the researcher personally administered the questionnaires to significantly reduce the non-response rate. This sample size of 60 was manageable considering the limited financial budget and time frame for the study. As Nyakiri (2009) notes, it is crucial to factor budgetary and time constraints when determining the sample size. Furthermore, the sample size was justified as it is more or less similar value to sample sizes utilized in similar studies on urban agriculture, for instance, Olivier & Heinecken (2017a) who used a sample of 59. According to Masuku & Singh (2014:11), it is justified to ‘use the same sample size as those of studies similar to the plan’. 
A total sample size of 60 (30 from each NGO) was determined. After establishing the sample size random sampling was conducted to select the actual questionnaire respondents. Random sampling ensured that every urban farmer in each cohort had an equal chance of inclusion in the sample size (Kumar, 2011). The actual random selection procedure was achieved through automated means. For each cohort, a Microsoft Excel spreadsheet was created. Urban farmers from each sampling frame were assigned a number then entered into the excel spreadsheet. Once each sampling frame (potential survey respondents) was uploaded to Excel the random selection function was performed. For example, for the first sampling frame with a total of 200 urban farmers where 30 urban farmers were selected the following procedure was followed. A column was added to the spreadsheet and given a random number. In the first cell beneath this heading row, the ‘= RAND ()’ function was entered. After the random number appeared it was copied and pasted into the cells in that column. Finally, the researcher sorted the records using the random number function on the Excel ribbon. The researcher simply selected the first 30 numbers of the 200 which were randomly sorted. The similar procedure was followed for the second sampling frame; consequently, the sample size from both sampling frames tallying to 60 was reached.

Purposive sampling was conducted in the selection of key informants who were scheduled for the in-depth interviews. Key informants for this study included the Provincial Department of Agriculture Extension officer, the SEED Project officer, the SFL Project officer, an UFiSAMo Research officer, selected urban farmers and the VUFA vice chairperson. Unfortunately, efforts to interview the City of Cape Town Urban Agriculture Unit officer were in vain. The CoCT indicated that this was due to the closure of the Urban Agriculture unit. This form of non-probability sampling was viable as the researcher had to select interviewees with specific knowledge to the areas of interest. For example, the government informant was selected on the premise that he was significant in providing a government perspective on urban agriculture in the study area and beyond as a state actor. The NGOs were selected due to their direct involvement with urban farmers in the study area. The VUFA chairperson was included as a key informant as it enabled the researcher to appreciate the role of the urban farmer association in Cape Town. Interviewing all these informants prevented the entire qualitative inquiry from being vitiated as it provided a platform to cross-examine some of the cross-cutting issues among the respondents. Purposive sampling was conducted in selecting the urban farmer interviewees until a point of saturation was reached.
Eventually, 20 urban farmers were interviewed. In-depth interviews were conducted face to face with the key informants to create a rapport with the interviewees. The semi-structured questions aimed at exploring their support for urban farmers in the study area and more importantly the level of coordination and cooperation amongst themselves.

3.6 Data analysis

3.6.1 Quantitative data analysis
Quantitative data collected through questionnaires was followed by a data cleaning process intended to identify errors before the data were coded and entered into a Microsoft Excel spreadsheet. The quantitative data were then exported to the International Business Machines (IBM) Statistical Package for Social Sciences (SPSS Version 25.0) for an array of data analysis procedures. To make sense of the large chunk of data descriptive statistics were employed to describe the basic features of the gathered data. Various tools such as graphs and tabulations were utilized which enabled easier interpretation of the data. Since the study intended to go beyond merely presenting the data, inferential statistics were employed for further analysis. In this regard, non-parametric tests were conducted. Bivariate analysis was conducted through the Chi-square test to identify associations between different data sets that were crucial in explaining some trends and irregularities identified. The justification for employing inferential statistics, in particular, the Chi-square test was to counter the limitations of the univariate analysis. Consequently, associations or lack of associations could be identified which were able to be triangulated with data collected through other means.

3.6.2 Qualitative data analysis
The interviews with state support organizations, non-state support organizations and selected urban farmers, which lasted between 20-45 minutes, were all tape-recorded and transcribed verbatim. The transcriptions were carefully studied, coded and content-analyzed according to the dominant themes (Braun & Clarke, 2006). Emerging themes were then presented in prose to capture each interviewee’s view in a particular question. Open-ended questionnaire responses were simply used to augment the respective quantitative responses, often as direct quotations. Regarding urban farmer interviews, the individuality of the farmer quoted in each case was distinguished using a number ranging from 1 to 20, and an indication of the type of farmer (household or community farmer), their sex and their age range. For example, an old female household farmer between 40 and 49 years old would be identified as (F1HF ≥ 49) (Appendix VII). The age range used for in-depth interviews is as follows: ≥29 (29 years and
below), ≥39 (30-39 years), ≥49 (40-49 years) and ≥59 (50-59 years) and ≤60 (60 years and above).

In terms of analyzing the literature, a hermeneutic approach was adopted. This approach was adopted for the study since it is most suitable for work that is textual in nature (Kinsella, 2006). According to Kinsella (2006), this approach is characterized by the meticulous reading of text since language plays a crucial role in formulating interpretations. The major limitation of this approach is bias based on the interpretation of the text. Nonetheless, the researcher countered this limitation by reading the literature several times before writing. This analysis was crucial in substantiating data gathered from the other research instruments.

3.7 Validity and reliability

According to Brink (1993), reliability and validity are important aspects of research. The researcher had to pay meticulous attention to these aspects to improve the quality and credibility of the study. Reliability refers to the ability to repeat the research process and findings (Leung, 2015). This implies that the research is deemed reliable if it can be done a second time yielding the same result. Noble & Smith (2015:34) define validity as ‘the integrity and application of the methods undertaken and the precision in which the findings accurately reflect the data’. To put it more simply, a valid study will show what exists through a valid measure (Brink, 1993). To maintain reliability, the researcher made sure that all decisions undertaken were clear and transparent involving a detailed record-keeping procedure. This meant that all the materials employed and processes followed during the data collection phase, for instance, the date of interviews and locations were all recorded creating a duplicable trail.

Leininger (1991) holds that trust has to be acquired from the research respondents if any reliability and credibility is to be maintained. Therefore, the researcher was introduced to the respondents by the relevant NGOs prior to the data collection exercise. The researcher also assured the respondent's anonymity which enabled them to freely and honestly respond to the questions. Moreover, the questionnaire administration survey was conducted in the absence of the NGOs to avoid any form of bias. Triangulation of both quantitative and qualitative methods was adopted to circumvent the personal biases of the researcher thereby improving the validity of the study. Triangulation ensured that the data from the various sources were analyzed and if leading to the same conclusion assured validity of the findings. This, in turn,
improved the line of argument. The researcher was involved in various urban agriculture workshops and participated in the formation of an urban agriculture network for urban farmers in Cape Town. Such engagements facilitated informal in-depth discussions of several issues under more relaxed settings with various supporting actors. The researcher's prolonged engagement with the key informants facilitated the development of trust thereby improving the validity of the data generated. The recording and transcription of the key informant interviews enabled the data to be revisited to check whether emerging themes were in line with the interviewees' accounts. Furthermore, the analyzed data were returned back to key informants for feedback to assure the accuracy of the content. Key informants were also invited to the departmental seminars and workshops where the preliminary findings were reported. This ensured that the researcher and the key informants viewed the data consistently thereby enhancing its validity.

3.8 Limitations of the Study

The overall aim of the research was to explore the organization of urban farmers in Mitchells Plains and their interactions with supporting organizations. While the research methodology provided a solid base to address the research aim and objectives it is important to highlight the limitations of this research.

First, this study examined the organization of urban agriculture through an analytical case-study design. Certainly, to generate a more robust picture of the organization of urban farmers would require a sample of more areas in Cape Town. This is because the practice of urban agriculture in Cape Town is widespread and diversified across different locations within the city borders (Olivier, 2015). Nonetheless, this study is important as it presents preliminary findings of the phenomenon under investigation from which future studies can build on. Therefore, with caution, this study can be used as a comparative base for future studies carried out in Cape Town which encounter a similar limitation. Moreover, besides demographic variations, Mitchells Plain is a typical residential area in Cape Town; therefore, findings are likely to resonate with other residential areas across the city with comparable socio-economic and demographic profiles. In this regard, policy suggestions raised for Mitchells Plain are likely to be essential for other residential areas in the city.

Second, not all supporting organizations were selected for this study. As already highlighted in the previous chapter the stakeholders involved in the supporting of urban agriculture in the
City of Cape Town are diverse. Smit et al. (2001) hold that supporting organizations extend beyond the Government and NGOs to include research institutions, donors, and markets amongst others. Likewise, in Cape Town including the study area, such actors do exist, albeit they could not all be included in this study due to time and resource constraints. Nevertheless, the included supporting organizations were selected on the premise that they are arguably the most influential within this intricate web of actors (Olivier & Heinecken, 2017a; Battersby et al., 2014; Olivier, 2017). For instance, Olivier & Heinecken (2017a) note that in most cases NGOs are usually responsible for connecting urban farmers to donors, government resources, and markets. In the same way, Rogerson (2010) holds that the institutional environment (shaped by the government) is fundamental in shaping urban agricultural activities in South African cities. In this respect, it was justifiable to select the two supporting actors as key informants for the study given the already mentioned constraints. Future studies with ample resources and time can be able to include all the supporting actors to address this pitfall and present a more consolidated picture.

Finally, the use of NGOs as entry points to access the urban farmers also presented challenges. For instance, it meant that urban farmers who are not connected to the identified NGOs were excluded from the study. It is very much possible that some urban farmers in the study area are not linked to the NGOs for various reasons such as lack of information. Nonetheless, transect walks could not be conducted for safety reasons. Furthermore, time and resources for such an exercise to such non-affiliated urban farmers were equally limiting. Consequently, from a broader perspective, the results of this research do not represent the perspective of all urban farmers in the study area; therefore, generalizations based on this research are strongly cautioned. Nonetheless, the nature of the research required respondents who were knowledgeable on issues of self-organization and networking, therefore, it was advantageous to select respondents from these NGOs since they might have been trained and exposed to the issues. Moreover, there were problems with the farmer registers as they lacked accuracy and sufficient information in some instances. Consequently, there was difficulty in contacting some farmers. Further, some urban farmers declined to be involved in the survey on the premise that they were no longer active in practising urban farming. Therefore, such urban farmers were dropped out of the sample and replaced by the next respondent on the random number table generated from the Microsoft Excel spreadsheet. This procedure was followed until the required sample was reached.
3.9 Ethical considerations
Before data collection commenced, ethical clearance (Reference Number: HS17/8/9) was obtained from the University of the Western Cape to ensure that the anonymity, confidentiality, and consent of the research respondents were not violated. Ethics were upheld throughout the course of this study. The research ensured that the respondents understood the information which detailed the aims and objectives of the study, the reason for their selection, possible risks and contact details of the supervisor for additional information among other things. Interviews were conducted only after the consent form was signed and it was made clear to the respondents that participation was voluntary. Respondents were allowed to withdraw their participation at any stage if necessary or avoid responding to questions they did not feel comfortable answering. Similarly, interviews were recorded with the approval of the respondent and the respondent's names were not requested instead each urban farmer was assigned a code. In cases where names of other individuals were mentioned by respondents during an interview, these were replaced by pseudo names. The researcher informed all the key informants of the study and explained its intention. Appointments were made well in advance considering how busy they might be. All the data captured was stored in a password protected location only accessible to the researcher and his supervisor.

3.10 Conclusion
To sum up, this chapter presented a discussion of the research methodology utilized in this research. This chapter justified the use of both qualitative and quantitative methods in exploring the organization of urban agriculture in the study area. The reason for adopting a mixed methods procedure, as noted earlier, was to provide an in-depth appreciation of the different actors involved in urban agriculture and how these affect the success of the activity in the study area. The empirical results based on the pragmatist research philosophy and methodology are presented and discussed in the next two chapters.
CHAPTER 4: URBAN FARMER ORGANIZATION AND NETWORKING

4.1 Introduction
This chapter presents the findings and a discussion on the first 3 objectives of the study. These include investigating the socio-spatial characteristics of urban farmers, examining how urban farmers have organized themselves as producers of fresh food for own consumption and the market and examining the challenges that urban farmers face in organizing and networking and their responses to these challenges. Primarily, the findings are presented from the experiences of urban farmers trained by the two NGOs; that said, it is triangulated with the insights from the NGO representatives and to a lesser extent the government official involved in the study area. Furthermore, because some of the household farmers were also community farmers, responses pertaining to community farming are specifically indicated. Following the pragmatist philosophical perspective adopted for this research, quantitative and qualitative findings are reported simultaneously where appropriate to augment each other.

4.2 Socio-spatial characteristics of the respondents
Of the study population, all 60 subjects participated in the questionnaire survey. The questionnaire survey collected the socio-economic characteristics of the respondents. According to Swanepoel et al. (2017) collecting the socio-economic profile of respondents is crucial because these are important in initiating any developmental initiatives. In the context of urban agriculture, they note that such information can assist development practitioners in determining the viability and sustainability of the projects. The variables captured by the questionnaire include place of birth, the area of residence and length of residence in Mitchells Plain among others.

All the respondents (100%) were born in Cape Town and had been residing in the different areas of Mitchells Plain (Colorado, Eastridge, Lentegeur, Portlands, Rocklands, Searidge, Tafelsig, Westgate, Westridge and Woodlands). This means that out of the 19 subareas identified by the City (StatsSA, 2013:1), 10 subareas of Mitchells Plain were represented in the study sample. A total of 98.3% of the respondents indicated that they have been living in Mitchells Plain for more than 10 years while only one respondent has been residing in the area for between 7 and 9 years. Generally, this reflects that the respondents have had enough time to generate some form of relationships within their respective communities as the
chances of increasing social capital increase with time in a particular neighbourhood (Woodcock, 2001).

A majority of the respondents belonged to the colored racial group (98.33%) whereas only a single respondent belonged to the black racial group (1.66%). These findings are consistent with the 2011 census which reported that the colored population (91%) was the dominant racial group in the area (StatsSA, 2013). These statistics also concur with the assertion that despite the end of colonialism, Cape Town’s residential setup remains largely ‘racially-determined’ (Haysom et al., 2017:6).

In terms of gender, 58.3% of the surveyed population were females with only 41.7% male respondents. In a broader context, these findings coincide with the statistics across the Sub-Saharan African region which suggests that females are the major respondents in urban agriculture (Maconachie et al., 2012). Specifically, studies across South Africa reflect the same scenario. For instance, in their study across Cape Town, Olivier & Heinecken (2017a) reported that 60% of the respondents were females; similarly, Tembo & Louw (2013) observed a dominance of women in community farms in the Cape Flats.

From the age breakdown, it was observed that 5% of the respondents were below 19; 1.7% between 20 and 29; 16.7% between 30 and 39; 13.3% between 40 and 49; 25% between 50 and 59 and 38.8% were above 60 years (Table 4.1). The statistics reflect that the elderly are the major respondents in urban agriculture. This is consistent with a study by Olivier & Heinecken (2017b) which reports that over 74% of the sampled urban farmers in the Cape Flats were above 40 years old.

Table 4.1: Age of the respondents

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 years and below</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>20-29 years</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>30-39 years</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>40-49 years</td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>50-59 years</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>60 and above years</td>
<td>23</td>
<td>38.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018
The average household size of the respondents in Mitchells Plain was 4.43 members per household with a standard deviation of 1.84. This observation corresponds to the 2011 census figure of a 4.57 average in Mitchells Plain (StatsSA, 2013). In comparison to Cape Town, it is slightly above the average household size (4) reported for Cape Town (Frayne et al., 2009). The biggest household was occupied by 10 residents, in contrast to 10 households which consisted of only 2 occupants each. Moreover, all of the respondents owned their area of residence with the exception of a single respondent who was renting the premises.

Generally, the survey results indicate that most of the respondents (43%) matriculated with only 13.3% going forward to pursue higher education (courses, certificates, diploma or degree). Primary school (grade 1 to grade 7) was attended by 10% of the respondents while 23.3% of the respondents attended grades ranging between Grade 8 to 12. Comparatively, the 2011 census reveals that 28.6% completed matric, 5.6% pursued some higher education, 8.9 received some primary education and 48.7% received some secondary education in Mitchells Plain (StatsSA, 2013).

As can be seen from Table 4.2 below, 24 (40%) of the respondents indicated that they were pensioners, 7 (11.7%) were unemployed, 10 (16.7%) are employed and 19 (31.7%) were self-employed. Additionally, it was discovered that the respondents’ primary source of income per annum came from their formal/informal jobs (41.7%), 18.3% from their spouses or relatives, and 40% from social grants in the form of pensions. Generally, this pattern coincides with Battersby’s (2011) assertion that urban farmers do not rely solely on farm activities as a principal source of income. Similarly, Thornton (2008) reported that social grants were the primary source of income for urban farmers in the Eastern Cape (South Africa).
Table 4.2: Employment Status and the main source of income

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Employment</th>
<th>Spouse/Relatives</th>
<th>Grant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not employed</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Self-employed</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Employed</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Pensioner</td>
<td>0</td>
<td>1</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>11</strong></td>
<td><strong>23</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

Respondents were asked to indicate how long they had been farming for within their backyards. It was discovered that the subjects have been farming in their backyards for an average of 7.85 years with one farmer having practiced urban farming for at least 40 years compared to 7 who have been farming for just a year. Due to the space constraints, most farmers (70%) have opted to utilise both ground space and containers to increase production (Table 4.3). Additionally, 18.3% specifically utilise containers with less than 12% of the respondents utilising ground space around the house. The majority of those who responded to interviews highlighted that container usage was popular for health reasons. As opined by one elderly farmer ‘my body is becoming weaker so I do not have strength, I feel at this present time I cannot dig into the ground anymore so I must look into containers’ (F11HF≤60). Therefore, container cultivation is preferred as it is less strenuous especially for elderly farmers. On the other hand, those engaging in community farming had been farming for an average of 3 years, with the longest farm in existence for 7 years while one was just a year old.

Table 4.3: Measures to accommodate farming

<table>
<thead>
<tr>
<th>Measure</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space around the house (front/back)</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Use containers/ sacks</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Both</td>
<td>42</td>
<td>70.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018
Another section of the questionnaire required respondents to give information on their primary motivations for farming, the major crops they grow and how they utilise produce from their farm. The majority of the motivations for farming were inclusive of social benefits (41%), health benefits (35.8%), environmental benefits (19.8) and to a lesser extent financial benefits (3.3%). This is in line with Battersby & Marshak (2013) who discovered that the motivations for urban farmers in Seawinds and Vrygrond (Cape Town) were not limited to financial gains but were multidimensional in nature. Moreover, non-financial motivations explained why most of the individuals continued farming despite the poor water conditions which were affecting their crops. For instance, most farmers grow their own crops due to perceived organic benefits. Most respondents revealed that individuals believed that one needed to possess an intrinsic motivation to cultivate given the obstacles they face in the practice. For instance, one respondent explained that despite the water crisis ‘when one crop dies I pull it out and plant another crop so it is always ongoing’ (F2HF≥49). In other words, despite problems such as plant wilting and subsequent poor harvest most respondents were determined to continue farming. Therefore, these findings support the view that the importance of urban agriculture must continue to be upheld despite the modest material benefits derived from the practice since these do not serve as the primary motivation behind it (Maswikaneng et al., 2002).

Although the type of crop grown by the different farmers varied the most common crops grown were pinned down to spinach leaks and herbs. Respondents were then asked to indicate whether produce was for household consumption, selling or both. In response to this question, most of those respondents (81.7%) indicated that the produce was strictly for household consumption whereas 1.7% indicated that they sell and 16.7% do both (Figure 4.1). Perhaps it is important to note that this finding concurs with the farmers’ motivations since they, to a lesser extent, include financial motivations. Once again, this supports the discourse that individuals engage in urban farming for reasons that extend beyond material gains (Averbeke, 2007).
Furthermore, in-depth interviews with selected respondents revealed that use of produce extended beyond consumption and selling to include sharing with neighbours and friends. A case in point is one lady who explained that ‘I just gave my neighbour the other day ten chillies and there you see the few tomatoes that I picked [for them]’ (F10HF≤60). The findings generally show that 7 females sell produce compared to 3 males which coincide with Mireria (2013) who argues that urban agriculture acts as one of several income streams adopted by females.

Table 4.4: Use of farm harvest by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sell</th>
<th>Household consumption</th>
<th>Both</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0</td>
<td>22</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>27</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>49</td>
<td>10</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018
4.3 Organization of urban farmers and farm activities

The manner in which urban farmers are organized is crucial as it affects the success of their activities (Mougeot, 2005). The following section provides an account of how urban farmers conduct their activities and how this subsequently relates to how they are organized among themselves. It will focus on various aspects including assistance received from the immediate family, friends and networks.

4.3.1 Assistance from family members

In response to the question of assistance with farming activities from family members, a range of responses was elicited. The data gathered shows that a considerable number of respondents (63.3%) receive assistance in their urban farming activities as opposed to 36.7% who reported no assistance. Almost two-thirds (65%) of the respondents receiving assistance highlighted that support was received mainly from their children or grandchildren while others received mostly from their spouse (35%).

Although a large number of respondents received support from family members the extent of engagement varied. For instance, in reference to his backyard farm, one respondent explained that ‘when I do not water, my wife waters using all the grey water ... she is quite part of the garden’ (M18CF≥59). On the other hand, one individual stated that ‘my brother is not a gardener but he helps in other ways [such as] making sure that I catch the gutter water’ (F2HF≥49). Such variations in the level of engagement were prevalent across the respondents. This clearly depicts that although both respondents receive support, the level of engagement varies and may be direct or indirect.

Conversely, the minority of respondents (36.7%) who reported not receiving support from immediate family provided various reasons to explain this. On one end, a few opined that they did not desire any disturbances in their farms hence preferred to conduct it in solitude. For such individuals, although their families may have been interested in assisting them they would be declined the opportunity on the premise that the individuals regarded their farms as a sanctuary. For some individuals, lack of support was blamed on limited interest and laziness from the household members. Others simply did not have the support, for example, referring to her household farm, one widowed farmer explained that ‘I have got no children in the house so I must do everything on my own’ (F13CF≤60).
Focusing on the four community farmers identified, the in-depth interviews revealed that they mainly depended on voluntary assistance from the community. One farmer reported that help from the community was irregular in nature hence she had to employ three full-time workers to assist her with her farm project. Another farmer had resorted to maintaining the farm through running programs which involved youth participation. The third farmer was working alone and was considering opening up the farm to interested members as a way to increase productivity. The last farmer was having trouble maintaining the community farm as he indicated that community interest was low. Generally, all the community farmers reported low support from their family due to various reasons such as a lack of interest and time.

4.3.2 Formal organization and networks

When the respondents were asked if they were affiliated with any formal urban farmer organization, the majority (93.3%) indicated that they had no affiliation whatsoever. In fact, respondents believed that their involvement with an NGO was a formal network. Consequently, when asked if they were a part of any formal urban farmer's organization they were quick to indicate their NGO affiliation. This was because this is where they received their inputs, training as well as information pertaining to urban agriculture activities. As a result, some respondents regarded this as a formal organization.

Further, most individuals were not aware of any local urban farmer organizations such as the VUFA. A minority of respondents (9.7%) indicated affiliation to formal organizations which support urban farmers. Regarding the affiliated individuals, two respondents indicated membership with the Philippi Horticultural Area Food and Farming Campaign. Regardless, further enquiry revealed that one of the respondents maintained a sporadic relationship as the respondent reported that ‘I could not make it to the Annual General Meeting’ (F6HF≥59). Another individual reported multiple affiliations as explained in the extract below:

‘I am busy with the network group with Nicole from UFISAMo and I am also a member of the South African Food sovereignty campaign and then other people I do attend but I am not really involved like I am with Nicole and SA food sovereignty group I just attend their workshops and the meetings’ (F3CF≥59).
The above quotation clearly shows the level of investment in networking by the urban farmer. Moreover, she underscored that maintaining such affiliations was important for her as it ensured that she could be linked to organizations that could assist her with her community farming project. Despite her involvement, she did indicate that it was time-consuming hence her desire to focus on two networks which were more beneficial to her. A Chi-square test was used in order to establish if there was an association between the type of urban farming practiced and membership to urban farmer’s networks. A result of 0.6 revealed that there was no association between network affiliation and type of farming (Table 4.5).

Table 4.5: Chi-Square Test of type of farmer and affiliation to formal networks

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.226</td>
<td>1</td>
<td>.635</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Work, 2018

The last individual reported affiliation to the UFiSAMo urban farmer’s group network. She indicated that the network enabled her to share experiences with other farmers from different communities such as Khayelitsha and Gugulethu. Furthermore, the respondent indicated that she benefited from the network in terms of free training programs and knowledge. An interview with the UFiSAMo research officer revealed that the purpose of the network was to improve the dialogue between urban farmers from the various communities within Cape Town. This initiative proves that the organization of urban farmers was poor not only in the study area but in Cape Town hence such efforts by external players. Despite the limited affiliation to formal organizations and networks, the findings did show a strong presence of informal networks at a community level.

4.3.3 Informal organization and networking

Some sections of the questionnaire attempted to examine the informal local organization and networks that exist among urban farmers within Mitchells Plain. A total of 81.7% of those surveyed indicated that they had friends who were urban farmers within the community. Of this population, almost all of the respondents (98%) said that they shared information related

http://etd.uwc.ac.za/
to farming with their friends. The main mode of communication was identified as face to face interactions (93.8%), compared to only 6.2% who utilised social media platforms such as WhatsApp Messenger\(^2\) and text messaging. Nonetheless, it was surprising that a respondent between 40-49 years old actively utilised mobile technology in sharing information with fellow urban farmers (Table 4.6). Additionally, the in-depth interviews revealed that sharing was not limited to information but extended to resources such as seeds, produce and in some instances labour. Therefore, this was an indication that there was some form of organization among the urban farmers in the community.

Table 4.6: Means of sharing information by age (N=48)

<table>
<thead>
<tr>
<th>Age</th>
<th>Face to Face interactions</th>
<th>Media technology use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and below</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>20-29 years</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>30-39 years</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>40-49 years</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>50-59 years</td>
<td>12</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>60 and above years</td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>3</td>
<td>48</td>
</tr>
</tbody>
</table>


The use of mobile technology platforms such as WhatsApp and text messaging was low. Consequently, given that more than half of the population was above 49 years of age it was assumed that there was a link between old age and low usage of mobile technology (Tacken et al., 2005). Returning to the subject of information sharing, individuals who relied on social media platforms to communicate with one another indicated that this was convenient for them. They highlighted that such technology enabled them to overcome constraints such as and distance from one another. In such cases, individuals exploited social media platforms to relay information ranging from updates on upcoming workshops, new recipes and pest management solutions.

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\(^2\) WhatsApp Messenger is a messaging service application that allows the sending of text messages, voice calls, images and documents through electronic devices such as mobile phones.
The findings also show that community farms provide a place where farmers and community members are able to meet and interact for different reasons. For instance, one community farmer reported periodically conducting market days where farmers come together to sell vegetables to the community. Consequently, urban farmers are able to meet and interact at such events. In sum, these aforementioned findings did indicate that local networks, although loose and fragmented, were present within the community.

4.4 Challenges urban farmers face in organizing and networking

Urban farmers face various obstacles in terms of organizing and networking, for instance, spatial variations and different views amongst farmers (Schmidt et al., 2015). This objective was tailored specifically to explore this assertion and the findings are presented below.

4.4.1 The importance of urban farmer’s organization and networking

The findings of this research revealed that most urban farmers believe that urban farmers’ organization and networking is generally important. Specifically, out of the 49 respondents who responded to ranking the importance of urban farmer networking/organization, 49% indicated it was important, 49.2% indicated it was very important, 8.2% thought it was slightly important whereas 11 respondents did not respond to the question (Table 4.7).

Table 4.7: Importance of urban farmer organization and networking in Mitchells Plain

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly important</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Important</td>
<td>24</td>
<td>40.0</td>
</tr>
<tr>
<td>Very important</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>81.7</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2018

From a broader perspective, these results reveal that the respondents are aware of the benefits of organizing and networking. According to them, benefits included the sharing of ideas and the reduction of operating costs. For instance, a female household farmer was aware of how organizing lead to the reduction of costs when attending meetings or workshops by mentioning that ‘it would be nice to travel in a group because there is a guy that I know ...
and he is always available to transport us but not for me alone to go but if we were in a group then there would be less than I would have to pay’ (F14HF≤60). Some farmers, as the respondent quoted below, explained that networking enabled them to strengthen friendships while getting some work done:

Aunty Rose and those people we are still connecting like I was saying earlier say, for example, if you wanted something to be done at home we can meet as a group ... because we enjoy being together, they keep on asking when are we going to get together because everybody enjoyed that, informal even and just helping each other because that is what is important. (F10HF≤60)

4.4.2 Challenges in organizing and networking

The majority of questionnaire respondents maintained that a lack of time was the greatest constraint in organizing and networking with fellow urban farmers across Mitchells Plain (Table 4.8). In-depth interviews ensured that more details were captured surrounding the major questionnaire responses.

Table 4.8: Factors affecting urban farmer networking and organization in Mitchells Plain

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Lack of time</td>
<td>23</td>
</tr>
<tr>
<td>Lack of resources</td>
<td>4</td>
</tr>
<tr>
<td>Different views</td>
<td>2</td>
</tr>
<tr>
<td>Distance between farmers</td>
<td>11</td>
</tr>
<tr>
<td>Lack of support/Insufficient from supporting actors</td>
<td>6</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2018

4.4.1.1 Time

Despite 51.6% of the respondents indicating that they were neither formally employed or self-employed 38.3% of the respondents indicated that time is a major constraint in networking with other farmers. The in-depth interview with selected respondents aided in

3 Not real name
shedding light on why time was the dominant constraint for the majority of urban farmers. For instance, one respondent who occasionally invites urban farmers over to her home to share information indicated how her formal job affected this activity. On accessing her informal networking group, she revealed that ‘Last year it went very well but somehow it ended, so I have to get myself rejuvenated again ... I work 6 months a year for German people, so now the 6 months is over so I have to start all over again’ (F2HF≥49). This indicated that work significantly reduced her time to engage in networking with other individuals. Similarly, another respondent highlighted that she knew people who were farmers but it was a challenge to network with them due to time constraints. She explained that ‘there are people who garden but they cannot attend the workshops that occur during the week and when it comes to the weekends there are some people who work and if they work they do not have the time to attend the workshops so with the other activities they have to do it is very difficult because you have that weekend ... to do all your chores’ (F11HF≤60).

The findings also indicate that even for individuals without formal jobs time was a challenge as they have several activities that they attend to during the course of the day. A case in point is a respondent who explained that for her the greatest challenge she faced was ‘Time, I have young kids and am doing a lot so I cannot go anywhere really’ (F8HF≥59). So for this household farmer, her preoccupation with a number of obligations at home hindered her from linking up with other urban farmers as often as she would have wanted.

The issue of time is crucial in relation to the dominant means of information sharing. As already noted, most urban farmers share information through face to face interactions as opposed to just 6.2% who exploit social media to share information. For this reason, time is a significant factor as it is prerequisite to ensure that exchange of information is achieved among urban farmers. Despite the problem, urban farmers had various suggestions and ways in which they were responding to the problem.

One community farmer explained that ‘Time is a challenge for us but we have managed to make do a network of our own’ (F13CF≤60). According to her, this ‘network’ includes a couple of her close friends in her neighbourhood who attend urban farmer events on behalf of the group after which they would share the information gathered. In the same way, another questionnaire respondent indicated how she sent her younger daughter to workshops and meetings when she was unable to. As a result, while such farmers may be absent at the meeting or events they are always updated in terms of information received. The next
prominent hindrance to organizing and networking was tied to the distance between urban farmers and a lack of interest.

### 4.4.1.2 Distance between urban farmers
Mitchells Plain is a relatively large township with 18 subareas (StatsSA, 2013:1). As a result, the distance between urban farmers can be an issue in terms of finding a central location for urban farmers to meet and share information. The in-depth interviews revealed that this distance between urban farmers translated to transportation costs as one would take up to three taxis to attend a workshop. This is shown in the excerpt below:

‘[I]f I have to travel to SEED I have to go from here to the Center and then from the Center to SEEDs so it is money per day and it takes long even if you going to Mitchells Plain, Mitchells Plains is big, you can go from one end it, it can take you an hour to go to the other end. For example, if I were to go there a taxi may not go to Town Center and may go around that side Beacon Valley, Spine road then they come to the Center, so a five-minute ride becomes a half an hour, and from the Center, you have to wait again for the Rocklands taxi … by 8:30 I have to be out because I don’t know if the taxi is going straight or if it is going to pick me up because it is coming full from Bellville or where ever it comes from’ (F9HF\leq 60)

Most of the respondents reported a similar comment as in the excerpt above. Given the distance which ultimately results in increased transport costs, different respondents had different ways of addressing the challenge. For example, one urban farmer suggested that the solution lies in ‘basically mobilising people within the area, closer to people so that they do not have to travel that far’ (F1HF\geq 49). One female farmer was already conducting gatherings at her house as a way of networking farmers who were in close proximity to her. Another farmer explained that due to the location of some of these meetings ‘we cannot always attend the meetings, so what must be done, maybe if they send information on your phone’ (F8HF\geq 59). In the same manner, another respondent highlighted that the use of social media specifically, WhatsApp messenger groups was the alternative approach to urban farmers networking in Mitchells Plain. She maintained that ‘we created a WhatsApp group … so I think that is the network that we use in the Mitchells Plain area … and there is where we share the information’ (F3CF\geq 59).
4.4.1.3 Lack of resources
Closely linked to the issue of time was a lack of resources which was identified as a challenge in organizing and networking. The respondents indicated that there was a need for funds to ensure that they could conduct activities related to organization and networking. For instance, one farmer explicitly said that the issue of a lack of resources is indicative of the fact that they do not possess the ‘money to attend the meetings’ (F1HF≥49). Some respondents believed it was the responsibility of farmers to provide resources to facilitate this process. For example, one respondent indicated that ‘the government can help us you know because if the government gives to the NGOs help so that they give to the people but they do not give it they have to go and ask for sponsors and sponsors do not really give you all that’ (F9HF≤60).

4.4.1.4 Lack of interest
Approximately 18% of the respondents regarded a lack of interest among urban farmers as the basic challenge of organizing and networking. In-depth interviews revealed that some farmers believed the major reason behind people lacking interest in organizing and networking was because people did not see the benefit of such activities. For example, one farmer maintained that ‘I do not think there are enough people that are interested’ (F8HF≥59). For this particular respondent, it was important that there be enough interest before such initiatives took place. In the same way, another respondent explained that ‘we need something like that and have a voice but how do you go about it but people do not want to stand together Mitchell’s Plain people are like that’ (F6HF≥59). For some respondents, it was because the farmers were generally not eager to be involved in such initiatives. For instance, one respondent had to say that ‘they are not interested I do not know, lots of people are not interested according to me, there are a lot that are not interested, they are very negative and they are lazy also … they do not want to go that extra mile’ (F14HF≤60).

In response to this challenge, some respondents thought it was crucial to educate the urban farmers in Mitchell’s Plain on the importance of organizing and networking. As one respondent indicated ‘I think people do not know the potential of having a network, people are not aware’ (F4HF≥39). They believed that once this was known then people would be appreciative and interested in networking among them. For another community farmer, the solution lies in improving the income generation aspect of urban farming. She believes that because urban farmers in Mitchell’s Plain are failing to realize the economic benefits they remain uninterested in networking and organizing as it is merely a waste of time. This she explained by saying ‘Mitchell’s Plain is a very difficult place to keep people together because
people are not really committed you know ... the reason we would like to take it to the next level is that to generate an income that will keep them going’ (F3CF≥59). On the other hand, one respondent mentioned that people lose interest especially because they did not receive anything in return from these activities. She explained that ‘people are always looking for something to get free and the passion must be big enough ... So they must stop thinking what are you going to get back, so peoples mindset must change and they must not be afraid to share it does not matter’ (F2HF≥49).

4.4.1.5 Different views/agendas

Differences in agendas were also found to be a challenge (3.3%) affecting urban farmers in organizing and networking in Mitchells Plain. It was noted that once people united with varying agendas this affected the function of the group or network formed amongst the farmers. One respondent described how this factor affected her in networking with other urban farmers on WhatsApp messenger as follows:

People come with their own agenda, for instance, you start a [group] chat on WhatsApp which is mainly just for advice and questions regarding gardening, now they come sending jokes and they send you personal stupid things and it takes your data and then I exit the group that is what happened with SEED, and I said I am not interested because why don’t you understand, you do not have to send me a prayer because I pray in the morning and I pray at night so I don’t want a prayer, don’t send me things like that and that puts me off, because at the end of the day we are here for urban gardening not for the chairman and that and that, I absolutely hate that, you waste your time, they do not stick to the agenda, I hate that. (F5HF≥49)

For this particular respondent, the urban farmers network had to stick to a particular set of rules to function and once members failed to follow rules the sustainability of the group would be threatened. In the same manner, another respondent detailed how she had withdrawn from an urban farmer’s network due to fights which occurred amongst members. She explained this by stating that ‘I have just withdrawn with the infighting ... I do not have the energy for that, that is not public stuff you do so I just slowly started withdrawing’ (F10HF≤60). The Provincial DOA senior extension officer also highlighted how conflicting agenda resulted in poor networking from his experience. He explained that ‘those people can’t form a union, no they can’t because there are disputes among them so they always fight,
fight’. According to the two afore-mentioned respondents, the only way to ensure that such initiatives were sustainable was by ensuring that all the farmers had a similar agenda and steered clear of disrupting the aims of the group.

4.4.1.6 Lack of support
A total of 10% of the questionnaire respondents felt they did not receive enough support to organize and network from supporting actors. Firstly, the standpoint of the Provincial DOA in assisting urban farmers in organizing and network was clear. The DOA senior extension officer explained that ‘it is easier for them (the farmers) to do it (network) because when you try and do it they can point fingers at you as someone who is from outside trying to force them to form unions’. In other words, the state actor believes urban farmers organizations should be self-organized as this increases the chances of sustainability. On the other hand, NGOs were willing to offer support to urban farmers in terms of technical advice and facilities. As one project officer explained ‘we said if they started their own thing we would assist them with anything but not with money we cannot assist them with money but they can use the space, they can bring people to the space they can have workshops here’. This expert clearly indicates that the NGO is willing to assist urban farmers to organize although not financially. In line with this challenge, other respondents believed that farmers had to stop expecting some form of support from supporting actors. Generally, there was an indication that supporting actors do want to assist urban farmers, however, they prefer the process to begin with the farmers. On the other hand, the in-depth interviews revealed urban farmers were not specific to how exactly supporting actors could assist them besides generally referring to financial means.

4.4.1.7 Other factors
According to the questionnaire results, the other category counted for 5% of the respondents. The issue raised under this category was the health status of the respondents. Health is a significant component of engaging in urban farming and related activities such as organizing and networking. Two respondents indicated that their health status significantly affected their ability to constantly travel and interact with other urban farmers in Mitchells Plain. One of the respondents indicated that her swollen foot limited her movements as explained in the excerpt below:

*The biggest challenge is my health because I am restricted to do, ... if you look at it [foot], it looks normal, but if I put it next to that one you can see that it is swelling*
and if I put it down like this for long then it swells tremendously and I still have a week or two before I go to the doctor, so that is what holds me back and this is my main challenge because there are things I would like to do. (F10HF≤60)

While the declining health status affects the ability of urban farmers travelling to network with other farmers in the vicinity it also affects their own work on their farm.

4.5 Discussion
This study aimed to examine the organization of urban farmers and challenges faced in organizing and networking in Mitchells Plain. This section seeks to discern the study findings by providing an in-depth analysis and interpretation of the aforementioned findings within the context of the theoretical framework.

4.5.1 Urban agriculture and farmer organization
The first three questions of this research sought to examine how urban farmers conduct their activities and their relationship with other farmers. With reference to the theoretical lens, such interactions relate to bonding and bridging capital. This examination was crucial given that social capital is a pre-requisite element required to promote the interaction between urban farmers (Gallaher et al., 2013) and subsequent organization. The study findings indicate that there is a significant level of bonding capital within the community of Mitchells Plain, although there are some findings which to a lesser extent counter this observation.

Primarily, the research findings established that there is significant family participation in urban agriculture activities within most farming households. Urban farmers have continued cultivating despite the harsh environment and limited material gains which highlights that for the respondents urban farming is important despite the limited material gains (Maswikaneng et al., 2002). The majority of the farmers have continued farming and extending the skill they possess to other members of the family namely their spouses or children. It was discovered that in most cases the children and grandchildren of the farmers are the helpers on the farm. As opined by most respondents this manoeuvre ensures that the urban farming principles are instilled in the child at a younger age. Furthermore, farmers are able to interact with their spouses and in some instances, the interaction extends to farm-related activities such as attending workshops and purchasing farming inputs. In other words, urban agriculture acts as
Urban farming presents a significant source of bonding among the family members in Mitchells Plain. Not only does it serve as an alternative entry point through which the family members can interact but it also increases time spent together which enhances family ties. Considering that the respondents have been farming for an average of 7 years it can be assumed that urban agriculture has increased the time spent between families. This is crucial in the Mitchells Plain context given that the area is plagued by drug abuse and criminal activity (Thompson, 2016). Therefore, depending on the level of engagement, urban agriculture keeps children actively occupied in the farm with their parents or grandparents removing them from the dangerous activities within the community. In accordance with the present results, previous studies have demonstrated that urban agriculture does, in fact, reinforce family bonding in Cape Town (Olivier & Heinecken, 2017a). Nevertheless, the results of the present study need to be interpreted with caution given that some respondents reported a lack of support in their activities from their immediate family.

One unanticipated finding was that there were instances where farmers did not receive any support from their family members. In some cases, farmers strictly did not want any of their family members intervening in the farm as they regarded it as their ‘sacred’ zone. On the other hand, some farmers reported that family members were generally not interested in assisting. In fact, some farmers particularly females were frustrated by the lack of interest by their spouses as they were left to do all the work related to the farm independently. Further, those engaging in community farms had difficulty obtaining support from their families and the community. In this regard, this particular finding reflects a low level of bonding capital as interaction time between the family members is reduced. These findings may help us to understand that in some instances where family involvement is low family participation may be intentionally prohibited. Therefore, it is necessary to appreciate the reasons why farmers are not receiving any assistance as it might be the desired option in some instances. Beyond the family setup findings also indicated that urban agriculture strengthens bonds between friends and colleagues.
The study established that bonding capital was strengthened among friends and neighbours in Mitchells Plain. There were several testimonies where farmers invited their friend to an urban agriculture workshop. In such cases, the level of the friendship was enhanced given that the time spent together was increased due to the urban agriculture-related activity. In other cases, friends continued to share crops, cooking recipes and good farming practices with one another. Although, face to face interaction was the dominant form of interaction use of technology was also acknowledged as a way to counter spatial constraints. As a result, loose informal networks are visible across the urban farming community in Mitchells Plain. Additionally, urban agriculture was found to be a point of departure encouraging communication between urban farmers and neighbours. This interaction extended to sharing of crops as well. In this instance once again, the interaction between the friends and neighbours is increased which strengthens bonding capital within the community. This bonding has allowed for the looming of informal networks which aid the farmers when in need of resources such as inputs, crops or pest management advice.

Given the above, it is clear that urban agriculture is significant in strengthening bonding capital within the community of Mitchells Plain. Not only does it offer an opportunity for the family members, friends and colleagues to interact but it also increases the time spent between the parties involved. Consequently, informal networks have emerged which are constantly strengthened through face-to-face interactions and mobile communications through which resources such as information, seeds and crops are shared. Nonetheless, these interactions are not adequate to encourage urban farmers to formulate any urban farmer groups. On this backdrop, the next paragraphs will discuss the bridging capital within the community.

Bridging is facilitated in situations whereby people in communities and towns ‘are not well known to one another’ (Nieman, 2006:165). The results of this study established that urban farmers specifically community farmers are able to foster bonding within the community. Somewhat surprisingly, the urban farmers themselves particularly the community farmers were found to contribute towards bridging capital within their community. Depending on the size of the farm, such spaces enable them to host events such as market days where farmers exploit the farm space to sell produce. This empirical finding provides a new understanding of social capital development through community farms. While the literature has traditionally
highlighted social capital development among community farm members (Small, 2007; Tembo & Louw, 2013) this finding indicates that community farms can be a bridging platform extending beyond the farm members to general community members and beyond. As a result, different community members are able to attend these market days and interact with other community members thereby enhancing the relationships between community members.

In light of the above discussion, this study goes to reinforce the fact that there is the formation of loose and largely fragmented informal networks where resources are shared among farmers in the community. However, to a lesser extent caution must be applied in interpreting these findings, as some of the results indicate that bonding and bringing are low in the community despite the practice of urban agriculture. As a result, urban farmers struggle to network with one another which reduces any chance of forming a successful urban farmer interaction.

The urban farmers in Mitchells Plain face time constraints in organizing. Considering that most of the interactions between these farmers are usually face to face, time constraint poses a significant hindrance to the organization of urban farmers in Mitchells Plain. Moreover, when put in the context of other challenges faced such as a lack of interest, spatial variations and a lack of resources it becomes clear that perhaps urban farmers in Mitchells Plains are not seeking for a formalised urban farmers organization as in the case of urban farmers in Maputo (Halder et al., 2018) or Dar es Salaam (Schmidt et al., 2015). This is because the time factor shows that urban farmers in the area are preoccupied with a number of activities hence urban agriculture does not necessarily take central focus in most cases. In other words, it is of marginal importance in their daily lives. Therefore, there is a need to encourage the alternative use of mobile technology which is seemingly low among the respondents. Despite the various platforms offered such as workshops and market days, not all community members are compelled to engage in the activities which reduce the intended impact of such activities in bridging capital among the urban farmers. In this way, the opportunity to interact with other individuals is reduced (Schmidt et al., 2015).

Moreover, some respondents are generally not interested in urban farmer organization and networking and believe that they need support to have such a structure formulated. As a result
of the aforementioned challenges in organizing formal urban farmer organization may not be the most appropriate form of organization since it requires a certain level of organization and commitment which does not seem to exist in Mitchells Plain. However, this may not be applicable to community farmers who prioritise their work and want to see their farms a success. For such farmers, a more traditional form of organization may perhaps be required which will ensure that they are recognised by all the relevant supporting actors. As the findings indicate, one of the farmers is actively involved in networking with other organizations beyond the community borders, therefore, the other community farmers must be encouraged to follow suit.

In sum, it is evident that urban farmers in Mitchells Plain are closely organized into informal networks through which they can share resources amongst themselves. Nonetheless, these organizations occur randomly and in an unregulated manner. It seems that urban farmers face a number of challenges in organizing but have exploited a number of strategies to ensure that they are able to continue networking within their current groups. As a result, there is a need to strengthen these networks to ensure that the level of organization of urban farmers is enhanced. From the findings, it seems that community farmers perhaps need to be more formally organized so as to access benefits from different networks. On the other hand, such an organization may not be crucial for household farmers. Instead, there may just be a need to strengthen the nature of the informal networks so that their efficiency is enhanced.

4.6 Conclusion
The findings of this chapter show that the urban farmers in Mitchells Plain conduct their activities with the support of their families and friends within the community. In this respect, urban agriculture has aided in strengthening bonding and bridging capital within the community. Nonetheless, some findings are indicative of low bonding and bridging capital within the community. Furthermore, although a majority of them are not affiliated with any formal urban farmer organization most urban farmers recognise the importance of farmer organization and networking. The urban farmers engage in informal networking which enables them to share resources amongst themselves. Failure to effectively organize is also attributed to a number of challenges urban farmers face, for example, time constraints and spatial variations.
CHAPTER 5: URBAN FARMERS, THE COMMUNITY AND SUPPORTING ACTORS

5.1 Introduction
This chapter presents the findings and a discussion on the last two objectives of the study. Accordingly, the relationship between urban farmers and the community is presented followed by the linkages between urban farmers and supporting actors. Once again the discussion is presented in line with the social capital theory and relevant literature where appropriate.

5.2 Interactions between urban farmers and the community
Given the low uptake of urban farming households in Cape Town (Crush et al., 2011), this section attempted to examine the communities’ response to urban agriculture. As the literature suggests, if urban farmers are organized they have increased chances to improve advocacy for urban agriculture (Simatene & Binns, 2008) which may improve the uptake of urban agriculture activities. The findings were solicited from the urban farmers’ viewpoint and in this way, the solutions suggested to increase the uptake of urban agriculture activities were captured primarily from the urban farmers’ views and experiences.

5.2.1 Community perception of urban farming
A five-point Likert scale was employed to determine how the respondents felt their immediate community perceived urban farming. According to the questionnaire results, it was discovered that the community of Mitchells Plain has a generally poor perception of the practice (Figure 5.1) with close to 45% and 10% rating it as poor and very poor respectively. Such respondents expressed the belief that most people were generally too busy and thought that urban farming was expensive and laborious. For instance, one respondent indicated that ‘people would want gardens but they do not have the time and they also think that it is expensive but it is not that expensive if you start it’ (F5HF≥49). Other respondents attributed the community’s poor perception on urban farming to the stigmatisation of the practice while other individuals highlighted that the Level 6b water restrictions discouraged community members to engage in urban farming as they witnessed other urban farming projects fail. In some instances, individuals reported a fraught relationship with their immediate community. For example, one farmer indicated that ‘neighbours will come to pick your stuff before you come and get it, my tyres here in front here had plants but they took that also’ (M17HF≥39).
Similarly, Battersby & Marshak (2013) reported that theft was a problem for urban farmers in Vrygrond (Cape Town).

Nevertheless, from the data in Figure 5.1, it is clear that 36.7% of the respondents labelled community perception as fair, 8.3% as good and 1.7% as very good. This group of respondents believed community perception was improving considering that food prices were increasing hence more individuals would be incentivised to grow some of their own vegetables. A case in point is a respondent who mentioned that ‘the people that I know they are now into to it because everything is expensive, so they have to eat from what they grow’ (F6HF≥59). On the other hand, some respondents argued that some community members were either not aware of how to start or lack the resources to engage in the practice. A majority of individuals highlighted that providing the relevant support was crucial in aiding community members to engage in urban farming as one respondent indicated ‘if they do get the things [they need] in the beginning ... I think they will do it by themselves’ (F9HF≤60).
5.2.2 Frequency and forms of enquiry on urban farming from community members

The next step involved determining the frequency urban farmers received members of the community interested in urban farming and the kind of information they requested. Based on the questionnaire survey, it was discovered that 55% of the urban farmers described the frequency of enquiries from prospective farmers as occasional (Table 5.1). A further 28% described the enquiries as frequent as opposed to just 16.7% who indicated that they have never received enquiries about urban farming from community members. Moreover, it was clear that community farmers are more likely to receive more enquiries as opposed to home farmers possibly due to the accessibility and visibility of community farms. For example, one community farmer mentioned that ‘I have [had] over 100 people since 2016 that I have been in contact with that started their home gardens’ (F3CF≥59). Therefore, community farms present a greater opportunity to expose the benefits of urban farming and possibly spark interest among community members in Mitchells Plain.

Table 5.1 Frequency at which community members enquire about urban farming

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>17</td>
</tr>
<tr>
<td>Sometimes</td>
<td>33</td>
</tr>
<tr>
<td>Never</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

There were distinguished responses on the kind of enquiries respondents received from prospective farmers. Out of the 50 respondents who responded to this question, 98% registered their desire to know how to start farming compared to just 2% who were interested in discovering how they could obtain support to start farming. This finding indicates that most community members do not know how to go about farming given the harsh environment in Mitchells Plain (Rono & Cottle, 2014). Interestingly, in-depth interviews detailed how the interaction between farmers and their immediate community extended to other sharing of produce from the farm. For instance, one farmer explained that ‘I give the crops to people around me, my neighbours and that Muslim lady there and then other two friends’ (F9HF≤60). Similarly, another detailed how he continued planting a particular crop for a friend despite him not consuming it.
5.2.3 Increasing community participation in urban agriculture
Household participation in urban agriculture is generally low in Cape Town (Frayne, McCordic & Shilomboleni, 2014). Given the multi-faceted benefits of urban agriculture, the study attempted to solicit how best community participation can be increased from the urban farmer's viewpoint. The questionnaire survey and interviews captured several responses to this question. Since this was qualitative in nature, responses were coded into themes which are reported below.

5.2.3.1 Make it more interesting
Some farmers highlighted that there was a need to identify interesting entry points when introducing urban agriculture to the community, specifically for the youth. This is because youth engagement in urban agriculture activities is generally poor (Thornton, 2008). For example, one respondent indicated that ‘what I have been trying with the youth is instead of just teaching them how to garden and how to plant [I] like having dance classes and music classes in-between including other entertaining stuff to attract them’ (F1HF≥49). In the same way, one farmer commented that

‘I think it needs to be just opened up in a garden, start in a garden and have people walk around ... having balloons or whatever the case maybe, music people love music so you attracting people especially children, not just focusing on the garden because I think people will not just gravitate towards a garden but once they are there [they] see what can happen with a seed’ (F4HF≥39).

This approach seemed to resonate with most respondents as they felt that it was important to get the youth interested particularly at an early age so as to ensure that the love of urban farming grows with them. Such respondents felt that given the stigma associated with the practice it was important to make it more exciting to capture the younger generation. Another set of responses indicated that the community members were not aware of the benefits and procedures of farming hence awareness was crucial in increasing the uptake.

5.2.3.2 Knowledge sharing
The study discovered that a lack of knowledge on the benefits and techniques of starting a farm was as a common denominator hindering the community from participating in urban agriculture.
farming. One lady explained that ‘when people look at gardening when they think about it they think I need a particular set of skills before I start’ (F2HF≥49). For this respondent there was a lack of knowledge of the fundamental skills required hence her decision to be actively involved as explained in the excerpt below:

‘I actually get people in here 10 at a time and the whole idea is to teach them how to start a garden and I actually teach them how to plant, what to use, what kind of fertiliser that you can use and that you do not have to buy everything and then I cook something from out of the garden because I think that is the best way to get people, because all people eat’ (F2HF≥49).

Another respondent added that it was important to involve and teach the youth ‘from a very early age so that they can grow with the garden’ (F3CF≥59). From this farmer’s experience, it was a cumbersome task to teach older children the concepts as they would have stigmatised the practice from an early age. Going back to knowledge sharing techniques, one respondent indicated that one way of sharing information could be achieved through the dissemination of success stories to the community. She indicated that most of the time people did not engage in the practice because ‘people are limited with the knowledge they have or the knowledge they do not have, now they think ohh I cannot do that’ (F10HF≤60). This view resonated with most respondents as they generally noted that if people were to witness the success of the activity they would be interested in participating in it. Similarly, some individuals explained that one way of doing this was through sharing their crops with community members in hopes that recipients would be encouraged to start producing their own crops.

5.2.3.3 Resources provision and monitoring
Besides knowledge sharing, the study discovered that most respondents believed that NGOs had a major role to play in ensuring that community participation was enhanced. This is because they felt they possess the capacity to provide not only the technical skills but physical resources to start farming. The soil is generally poor for agriculture purposes in Cape Town hence urban farmers need to invest in it before realising any gains (Battersby et al., 2014). Consequently, as one individual pointed out ‘you cannot grow in that soil so you have to buy the soil (compost) and grow in it and soil (compost) tends to be a bit pricey’
For this reason, NGOs play a crucial role in subsidizing some of the costs associated with starting a farm. The SFL programs manager pointed out that for a standard fee, members received ‘a starter kit which consists of three bags of compost, 3 bags of mulch, 12 packets of seeds and seedlings ... basically what they are getting ... is enough to start the garden’. In this way, prospective farmers are capacitated to successfully engage in the practice since they have been provided with the skills and inputs. Moreover, respondents elaborated that NGOs monitoring was equally important to ensure that projects that are initiated are successful.

Some individuals thought that monitoring does not necessarily have to come from the NGOs but other knowledgeable individuals could be involved. For example, one respondent explained that ‘SEED has been training people in a permaculture course, so there are a lot of people with the qualification so they must connect those who did the longer course with people ... so that they can work together so as to fill the gap’ (M15HF≥39). In this way, trained community members would be able to obtain training even in the absence of NGOs. This is something the NGOs are already implementing as the NGO informants revealed that they had local trainers within the community. Therefore, this presents an opportunity for them to disseminate the skills and knowledge they acquire although it does not address the provision of inputs.

5.2.3.4 Demonstrating the financial capacity of urban agriculture

Some respondents explained the importance of urban farmers demonstrating the financial capacity of urban farming as a way to incentivise community involvement. Most respondents felt that this was the language that the urban community understood; therefore, it was important for it to be included when raising the awareness of urban agriculture within the community. This sentiment is best embodied in the following extract:

‘we can use the garden to run school holiday programs so that we can show them even how to make soap from your garden, you know at the end of the day they can see the business opportunity but that is to just capture them that is the only way we are going to get the youth interested, see the youth love making money’ (F3CF≥59).
Some farmers indicated how they were able to sell crops and processed products such as jam. For such individuals, this was important to spark interest among the community members. On the other end, some responses indicated that primarily there was a need for a passion and proactiveness from the prospective urban farmers.

5.2.3.5 Proactive community members
Some respondents did not think there was much that could be done to increase community participation as it had to be a personal decision made by the individual. Such respondents underscored that starting a farm was a difficult task which potentially hindered prospective farmers from engaging in it. For example, one respondent emphasised that ‘the beginning to kick it off is hard work, to get it right is no joke’ therefore ‘at the end of the day you must have a love for it’ (F5HF≥49). Generally, such respondents felt that despite teaching an individual and providing them with the relevant inputs, farms still failed due to a lack of an unwavering commitment to pursue the activity. The following extract from one respondent explains this assertion:

‘I learnt not to ask people they must come and show interest and show they are passionate about it, so I do not go and look for people anymore that is one thing I have learnt. I do not go out there and advertise, you must come and if you are passionate about it you will come and be a part of something, otherwise, they do not last, it will just be for a while’ (F7CF≥59).

This extract shows that passion for the practice was a prerequisite for engaging in the practice without which a farmer could not sustainably farm. Consequently, such farmers have stopped trying to actively encourage the immediate community members to engage in the practice. Instead, they wait for interested individuals to approach them as a basis for providing assistance.

5.3 Linkages between urban farmers and supporting organizations
Olivier (2018) asserts that supporting organizations, specifically, NGOs and the government play a pivotal role in assisting urban agriculture initiatives across Cape Town. Notwithstanding, governments and NGOs all face challenges successfully implementing socio-economic developmental projects in low-income communities (Forkuor & Agyemang,
2018). In this respect, this part of the study attempted to examine the relationship between the supporting actors and urban farmers in Mitchells Plain.

5.3.1 Non-state actors
The two NGOs SFL and SEED were identified as the primary non-state actors for this study. Both NGOs have been operating in Cape Town for more than 10 years. Their main activities include the educating and supporting home farmers to grow crops based on permaculture principles. Based on the study findings the following information was identified.

Firstly, the entire questionnaire sample reported membership with either SEED or SFL and in some instances both. While most respondents reported regular membership to access the resources offered, some respondents reported a more sporadic interaction with the NGO. For instance, one lady indicated that ‘SEED helped me with implementation but after that; I was pretty much on my own’ (F1HF≥49). As a result, she does not regularly rely on the NGO anymore although she reports a good relationship with it. Moreover, she has continued to meet with her former-workshop colleagues pertaining to issues around urban agriculture. In this instance, NGOs can be said to instigate the formation of networks within the community.

On the other hand, 21.7% of the respondents indicated affiliation to another NGO operating in the area in addition to the primary NGO through which the respondent was identified. Generally, the reason for this was to obtain additional resources and meet new people as embodied in the following extract:

‘The more places you go to the more perspectives and growth. There is always information, information has no ending so there is always more and I am curious to find out more, what else can I do to help my garden and my knowledge, for me being a housewife it also gives me a chance to connect with people because I only see pots, pans and cups, so that is something different and I like that’ (F5HF≥49)

Similarly, another respondent argued that her dual membership was as a result of one NGO not providing a service available at another. She explained this by stating that the second NGO she joined ‘has health workshops that are starting in March and in October where you can attend and they teach you what to do with your crop and to manage your crops’ (F20HF≥49). Besides such explanations, an interview with the SEED project officer highlighted that it was facing financial challenges hence support for household farmers was
curtailed. Consequently, resource provision has been downscaled implying that members could have been joining other NGOs to ensure that they continue to access resources they could no longer receive from SEED. Besides membership, the study attempted to identify the level of awareness of NGOs within the study area.

Generally, the questionnaire survey results reflect that the awareness of the sampled NGOs is prominent across Mitchells Plain. Asked about how the respondents had come to know about their primary NGO, 71.1% of them indicated that it was through the media specifically a local newspaper the *Plainsman*[^4]. NGOs generally attempt to utilize every means possible to advertise their activities to the community. As the SFL project coordinator pointed out, they try to exploit any possible outlet including ‘a website... Facebook page and also ... radio’. For this reason, they are able to access more community members and beyond. The next dominant means of acquaintance was through word of mouth (Table 5.2).

### Table 5.2: Means of awareness of NGOs

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I approached them</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>They approached me</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>I was introduced by a friend/colleague/RELATIVE</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>Media/newspaper etc</td>
<td>43</td>
<td>71.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2018

Several respondents (21.7%) highlighted that they were introduced to the NGO through friends, relatives or colleagues. To this end, one respondent attested to how his wife had introduced him to an NGO after which they jointly collaborated in farming activities in their yard. Another respondent explained how it enabled her to start conversing with her neighbours. As evident in Table 5.2, only one farmer indicated that an NGO directly approached her. This rare scenario was explained by the SFL project coordinator who mentioned that they had been impressed by her community farm hence their attempt to establish a relationship with it. In fact, the farm is now being used as an Agricultural Hub for the NGO. According to the SLF project coordinator, this Agricultural Hub was an attempt to

[^4]: The Plainsman is local community newspaper distributed in Mitchells Plain.
improve the accessibility of the NGO in the community. As a result, urban farmers may be able to acquire resources such as compost and seedlings instead of travelling to the NGO offices located some distance from the community.

Another section of the research questionnaire explored the nature of resources provided by the NGOs working in the area. According to the findings, the respondents are able to obtain various resources such as starter packs (inputs), training and monitoring at reasonable prices from the NGOs. The NGO informants reported that training is advertised after which interested individuals register and attend the workshops which occur periodically. From a broader perspective, the findings indicate that the urban farmers were satisfied with the service rendered by the various NGOs. Nevertheless, these services are provided primarily for household farmers only. In other words, the identified NGOs operating in the area do not assist community farmers with resources in exception to the aforementioned community farm in the area. This is attributed to two reasons: firstly, the kind of funding acquired by the NGOs is specific to the type of farmers to be assisted. For example, SEED implements ‘the Food Freedom Initiative … supporting home gardeners based’ (Brown 2013 in Haysom et al., 2017:41). Secondly, for one of the NGOs, they have noted that it is easier to work with household farmers as opposed to community farmers due to the dynamics involved in community farming. As the SFL project coordinator explained:

When they started in 2008, that is what they used to do in community gardens what they have found is that there are a lot of community dynamics where you have this garden in this field you have 10 or 20 people and in the beginning everybody is there, sometimes members fall away before you even really set up the garden and you have the very few that will maintain and come back what happens when it is harvesting time all the other members would come back and that is where the dynamics are not a good thing and then they went to home food gardening individuals and that is where we are today, this is what is working for us best and it is proven that it is working, because of previous experiences.

Consequently, this NGO has learnt that community farming initiatives within Mitchells Plain are not sustainable hence the desire to support household farmers instead.
Finally, there was an attempt to examine the level of coordination amongst the NGOs as well as with state actors namely the Provincial DOA and the City of Cape Town. The in-depth interviews with the NGO officials revealed divergent views in terms of coordination amongst one another as well as with state actors. One NGO informant explained that ‘it’s always a bit tricky is it not, other NGOs are always like ooh I got the money and we just want to keep it here’. This informant reported that there were generally poor linkages between NGOs working in the area due to the competitive nature of funding. This was further corroborated by the fact that the funder that had been supporting them previously was now funding another NGO within the same area. So it was such competitiveness that caused a fraught relationship between NGOs within the area. Similarly, a key informant from the other NGO acknowledged that synergies were not as strong as they should be hence stating that ‘I would like to have a good relationship with all the people here in MP especially the organizations’.

In terms of coordination with state actors, the interviews revealed a rather disappointing finding as well. One NGO informant reported a very poor relationship with the City of Cape Town Urban Agriculture Unit. The informant explained this in the following quotation:

No, I have not come across them or worked with them at all (City of Cape Town UAU), In fact we were looking for them, and I know Stanley left didn’t he and that was like the last that we dealt with them and I tried to phone Godfrey, but it is also like they do not want to work with us, but also I think they do two things, they are not only on urban agriculture so they are understaffed and they do not have much funding so they have never been really useful.

From the above excerpt, it is clear that the City of Cape Town’s activities were curtailed by the understaffing and poor funding. Similarly, a poor relationship was reported with the Provincial DOA. Specifically, one informant reported that ‘[the] Department of Agriculture was around but it always wanted to deal more with the farmers (community farmers) than the home gardeners’. In other words, the relationship becomes weak considering that the NGO specifically runs a project working with household farmers. However, there was a sign that linkages could be looming given that another NGO informant reported that ‘we are going to be training for them [Provincial DOA] now, in the next cycle’. As a result, this is an indication that there may be room for the creation of a partnership between the two actors.
5.3.2 State actors

As aforementioned in the methodological chapter, the identified state actors include the Provincial DOA and the City of Cape Town specifically the Urban Agriculture Unit. Nonetheless, attempts to conduct an interview with the City of Cape Town UAU were fruitless. This left the Provincial DOA as the major state actor operating in the area.

The Provincial DOA plays a pivotal role in assisting urban farmers across Cape Town (Swanepoel et al., 2017). Notwithstanding, the findings identified two different extremes in this regards. Primarily, none of the respondents (0%) acknowledged receiving support for their household farming activities. This was interesting considering that the DOA informant indicated that they ‘Yes we support home gardeners, in fact, the requirements are standard, you must have an open space at the back and you must have water to irrigate’. Despite this comment, there was a clear indication that the majority of farmers were not aware of the services offered by the actor. For example, one farmer explained that ‘I have never done business with them (Provincial DOA) I want to find out how to do it’ (F1HF≥49). Furthermore, the in-depth interviews revealed that a majority of the urban farmers felt they were not sufficiently informed of the different actors which support urban farmers. This further adds to the impression that there was limited knowledge of the actor. In contrast, the DOA informant highlighted that there were various means through which awareness was raised among community members including Mitchells Plain. For him, it was simply a matter of the community of Mitchells Plain being interested in the practice. Specifically, he explained that ‘It’s not a matter of we have never communicated the information to those people down there (Mitchells Plain), but they don’t show interest when it comes to that. Instead, there is a lot of demand in areas such as Khayelitsha.’

On the other hand, 3 of the 4 community farmers identified reported receiving support from the Provincial DOA. While this indicates that community farmers are more knowledgeable of supporting actors as opposed to farmers who strictly engage in household farming it also confirms the community is to some extent aware of the DOA. In terms of services offered, the following quotation from a community farmer highlights the services offered by the DOA:
‘[the] DOA started with me in 2015, they donated, they funded me and helped me with the setup of this garden, like with the container the irrigation system, they gave me production inputs, tools, they gave me everything to start up’ (F3CF≥59)

The other two farmers had received more or less the same assistance which coincides with the DOA informant who clearly stated that assistance was offered provided stipulated requirements were met. Only one community farmer explained that he had not received support from the DOA. In fact, he stated that ‘[support from the] DOA, no I don’t know what they do like I said we do not get support from the government’ (M18CF≥59). This indicated that he was not aware of the DOA and services they offered. Also, the fact that the farm has been in operation for just a year suggests that the respondent had not actively searched for support from possible actors.

In terms of coordination with other actors, the DOA senior extension officer described the relation between supporting organizations as ‘very poor’ and occurring ‘randomly’. He acknowledged that there was limited coordination of activities specifically with NGOs working on similar projects in the area. For him, this resulted in duplication of efforts and resource wastage. The concerns of ineffective coordination of activities are best summed up in the following extract:

‘there is no problem either than [that] people do not want to work together, I don't know whether you have noticed this country of ours there is that tendency of people undermining each other but people will run away from that, for example, people will think they are working with the city they are better than government and if working for an NGO some will say I don't care you see’.

The informant further indicated that considering that NGOs are the primary contact for the urban farmers if they had a good relationship they could act as a central point through which the DOA communicates its services. Consequently, these findings reveal that there is a poor relation among these actors involved in Mitchells Plain.

Another actor identified as important is the City of Cape Town. Unfortunately, as already mentioned efforts to secure an interview with the CoCT UAU were fruitless due to the closure
of the unit. As a result, the findings generated from the questionnaires and interviews could not be triangulated with the City’s perspective.

Respondents were asked to indicate whether they had received support from the CoCT specifically the Urban Agriculture Unit. The overall response to this question was rather disappointing. All of the respondents (100%) indicated that they never received support from this unit whatsoever. In fact, in-depth interviews revealed that most of them were not aware of this unit or the Urban Agriculture Policy of the city.

The only form of support received from the City was through the provision of compost bins. Nevertheless, only 40% reported receiving these bins from the local council. Further probing revealed that the requirements for receiving this bin were by ‘providing evidence of rates payment as well as a local Identity Card’ ($F11HF ≤ 60). In other words, these compost bins could be acquired by anyone within the community despite engaging in urban farming.

5.4 Discussion
The aforementioned findings reflect that according to the respondents there are generally mixed perceptions of urban agriculture in Mitchells Plain. Moreover, NGOs and to a lesser extent the Provincial DOA are responsible for instigating the development of urban farmer networking in the community. This section seeks to discern the research findings by providing an in-depth analysis and interpretation of the results within the context of the theoretical framework.

5.4.1 Urban farmer organization, community interaction and support
The current study set out to examine the relationship between urban farmers and the community. From the respondents’ perception, it is clear that there is generally a negative attitude towards urban agriculture in the community. According to the respondents, most individuals in the community seem not to be interested in the practice. In fact, in some instances, there is a bad relationship between urban farmers and the community members which has escalated into stealing and damaging crops. Therefore, there is a need to raise awareness of urban agriculture and its benefits within the community.

On the other hand, there are community members interested in engaging in urban agriculture as evident by the enquiries most urban farmers receive. A majority of respondents reported
that most interested individuals request assistance on how to start farming. Although farmers would like to assist they do so in a rather ad hoc manner, as a result, it may not be as effective. For instance, some farmers assist through conducting workshops in their own homes while some simply respond to the questions they are asked. Moreover, the varied responses on how to increase the uptake of urban agriculture activities received from the respondents show that they possess a number of ideas to tackle the problem. Therefore, if the urban farmers were more organized they would be able to increase the uptake of urban agriculture activities more efficiently. For instance, they would be able to offer their own training programs for interested community members to avoid duplication of efforts. This is entirely feasible given that most of the respondents are well trained on the issues and the presence of community farms can act as venues for such workshops. Moreover, given the funding challenges faced by NGOs urban farmers may be able to step in and formulate some form of Community based organization which will ultimately keep the skills within the community promoting sustainability (Malan, 2015). Essentially, training becomes much closer to the community and advocacy may be strengthened which may increase the communities’ uptake of urban agriculture activities.

The last objective aimed at examining the linkages between urban farmers and supporting organizations, namely, NGOs, the Provincial DOA and the CoCT. In reference to the theoretical framework, these relationships are labelled as linking capital. Linking capital can be defined as relationships that are formed beyond the immediate community (Acharya et al., 2010). In the context of Mitchells Plain, this relates to the links the urban farmers have to actors outside the community. Such linkages are crucial for communities when additional resources need to be acquired from outside the immediate territory (Woolcock, 2001). Therefore, the actors which can provide such resources include the provincial government and municipal government and NGOs (Malan, 2015). Generally, improved organization aids in better access to such resources (Schmidt et al, 2015). The study findings revealed that there is poor linking capital within the community. While the urban farmers are linked to NGOs, linkages to the Provincial DOA are minimal. In fact, linkages to the City of Cape Town are virtually non-existent (Figure 5.2).
The study established that linking to the state actors such as the Provincial DOA although present was limited to a few urban farmers. Only community farms were found to be linked to this state actor. This particular link was found to be significant as it enabled the farmers to acquire resources such as boreholes, tools, tanks, containers and farm inputs from the state actor. The importance of the Western Cape DOA can be understood in the context that NGOs hardly support community farms. Therefore, this finding supports the view that although different actors may have divergent views (Battersby et al., 2014), they are able to serve different kinds of urban farmers (Kanosvamhira, 2018). It can be assumed that without the involvement of the Provincial DOA community farming projects would not be able to access support from elsewhere. The low linking specifically among the household farmers can be
explained by the following reasons. First, the Western Cape DOA does not maintain a local presence within the community hence is not easily accessible to the community members as compared to the NGOs. Moreover, while they attempt to advertise their activities across various platforms, they do not exploit local tools such as the community newspapers. Consequently, most respondents have no linkages to the state actor which is reflected in the low linking capital within the community of Mitchells Plain.

Contrary to expectations, this study did not find any significant level of linking between the community and the municipal government. In fact, the findings of this study indicate that the linking capital with the City of Cape Town specifically the CoCT UAU is non-existent (Figure 5.2). Given that the City of Cape Town openly supports urban agriculture (CoCT, 2007) one would have expected the findings to reflect some linkages with the farmers from Mitchells Plain. However, none of the respondents reported receiving support from the City of Cape Town in exception of a minority who reported receiving compost bins from the local council. Most farmers were neither aware that the city had an urban agriculture unit nor an Urban Agriculture Policy. Therefore, this poor linking can be attributed to a low level of awareness among most respondents. Moreover, it shows that the loose and fragmented nature of informal organization among urban farmers in the community is not adequate to ensure that they access this actor. NGOs are partly responsible for the poor linking capital within the community as well.

NGOs are crucial actors in improving linking capital in urban farming communities in Cape Town (Olivier & Heinecken, 2017a). As a result, it was expected that NGOs in the present study would be the central link between the urban farmers and state actors. Unfortunately, based on the results of this study the assertion by Olivier & Heinecken (2017a) is rendered invalid for Mitchells Plain. This may be attributed to two reasons. Firstly, the findings of the study prove beyond doubt that the majority of the respondents are happy with the presence of NGOs operating within their vicinity. NGOs have enabled the respondents to engage in urban agriculture through the provision of training and resources at affordable prices. Therefore, in their own right, they are linked to urban farmers. Resources offered are not only limited to physical input but extend to technical services as well. In this respect, NGOs services are more or less similar to services urban farmers would require from state actors hence less
dependence on state actors. Furthermore, NGOs are easily accessible compared to state actors within the community.

NGOs maintain a community presence hence are accessible to the community of Mitchells Plain (Figure 5.2). In this case, one of the NGOs has offices within the community. The other NGO runs an urban agriculture hub in an attempt to decentralise its services to the community. Another strategy employed by both NGOs is through the employment and training of community members who are in some instances able to run certain projects. In this way, there is a bottom-up approach which enables the community to identify with the NGOs. Finally, the means of advertisement is crucial as the non-state actors not only exploit the traditional means of communication but also utilise community media outlets such as the local newspaper. Essentially, all the aforementioned tools and techniques exploited by NGOs enable them to be popular and accessible to urban farmers and in this way, their relationship with the community is improved. Nevertheless, the NGOs were the entry point to the respondents hence the conclusion arrived at in this particular instance is based on respondents with links to either NGO. This limitation means that study findings need to be interpreted cautiously. To some extent, poor linking can also be attributed to the urban farmers themselves.

The research established that the majority of urban farmers were not affiliated with any formal organizations or networks. While there was a presence of informal networks these are local, loose, largely fragmented and opportunistic in nature hence the amount of links they possess to supporting actors is minimal. In other words, these informal networks may not be strong enough to link the farmers to high profile supporting institutions such as the Provincial DOA. This explains the few links urban farmers have with the Provincial DOA (Figure 5.2) coupled with the challenges urban farmers face in organizing and networking within these informal networks it is extremely difficult for them to link to state actors. Therefore, such challenges reduce the capacity of improving the impact of urban farmer organization and subsequent linking with supporting actors, specifically state actors.

In essence, the aforementioned discussion indicates that linking to state institutions is generally limited. One of the issues that emerge from these findings is that there is limited coordination of activities among the various actors which adds to the problem. Nieman
(2006) argues that it takes deliberate effort from development institutions to build social capital through working together and forming relationships. Unfortunately, this does not seem to be the case within the Mitchells Plain community. Contrary to the City’s urban agriculture policy, both NGOs and the Provincial DOA reported a stagnant relationship with the CoCT UAU. Furthermore, there was limited coordination of activities between the NGOs themselves due to the rivalry nature of fund acquisition from donors. In this respect, these results differ from Olivier & Heinecken (2017a) and Kirkland (2008), but they are broadly consistent with Haysom & Battersby’s (2016) assertion that there is limited synergy between various supporting actors.

Previous studies across Cape Town have shown that NGOs were vital in supporting urban agriculture activities because they are able to link urban farmers to supporting state institutions (Olivier & Heinecken, 2017a; Kirkland, 2008). This study has been unable to corroborate this claim due to the poor linking identified between the urban farmers and state actors. In fact, the results of the present study suggest that there is limited coordination given that none of the household farmers was aware of the services offered by the Provincial DOA or the City of Cape Town. Therefore, these particular findings support the assertion that development practitioners tend to function in isolation which hinders any chances of linkages and resource sharing (Kanosvamhira, 2018). Other than linking capital, supporting organizations are crucial in enhancing bonding capital.

Bridging is facilitated in situations whereby people in communities and towns ‘are not well known to one another’ (Nieman, 2006:165). The results of this study established that urban agriculture plays a pivotal role in strengthening bridging capital in the community of Mitchells Plain and beyond. Different actors were identified as crucial in instigating bridging capital in the study area and these include NGOs and to a lesser extent the Western Cape DOA.

The findings indicate that the NGOs operating in the study area are the main instigators of bridging social capital within the community. The NGOs have achieved this through the conducting of various activities such as workshops which focus on different components of urban agriculture for interested community members. For instance, various workshops are advertised mainly through the Plainsman local newspaper and interested members are able to
sign-up and attend these workshops. At these workshops, different people from different backgrounds converge with the common objective of learning how to farm. In other words, they are among like-minded people and this facilitates dialogue and the formulation of friendship (Schuller, 2001). This finding was further corroborated by some respondents who revealed how they had cultivated friendship through such gatherings. Consequently, different individuals are able to find a common ground for interaction and the development of friendship amongst themselves (Nieman, 2006). Nonetheless, these workshops occur periodically which means different groups of friendships are formulated which do not necessarily interact.

While the findings discovered that a majority of urban farmers in the community are not affiliated with any formal urban farmer networks, NGOs have been instrumental in establishing local informal networks. Urban farmers from different sub-areas of Mitchells Plain (Figure 5.2) have been able to maintain communication through face to face meeting and interactions via social media. Community members have formed social media groups through which they continue to communicate away from the actual workshops. Furthermore, it was noted that some trained individuals who continued to meet with one another even after they completed their course. In general, therefore, it seems that these local informal networks continue to survive even after workshops conclude. In this respect, the influence of NGOs is crucial in strengthening bridging capital in the community. Similar results are reported by Olivier & Heinecken (2017a), where it was noted that NGOs were able to formulate platforms which enabled the community members to engage and develop relationships. Another supporting actor that has influenced bonding capital among the respondents is the Provincial DOA.

Although the Provincial DOA has assisted in extending the bridging it was notably to a lesser extent but at a larger scale compared to NGOs. The findings clearly revealed that the majority of urban farmers were not aware of the services offered by the actor. This result may be explained by the fact that the information about the state actor is not easily accessible to the farmers. As a result, most farmers are not able to take advantage of the training opportunities offered by the Provincial actor. Furthermore, while the NGOs target household farmers it seems that the Provincial DOA targets community farmers. Nevertheless, for the few farmers who were aware of the services offered by the actor took advantage of them. Specifically,
these were all community farmers who have been able to attend workshops offered by the actor. These workshops are in most cases conducted in different areas outside of Mitchells Plain thereby connecting urban farmers from different areas (Figure 5.2). Therefore, interaction is expanded to outside the community borders as opposed to NGOs where interaction is generally within the community. As a result, respondents are able to interact and develop relationships with individuals who share similar interests in other communities.

Additionally, state actors such as the City of Cape Town, specifically the urban agriculture unit is not contributing towards bridging capital at all. As was noted in some interviews, the unit is underfunded, therefore, it can be assumed that it is unable to offer services such as workshops which have the potential to enhance bridging capital.

5.5 Conclusion
From the respondents’ perspective, the general community in Mitchells Plain would like to engage in urban agriculture activities. However, most remain cynical towards the practise viewing the activity as laborious and are discouraged due to factors such as the water restrictions. As a result, more initiatives need to be conducted to dispel some of the myths cynical community members possess about urban agriculture. NGOs have been instrumental in strengthening bonding and bridging capital within and between different subareas of Mitchells Plain although they do not necessarily link them to the Provincial DOA. Furthermore, urban farmers face a number of challenges in organizing which adds to the problem of linking with supporting actors specifically state actors. In other words, it may seem that informal networks are not adequate to enable urban farmers to access resources beyond the community borders. Therefore, urban farmers may need to be more aligned with formal networks or organizations. Alternatively, the discussion highlights that they may still be accessible through NGOs because of the popularity of NGOs in the community. Notwithstanding, the success of this alternative hinges on the improved partnership between the NGOs and state institutions specifically the Provincial DOA and the City of Cape Town. Moreover, this interaction is necessary given that while the different actors do have similar agendas they vary in terms of implementation. Therefore, interaction ensures that each niche within the community is covered. Currently, it seems that besides links with NGOs, linking capital is generally poor although the Provincial DOA has been able to bridge members from Mitchells Plain with other communities.
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction
In order to get insights on how this organization influences the impact of urban agriculture activities in Mitchells Plain, the overarching aim of this study was to present empirical findings on urban farmer organization and linkages to supporting actors. This was achieved by examining the manner in which urban farmers in Mitchells Plain organize their activities and their relationship with supporting actors. This study revealed how urban farmers conduct their activities, the challenges they face in networking and their relationship with the community. Additionally, one of the main objectives of this research was to explore the links between urban farmers and supporting actors. This final chapter presents a summary of the major findings, draws a conclusion and provides recommendations based on the research findings.

6.2 Summary of Findings
One of the most noteworthy findings to emerge from this study is that there is a strong presence of informal networks among urban farmers in Mitchells Plain and to a lesser extent beyond the community borders. Bonding and bridging capital have ensured the emergence of informal support networks which benefit the urban farmers. These networks have facilitated information exchange, for instance, communicating workshop dates and pest management solutions. Moreover, these networks are responsible for advertising NGO services resulting in the capacitation of aspiring urban farmers through training programs and resource provision. The presence of these networks can be attributed to NGOs which have facilitated the interaction of urban farmers from different sub-areas of Mitchells Plain. Further, as indicated in Figure 5.2, state actors such as the Provincial DOA are to a lesser responsible for these networks.

The findings also show that, while informal networks are present, they are rather sporadic, fragmented and occur in an opportunistic manner. The study findings indicate that while informal networks benefit the farmers they are unable to tap into networks beyond the community. Nonetheless, given that urban agriculture is not the primary activity for most households and the differences in the spatial location of the farmers it is perhaps advisable to encourage the use of mobile technology in communication amongst farmers. In other words, this may be the new wave of urban farmer networking and organization specifically for
household farmers who are preoccupied with other activities hence may not be willing to devote most of their time for the more formal structures for urban farmer organization and networking. For community farmers, the findings imply that the existence of a more formal structure would improve their linkages with supporting actors as they would be more recognised by organizations at various levels (Schmidt et al., 2015). This in part may explain why some farmers choose to affiliate with other more formal structures despite their engagement in informal networking within the community. Essentially, both informal and formal type of networks appear to be crucial for the success of urban agriculture activities in the community.

Institutionally, although urban farmers have good relations with NGOs, there are weak linkages with state actors particularly the Provincial DOA and to a great extent the City of Cape Town. The evidence from this study suggests that NGOs have a closer presence to the community compared to state actors as conceptualised in Figure 5.2. In general, therefore, it seems that NGOs are more popular than state actors. The findings also show that NGOs are crucial in ensuring that urban farmers successfully engage in their activities. NGOs are able to provide subsidized inputs, capacity building workshops and extension services for the urban farmers. Furthermore, they facilitate the formulation of local networks among the urban farmers which are crucial in allowing for the exchange of information such as training dates, pest management solutions and recipes. Consequently, it is doubtful whether urban farmers would be able to conduct their activities in the absence of NGOs given the various challenges faced in Mitchells Plain, for instance, sandy soils and water restrictions. This aspect of the study validates the significance of NGOs in capacitating urban farmers in Cape Town, for example, Olivier (2018) acknowledges the importance of NGOs in capacitating urban farmers in the Cape Flats given resource limitations. Nevertheless, criticism has been raised on the sustainability of NGOs initiatives given that they are providing resources for urban farmers which creates a dependency syndrome (Battersby & Marshak, 2013; Malan, 2015). Indeed, these actors may face limitations, for example, funding challenges and internal politics which may affect service provision. Consequently, it is important for such organizations to sustainably capacitate urban farmers (Olivier & Heinecken, 2017b). The results of this study suggest that NGOs operating in Mitchells Plain are attempting to reduce this dependence syndrome. This is seen through the various training program which promotes self-help skills such as compost making as opposed to buying compost. The training of local
extension officers ensures that the skills acquired remain in the community even after the demise of the NGO. In addition, urban farmers are able to conduct their own workshops to capacitate aspiring urban farmers in the community, thereby increasing the uptake of urban agriculture in the community. As a result, these findings call into question the emphasis on unsustainably NGO interventions (Schmidt, 2012) as they indicate that NGOs can progressively reduce dependence syndrome in the long-term.

The research findings reinforce the idea that although supporting actors may possess different agendas they each have a niche within the community they can fill. It was shown that while the NGOs mostly work with household farmers, the Provincial DOA mainly works with community farmers. As a consequence, NGOs can connect community farmers they come across to the Provincial DOA provided that they maintain a working relationship with the state actor. These findings enhance our understanding of the importance of coordination among development practitioners. Also, the aspects of poor interacts between the NGOs and Provincial DOA resonate with Haysom & Battersby (2016) who have argued that there is limited interaction between NGOs and the government in supporting urban agriculture projects. Therefore, both actors are encouraged to work together despite competing agendas as room for cooperation is present (Kanosvamhira, 2018). While each actor assists in its own way it is evident that there is limited interaction between actors which significantly affects linking capital for the Mitchells Plain urban farming community. It is difficult for state actors such as the Provincial DOA to access the farmers directly due to their unpronounced presence within the community. Consequently, there is a need for dialogue between the state and non-state actors.

6.3 Conclusion
From a broader perspective, the findings of this study have implications for understanding how the organization of urban agriculture influences the success of urban agriculture activities. The study research presents a major contribution to the discourse on the organization of urban agriculture activities in Southern African cities. As already highlighted in the summary, the results of this thesis show that there is a progressive connection between the supporting actor interaction, urban farmer organization and the success of urban agriculture activities in Mitchells Plain.
The findings indicate that improved networking increases the capacity of urban farmers in accessing resources in the form of farm inputs and knowledge. Generally, urban farmers conduct their activities with the help of family members and friends. As argued by Schmidt et al. (2015) urban farmers are able to solve problems which they encounter if they cooperate together. This assertion can be held true in the case of Mitchells Plain. It is clear that through these networks urban farmers are able to communicate information such as pest remedies, recipes and workshops dates and venues with one another. NGOs are crucial in enhancing urban farmer interaction due to their accessibility in the community. They are able to provide urban farmers with a platform to interact and develop relationships among themselves and the community. Conversely, state actors such as the Provincial DOA and Cape Town are to a lesser extent responsible for the developing networking amongst urban farmers due to their limited presence in the community which makes them inaccessible to the average urban farmer. However, the Provincial DOA are equally significant as they are able to support community farmers with physical resources such as perimeter fencing, boreholes installations and storage container. Also, their workshops and training programs are able to connect urban farmers from various urban farming communities such as Mitchells Plain, Khayelitsha and Gugulethu. In this respect, the findings suggest that more formal structures of organization would be beneficial to increasing linking capital especially for community farmers who require such support from state actors. Moreover, such connections enable them to participate in stakeholder dialogue programs which influences policy development, for example, VUFA’s (a formal urban farmer organization) involvement in Cape Town’s 2003 Urban Agriculture Summit was part of the stakeholder process leading to the formulation of the Urban Agriculture Policy of Cape Town (Small, 2003). By unpacking the role of the different actors, the study has determined that the objectives of development practitioners cannot be achieved in isolation unless there are integration and partnerships between the different role players. Consequently, both the influence of NGOs and state actors is crucial in the sustenance of urban agriculture communities.

Finally, the study findings are relevant where urban agriculture is promoted as a pro-poor development strategy as in the case of the City of Cape Town (Battersby & Marshak, 2013; Slater, 2001; Wilbers & Zeeuw, 2006). Certain aspects of this study, specifically the motivations for engaging in farming indicate that most urban farmers engage in urban agriculture for reasons which extend beyond economic gains. Although at small-scale urban
farmers continue cultivation for health reasons. The study reinforces the notion that urban agriculture initiatives are ideal for engaging communities in healthy lifestyles and environmental conservation (Olivier, 2018). Therefore, this has implications for policy development specifically from the local government (Slater, 2001; Battersby & Marshak, 2013). Policies crafted towards urban agriculture have to reflect these non-economic aspects to ensure that the aims of developmental practitioners are reconciled with the needs and motivations of the farmers. This is one of the avenues through which the rest of reluctant community members can be convinced to engage in urban agriculture activities. Such community members need to be aware that indeed they may be limited economic benefits, however, urban agriculture offers several concomitant benefits such as healthy living and environmental conservation.

6.4 Recommendations
This thesis has established a number of challenges which militate against the success of urban agriculture activities in the township of Mitchells Plain. Three focal points are recommended in improving urban agriculture activities in the study area.

- There is a need for urban farmers, NGOs and the provincial DOA to establish a multi-stakeholder forum. This will ensure increased collaboration, partnership, and action amongst supporting actors and urban farmers in the area. Currently, the results suggest that interaction between NGOs and the Provincial DOA is opportunistic in nature. Mitchells Plain has an opportunity to expedite its progress towards the success of urban agriculture projects due to the presence of a number of supporting actors. Therefore, strengthening the dialogue between urban farmers, state actors and NGOs through regular meetings will enhance problem identification, shared experiences and solutions.

- Secondly, this study revealed that the needs of backyard farmers and community farmers are different. Consequently, the nature of networking and organizing between the two kinds of farmers will differ as well. Community farmers need to be engaged with more formal networks such as VUFA which will ensure that they are able to interact with other community farmers. Furthermore, this will improve access to resources such as boreholes and fencing beyond the community given that NGOs barely support community farmers. On the other hand, NGOs should encourage urban
farmers, to exploit the use of mobile phones as a manner to disseminate information and from state actors beyond community borders.

- Finally, more diverse ways of attracting the interest of community members towards urban agriculture activities are encouraged. As already noted, most farmers have interesting thoughts through which the practice can be made attractive to community members, for example, integrating the practice with other activities such as dancing or soap making. As a result, NGOs need to take these into account by supporting urban farmers in pursuing such initiatives.
REFERENCES


Goles, T. & Hirschheim, R. (2000). The paradigm is dead, the paradigm is dead…long live the paradigm: the legacy of Burrell and Morgan. Omega, 28(3): 249-268.


APPENDICES

APPENDIX I: QUESTIONNAIRE FOR URBAN FARMERS

Research Topic: The organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by answering the questions in the attached research questionnaire. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

________________                                                                            __________________

Tinashe Kanosvamhira                                                                       Prof. D. Tevera
Researcher                                                                                Supervisor

Questionnaire for urban farmers

Please tick the appropriate box.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Question</th>
<th>Responses Categories</th>
<th>√</th>
<th>Codes</th>
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<td>1</td>
<td>Where were you born?</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>How long have you lived in Mitchells Plain?</td>
<td>Less than one year</td>
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<td></td>
<td>1-3 years</td>
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<td>Where do you live in Mitchells Plain?</td>
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<th>Female</th>
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<td>Female</td>
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<td>What is your age?</td>
<td>20-29 years</td>
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<td>What is your age?</td>
<td>40-49 years</td>
<td>4</td>
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<th>What is your age?</th>
<th>50-59 years</th>
<th>5</th>
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<td>6</td>
<td>What is your age?</td>
<td>60+ years</td>
<td>6</td>
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<th>What is your Marital status?</th>
<th>Single</th>
<th>Married</th>
<th>Separated or Divorced</th>
<th>Widowed</th>
<th>Other- specify</th>
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<td>Single</td>
<td>Married</td>
<td>Separated or Divorced</td>
<td>Widowed</td>
<td>Other- specify</td>
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<table>
<thead>
<tr>
<th></th>
<th>What is your highest level of education?</th>
<th>No formal education</th>
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<tbody>
<tr>
<td>8</td>
<td>What is your highest level of education?</td>
<td>Completed Primary (Grade 1-7)</td>
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<table>
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<th>What is your highest level of education?</th>
<th>Completed Secondary (grade 8-12)</th>
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<tbody>
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<td>8</td>
<td>What is your highest level of education?</td>
<td>Completed grade 12/post matric</td>
<td>5</td>
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<p>|   | What is your highest level of education? | University degree | 6 |</p>
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<th></th>
<th>Question</th>
<th>Options</th>
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<td>9</td>
<td>What is your current employment status?</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Self-employed</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Part-time employed</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>What is your main source of income?</td>
<td>Farm</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relatives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government Grant</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other-specify</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>What is your household’s main source of food?</td>
<td>Buy from supermarkets/tuck shops</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friends and relatives</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farm activities</td>
<td>3</td>
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<td></td>
<td></td>
<td>NGOs</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other specify</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>How many people live in your household?</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>What is the nature of your accommodation status?</td>
<td>Owned</td>
<td>2</td>
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<td></td>
<td></td>
<td>Rented</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>For long have you been farming?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Why is your motivation for farming?</td>
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<tr>
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<th>Question</th>
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<tr>
<td>16</td>
<td>What have you done to accommodate agricultural production at your home?</td>
<td>Space around the house (front/back)</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>Use containers/ sacks</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>3</td>
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<tr>
<td>17</td>
<td>What do you do with your produce?</td>
<td>Sell</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>Use for household consumption</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Both</td>
<td>3</td>
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<td></td>
<td></td>
<td>Others Specify………………….</td>
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<tr>
<td>18</td>
<td>What are the 3 main crops you grow?</td>
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**THE ORGANIZATION OF FARMERS**

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<th>Question</th>
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<td>Does your family assist in your farming activities?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No (If no move to 25)</td>
<td>2</td>
</tr>
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<td>19b</td>
<td>If yes how do they assist?</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td>Do you have any friends in Mitchells Plain who are farmers?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No (if no move to 20)</td>
<td>2</td>
</tr>
<tr>
<td>20b</td>
<td>Do you exchange information about farming with them?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>20c</td>
<td>What kind of information do you share?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20d</td>
<td>How do you share this information</td>
<td>Face to face interactions</td>
<td>1</td>
</tr>
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<td></td>
<td></td>
<td>Social media (WhatsApp, email etc)</td>
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</tr>
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<td></td>
<td></td>
<td>Phone</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Answer</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Do you face challenges in sharing information with other farmers?</td>
<td>Other. Specify</td>
<td>4</td>
</tr>
<tr>
<td>21b</td>
<td>If yes. What are the challenges?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Are you a part of any urban farmers network/group? e.g.</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An informal group in Mitchells Plain/</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Cape Town eg VUFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22b</td>
<td>If Yes. What is the name of the network/group?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22b</td>
<td>What kind of services do you get from this network?</td>
<td>Sharing information/visits</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Linkages with the supporting actors</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inputs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loans</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other specify</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>How would you rank your satisfaction with the services provided?</td>
<td>Completely satisfied</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfied</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dissatisfied</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>What challenges do you face as a group?/how are you solving it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Are you aware of associations such</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How would you rank the Importance of urban farmer organization and networking</td>
<td>Slightly important</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Important</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very important</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INTERACTIONS WITH THE COMMUNITY**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you perceive the community’s response to urban agriculture?</td>
<td>Very Good</td>
</tr>
<tr>
<td></td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you receive community members interested in urban farming?</td>
<td>Yes always</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
</tr>
<tr>
<td></td>
<td>Never</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes what kind of information do they ask?</td>
<td>How to start a farm?</td>
</tr>
<tr>
<td></td>
<td>How to obtain support?</td>
</tr>
<tr>
<td></td>
<td>Other. Specify</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think can be done to make more residents engage in urban agriculture?</td>
<td></td>
</tr>
</tbody>
</table>

**LINKAGES TO SUPPORTING ACTORS**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you receive support from supporting actors?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

http://etd.uwc.ac.za/
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>organizations such as government, NGO?</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>29b If not Why?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 If yes what is the name of the organization/NGO/Government?</td>
<td>NAME of Organization:</td>
<td></td>
</tr>
<tr>
<td>30a How did you come to build this relationship?</td>
<td>I approached them</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>They approached me</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>I was introduced by a friend/colleagues</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Media/newspaper etc</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Other….. Specify</td>
<td>5</td>
</tr>
<tr>
<td>30c What kind of services have you received from this organization?</td>
<td>Inputs</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Extension</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Loans</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Market</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Other… Please specify</td>
<td></td>
</tr>
<tr>
<td>30d How would you rank the services received from the NGO?</td>
<td>Completely satisfied</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Satisfied</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Dissatisfied</td>
<td>3</td>
</tr>
<tr>
<td>30e What do you think can be done to improve the services?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 Have you received support from any of the following?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supporting organization</td>
<td>Form of support</td>
<td>How would you rank the services?</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>(tick where appropriate)</td>
<td></td>
<td>Completely satisfied 1, Satisfied 2, Dissatisfied 3.</td>
</tr>
<tr>
<td>Other NGO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Cape Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other …specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

31b What do you think can be done to improve the services offered?

32 Do you feel sufficiently informed about organizations supporting urban farmers in Cape Town?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

33 What do you think can be done to improve the links between urban farmers and supporting actors?

**CHALLENGES to ORGANIZING**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Water challenges</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Conflicts with neighbors</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Limited skills</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Financial challenges</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
<td>---</td>
</tr>
<tr>
<td>Limited support</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Other specify</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

What are you doing to address these challenges? Is collective action applicable?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lack of resources</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Different views</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Distance between farmers</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lack of support from supporting actors</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Lack of interest</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Which of the following do you think affects you joining/forming a network/group? **(select 1)**

What can be done to address this?

1. .................................................................
2. .................................................................

END: Thank you for your participation
APPENDIX II: SEMI-STRUCTURED INTERVIEW GUIDE FOR DEPARTMENT OF AGRICULTURE EXTENSION OFFICER

Research topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by participating in this interview. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

__________________  __________________
Tinashe Kanosvamhira  Prof. D. Tevera
Researcher  Supervisor

Questions

Introduction

1. What is your position and what are your main tasks?
2. In what way have you been working with urban farmers? For how long?
3. What needs to be done to improve urban farmer groups in Mitchells Plain?
4. Have you worked with farmer group A and B in Mitchells Plain? In what way?
5. Have you given training? In what? For how long? Was it enough? Are there records?
6. What are the main challenges for urban farmer groups?
Objective 1: Internal organization and implications

7. What is the most common goal among urban farmer groups that you work with?

8. Do you feel like most members understand the goals of their farmer groups?

9. How do you support good leadership among urban farmer groups?

10. In what way can an urban farmer group become financially sustainable?

11. What kind of organizations exits that can support urban farmer groups in Mitchells Plain?

12. What supporting organizations are the most important for urban farmer’s success?

13. What are the most common links that urban farmers have with supporting actors?

14. What is the DOA stance on supporting urban farmer organization

15. Which of their activities do you promote in your work?

16. What other challenges do you think they face as a group?

17. What solutions do you propose to these challenges?

THANK YOU FOR YOUR PARTICIPATION
APPENDIX III: SEMI-STRUCTURED INTERVIEW GUIDE FOR SEED & SFL PROJECT OFFICERS

Research topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by participating in this interview. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

__________________  __________________
Tinashe Kanosvamhira  Prof. D. Tevera
Researcher   Supervisor

Introduction

1. What is your position and what are your main tasks?

2. In what way have you been working with farmers in Mitchells Plain? For how long?

3. What needs to be done to improve urban farming in Mitchells Plain?

4. What role does your organization play in supporting urban farmers in the community?

Objective 1, 2 & 3

5. Would you say urban farmers in Mitchells Plain are organized?

6. If so in what way?

http://etd.uwc.ac.za/
7. What are the main challenges for urban farmers in Mitchells Plain?

8. Do you find it easy to access urban farmers in Mitchells Plain?

9. What other kind of organizations exits that can support urban farmers in Mitchells Plain?

10. What supporting organizations are the most important for urban farmer’s success?

11. What are the most common links that farmers in the community have with supporting actors?

12. How would you describe your relationship with other actors-/NGOs, Provincial Department of Agriculture.?

13. What challenges do you face in working with other supporting actors

THANK YOU FOR YOUR PARTICIPATION
APPENDIX IV: SEMI-STRUCTURED INTERVIEW GUIDE FOR UFISAMo
RESEARCH OFFICER

Research topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by participating in this interview. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

________________                                                                            __________________
Tinashe Kanosvamhira                                                                       Prof. D. Tevera
Researcher                                                                                                 Supervisor

Questions

1. Please provide your name and position within your organization

2. Please provide a brief history of your organization and its involvement within the community

3. What challenges have you witnessed amongst urban farmers in the community?

4. What do you think is the solution(s)?
5. From your engagement with different stakeholders, what are your comments on stakeholder dialogue, farmer engagement, and activity coordination?

6. How best do you think the coordination between different actors can be enhanced?

THANK YOU FOR YOUR PARTICIPATION
APPENDIX V: SEMI-STRUCTURED INTERVIEW GUIDE FOR VUFA REPRESENTATIVE

Research topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by participating in this interview. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

________________________________________________________________________
Tinashe Kanosvamhira       Prof. D. Tevera
Researcher                                                                 Supervisor

Questions

1. Give a brief description of VUFA, how it was founded and the state of the organization now

2. Why did you join VUFA?

3. In which areas does VUFA operate

4. Explain the membership structure

5. How does VUFA finance its activities?
6. What challenges does VUFA face

7. Explain the linkages between VUFA and urban farmers in Mitchells Plain?

8. Explain the linkages between VUFA and supporting actors
APPENDIX VI: SEMI-STRUCTURED INTERVIEW GUIDE FOR URBAN FARMERS

Research Topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvamhira and I am currently studying for a Master’s Degree in Geography at the University of the Western Cape, Cape Town, South Africa. I am conducting a research project which seeks to investigate how urban agriculture is organized in Mitchells Plain. I would greatly appreciate it if you would participate in this study by answering the questions in the attached research questionnaire. Please be assured that the findings of this study will be used for academic purposes only. The information you give will be treated with confidentiality and you are not required to provide your name for the sake of maintaining anonymity. Participation in this study is voluntary and you can withdraw if you feel uncomfortable at any stage of the study.

Your time and patience in answering the questionnaire is much appreciated.

_________________________    __________________________
Tinashe Kanosvamhira                               Prof. D. Tevera
Researcher                                               Supervisor

Questions

1. What is your household’s main source of food, how do your urban agriculture activities help in enhancing household food security?

2. Does your family assist in your farming activities? Please give details

3. Are you a part of any urban farmer’s network? If so please give a background of this organization and how you benefit from it?

4. Why are most urban farmers not aware of urban farmer networks

5. Do you think networking is important? What are some of the benefits?
6. What challenges do you face in networking?

7. Explain your relationship with supporting actors such as NGOs and the DOA/CoCT?

8. What challenges do you face in accessing services from these actors?

9. How are you responding to these challenges?

THANK YOU FOR YOUR PARTICIPATION
APPENDIX VII: INTERVIEWEE CODES

F1HF ≥ 49: Female household farmer between 40 and 49 years old.
F2HF ≥ 49: Female household farmer between 40 and 49 years old.
F3CF ≥ 59: Female community farmer between 50 and 59 years old.
F4HF ≥ 39: Female household farmer between 30 and 39 years old.
F5HF ≥ 49: Female household farmer between 40 and 49 years old.
F6HF ≥ 59: Female household farmer between 50 and 59 years old.
F7CF ≥ 59: Female community farmer between 50 and 59 years old.
F8HF ≥ 59: Female household farmer between 50 and 59 years old.
F9HF ≤ 60: Female household farmer 60 years old and above.
F10HF ≤ 60: Female household farmer 60 years old and above.
F11HF ≤ 60: Female household farmer 60 years old and above.
F12HF ≥ 49: Female household farmer between 40 and 49 years old.
F13CF ≤ 60: Female community farmer 60 years old and above.
F14HF ≤ 60: Female household farmer 60 years old and above.
M15HF ≥ 39: Male household farmer between 30 and 39 years old.
F16HF ≥ 49: Female household farmer between 40 and 49 years old.
M17HF ≥ 39: Male household farmer between 30 and 39 years old.
M18CF ≥ 59: Male community farmer between 50 and 59 years old.
F19HF ≥ 59: Female household farmer between 50 and 59 years old.
F20HF ≥ 49: Female household farmer between 40 and 49 years old.
APPENDIX VII: ETHICAL CLEARANCE CERTIFICATE

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

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F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

23 April 2018

Mr TP Kanosvanhira
Geography, Environmental Science and Tourism
Faculty of Arts

Ethics Reference Number: HS17/8/9

Project Title: Organization of urban agriculture on open spaces in Mitchell's Plain, Cape Town.

Approval Period: 18 April 2018 – 18 April 2019

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Jostas
Research Ethics Committee Officer
University of the Western Cape

PROVISIONAL REC NUMBER - 130416-049