

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 were 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 activities 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, Putnam 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, Putnam 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 to 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 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, Scotlands (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, McCordic & Shilomboleni (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

Interviewee	Reasons for the interview
Department of Agriculture Senior Extension Officer (Appendix II)	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.
SEED & SFL Project Officer & (Appendix III)	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.
UFiSAMo Research Officer (Appendix IV)	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.
VUFA vice chairperson (Appendix V)	To gather the extent of operation of the organizations' activities in the study area.
Urban farmers (Appendix VI)	To explain trends observed after preliminary questionnaire data analysis.

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 \geq 49) (Appendix VII). The age range used for in-depth interviews is as follows: \geq 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, Lentegur, 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

		Frequency	Percent
Valid	19 years and below	3	5.0
	20-29 years	1	1.7
	30-39 years	10	16.7
	40-49 years	8	13.3
	50-59 years	15	25.0
	60 and above years	23	38.3
	Total	60	100.0

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

		The main source of income			Total
		Employment	Spouse/Relatives	Grant	
Employment Status	Not employed	0	7	0	7
	Self-employed	16	3	0	19
	Employed	10	0	0	10
	Pensioner	0	1	23	24
Total		26	11	23	60

Source: Field Survey, 2018

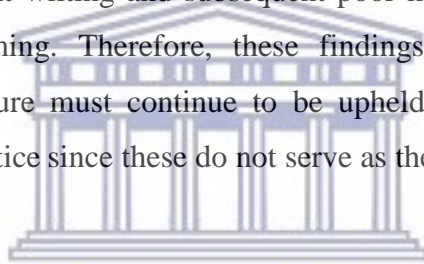
Respondents were asked to indicate how long they had been farming for within their backyards. It was discovered that the subjects have been farming in their backyards for an average of 7.85 years with one farmer having practiced urban farming for at least 40 years compared to 7 who have been farming 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

		Frequency	Percent
Valid	Space around the house (front/back)	7	11.7
	Use containers/ sacks	11	18.3
	Both	42	70.0
	Total	60	100.0

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).

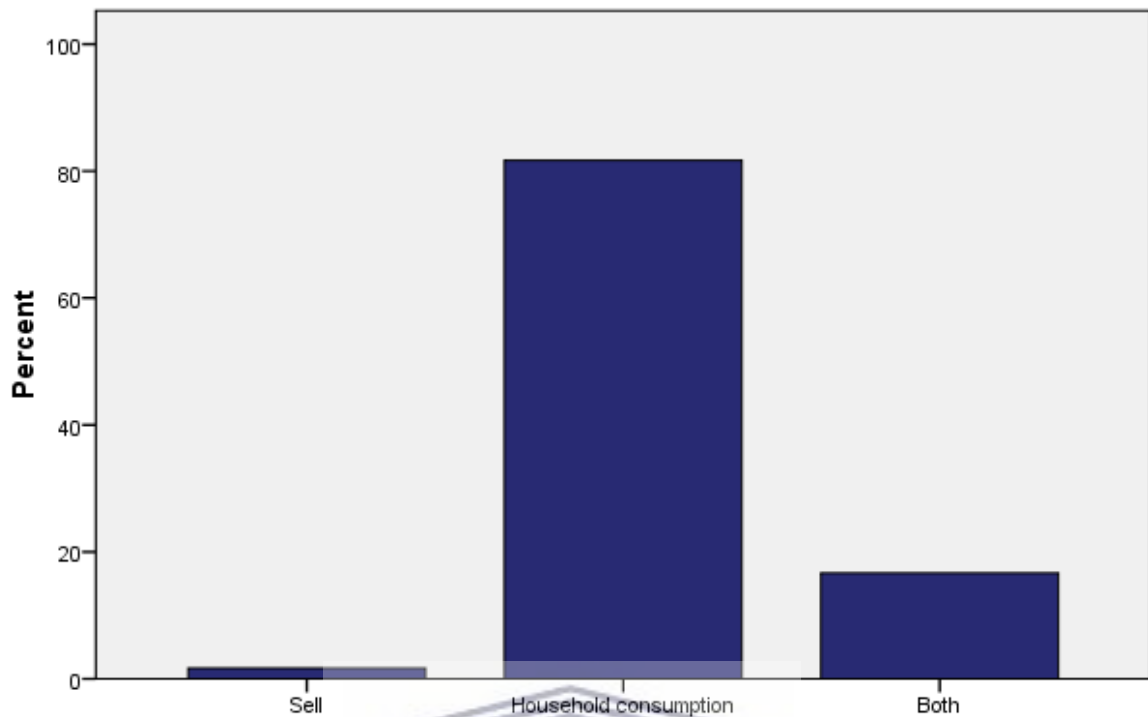


Figure 4.1: Use of farm harvest (Source: Field Survey, 2018)

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

		Use of produce			Total
		Sell	Household consumption	Both	
Gender	Male	0	22	3	25
	Female	1	27	7	35
Total		1	49	10	60

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

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.226 ^a	1	.635		
N of Valid Cases	60				

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

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 Messenger² 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)

		Dominant means of information dissemination		
		Face to Face interactions	Media technology use	Total
Age	19 and below	3	0	3
	20-29 years	1	0	1
	30-39 years	7	2	9
	40-49 years	4	1	5
	50-59 years	12	0	12
	60 and above years	18	0	18
Total		45	3	48

Source: Field Survey, 2018.

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.

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

		Frequency	Percent
Valid	Slightly important	4	6.7
	Important	24	40.0
	Very important	21	35.0
	Total	49	81.7
Missing	11	11	18.3
Total		60	100.0

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 Rose³ 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



		Frequency	Percent
Valid	Lack of time	23	38.3
	Lack of resources	4	6.7
	Different views	2	3.3
	Distance between farmers	11	18.3
	Lack of support/Insufficient from supporting actors	6	10.0
	Lack of interest	11	18.3
	Other	3	5.0
	Total	60	100.0

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 \geq 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 \leq 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 \geq 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 \leq 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≤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≥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≥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≥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 \geq 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 \leq 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 \geq 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 Mitchells Plain people are like that'* (F6HF \geq 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 \leq 60).

In response to this challenge, some respondents thought it was crucial to educate the urban farmers in Mitchells 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 \geq 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 Mitchells 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 *'Mitchells 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

an activity which increases the time spent between family members thereby strengthening family ties. In accordance with the analytical framework, this is termed bonding.

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 (Simatele & 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).

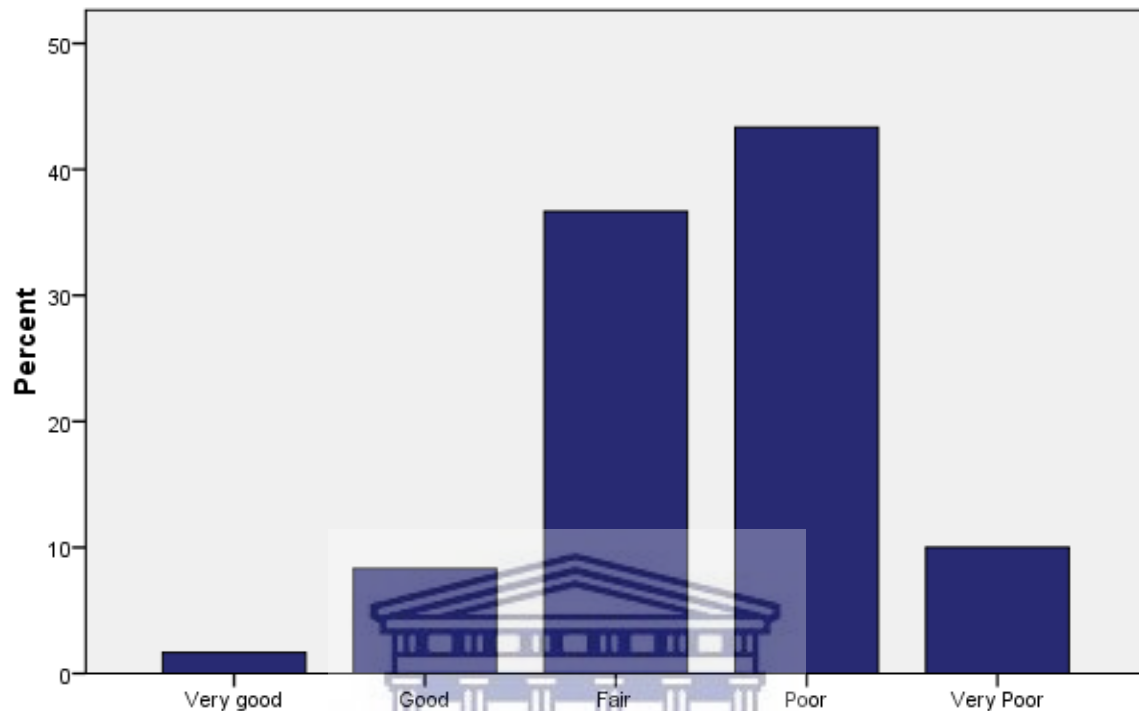


Figure 5.1: Community's perception of urban farming (Source: Field Survey, 2018)

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 \geq 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 \leq 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 \geq 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

		Frequency	Percent
Valid	Always	17	28.3
	Sometimes	33	55.0
	Never	10	16.7
	Total	60	100.0

Source: Field Survey, 2018

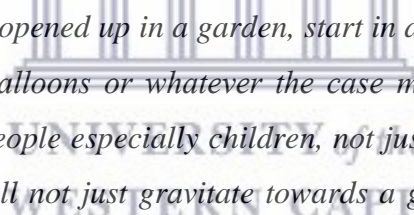
There were distinguished responses on the kind of enquiries respondents received from prospective farmers. Out of the 50 respondents who responded to this question, 98% registered their desire to know how to start farming compared to just 2% who were interested in discovering how they could obtain support 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 \leq 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

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'*

(M17HF≥39). 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

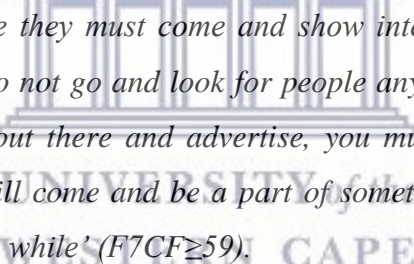
Some respondents explained the importance of urban farmers demonstrating the financial capacity of urban farming as a way to incentivise community involvement. Most respondents felt that this was the language that the urban community understood; therefore, it was important for it to be included when 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



		Frequency	Percent
Valid	I approached them	3	5.0
	They approached me	1	1.7
	I was introduced by a friend/colleague/RELATIVE	13	21.7
	Media/newspaper etc	43	71.7
	Total	60	100.0

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' (FIHF≥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*' ($F11HF \leq 60$). 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).

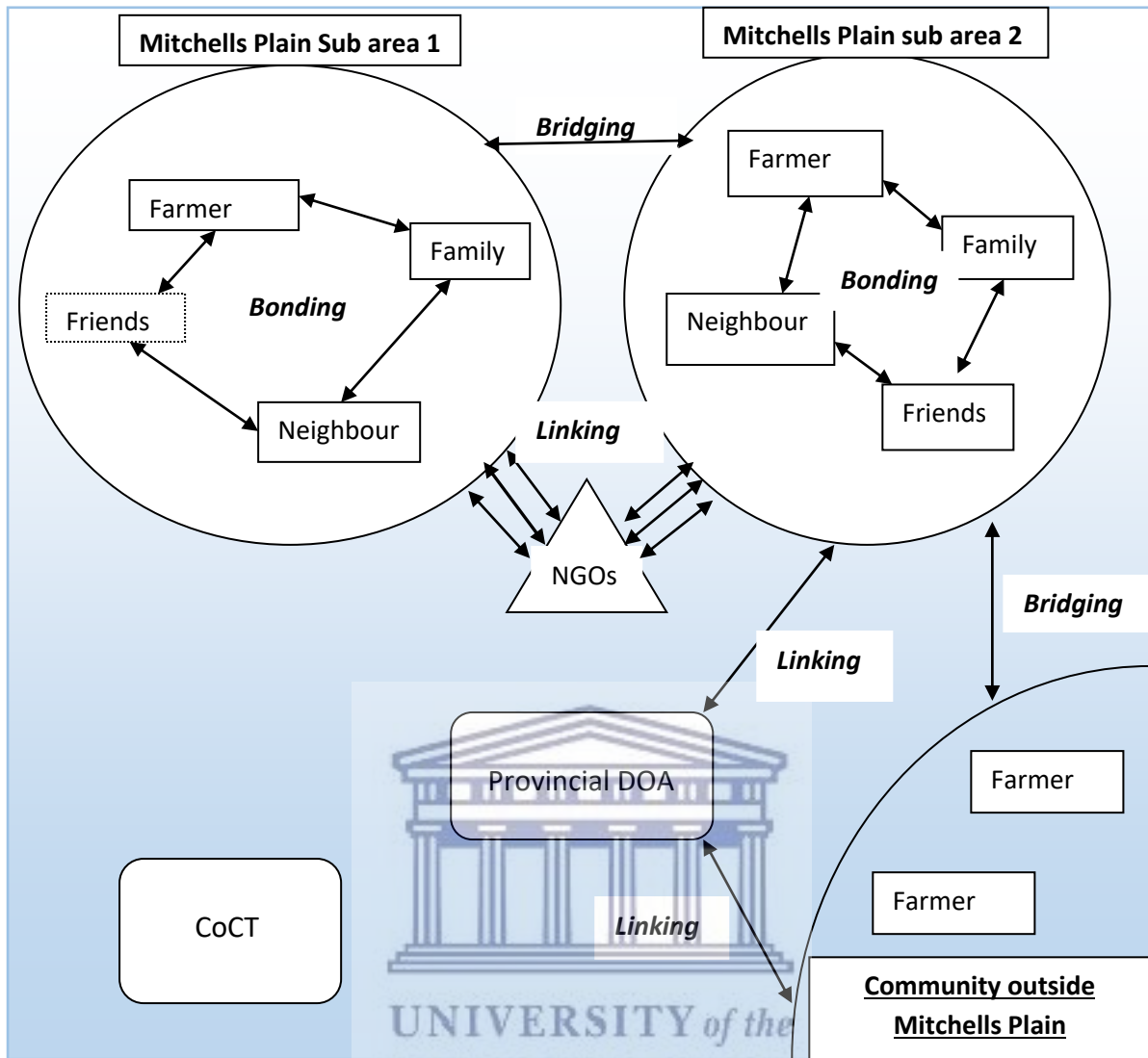
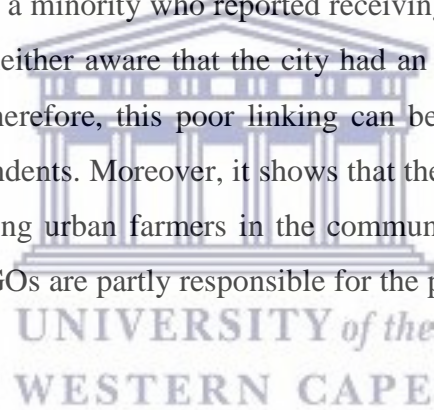


Figure 5.2: Conceptual diagram showing aspects of social capital in Mitchells Plain. (Source: Author, 2018)

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.

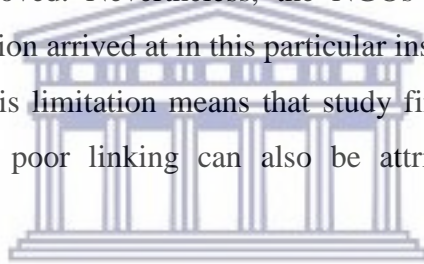
Contrary to expectations, this study did not find any significant level of linking between the community and the municipal government. In fact, the findings of this study indicate that the linking capital with the City of Cape Town specifically the CoCT UAU is non-existent (Figure 5.2). Given that the 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 & Heineken (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 interaction 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.



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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

Researcher



Prof. D. Tevera

Supervisor

Questionnaire for urban farmers

Please tick the appropriate box.

BACKGROUND INFORMATION				
S/N	Question	Reponses Categories	√	Codes
1	Where were you born?			
2	How long have you lived in Mitchells Plain?	Less than one year		1
		1-3 years		2

		4-6 years		3
		7-9 years		4
		10+ Years		5
3	Where do you live in Mitchells Plain?			
4	What is your gender?	Male		Female
5	What is your ethnicity			
6	What is your age?	Less than 19 years		1
		20-29 years		2
		30-39 years		3
		40-49 years		4
		50-59 years		5
		60+years		6
7	What is your Marital status?	Single		1
		Married		2
		Separated or Divorced		3
		Widowed		4
		Other- specify		5
8	What is your highest level of education?	No formal education		1
		Completed Primary (Grade 1-7)		2
		Completed Secondary (grade 8-12)		3
		Completed grade 12/post matric		5
		University degree		6

		Other- indicate	7
9	What is your current employment status?	Not employed	1
		Self-employed	2
		Employed	3
		Part-time employed	4
10	What is your main source of income?	Farm	1
		Employment	2
		Relatives	3
		Government Grant	4
		Other-specify	5
11	What is your household's main source of food?	Buy from supermarkets/tuck shops	1
		Friends and relatives	2
		Farm activities	3
		NGOs	4
		Other specify	5
12	How many people live in your household?		
13	What is the nature of your accommodation status?	Owned	2
		Rented	3
14	For long have you been farming?		
15	Why is your motivation for farming?		

16	What have you done to accommodate agricultural production at your home?	Space around the house (front/back)		1
		Use containers/ sacks		2
		Other		3
17	What do you do with your produce?	Sell		1
		Use for household consumption		2
		Both		3
		Others Specify.....		4
18	What are the 3 main crops you grow?			
THE ORGANIZATION OF FARMERS				
19	Does your family assist in your farming activities?	Yes		1
		No (If no move to 25)		2
19b	If yes how do they assist?			
20	Do you have any friends in Mitchells Plain who are farmers?	Yes		1
		No (if no move to 20)		2
20b	Do you exchange information about farming with them?	Yes		1
		No		2
20c	What kind of information do you share?			
20d	How do you share this information	Face to face interactions		1
		Social media (WhatsApp, email etc)		2
		Phone		3

		Other. Specify	4
21	Do you face challenges in sharing information with other farmers		
21b	If yes. What are the challenges?		
22	Are you a part of any urban farmers network/group? e.g. An informal group in Mitchells Plain/ Cape Town eg VUFA	Yes	1
		No	2
22b	If Yes. What is the name of the network/group?		
22b	What kind of services do you get from this network?	Sharing information/visits	1
		Linkages with the supporting actors	2
		Inputs	3
		Loans	4
		Other specify	
23	How would you rank your satisfaction with the services provided?	Completely satisfied	1
		Satisfied	2
		Dissatisfied	3
24	What challenges do you face as a group?/how are you solving it?		
25	Are you aware of associations such	Yes	

	as VUFA AGRI Western Cape	No	
25b	How would you rank the Importance of urban farmer organization and networking	Slightly important	
		Important	
		Very important	
INTERACTIONS WITH THE COMMUNITY			
26	How do you perceive the community's response to urban agriculture?	Very Good	1
		Good	2
		Fair	3
		Poor	4
		Poor	5
27	Do you receive community members interested in urban farming?	Yes always	1
		Sometimes	2
		Never	3
27b	If yes what kind of information do they ask?	How to start a farm?	1
		How to obtain support?	2
		Other. Specify	3
28	What do you think can be done to make more residents engage in urban agriculture?		
LINKAGES TO SUPPORTING ACTORS			
29a	Do you receive support from	Yes	1

	organizations such as government, NGO?	No		2
29b	If not Why?			
30	If yes what is the name of the organization/NGO/Government?	NAME of Organization:		
30a	How did you come to build this relationship?	I approached them		1
		They approached me		2
		I was introduced by a friend/colleagues		3
		Media/newspaper etc		4
		Other..... Specify		5
30c	What kind of services have you received from this organization?	Inputs		1
		Training		2
		Extension		3
		Loans		4
		Market		5
		Other... Please specify		
30d	How would you rank the services received from the NGO?	Completely satisfied		1
		Satisfied		2
		Dissatisfied		3
30e	What do you think can be done to improve the services?			
31.	Have you received support from any of the following?			

	Supporting organization (tick where appropriate)	Form of support	How would you rank the services? Completely satisfied 1 , Satisfied 2 , Dissatisfied 3 .	
	Other NGO			
	City of Cape Town			
	Department of Agriculture			
	Private Sector			
	Other ...specify			
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?	Yes		1
		No		2
33	What do you think can be done to improve the links between urban farmers and supporting actors?			
CHALLENGES to ORGANIZING				
34	What are the challenges are you facing while conducting Home-based agricultural production?	Water challenges		1
		Conflicts with neighbors		2
		Limited skills		3
		Financial challenges		4

		Limited support		5
		Other specify		6
	What are you doing to address these challenges? Is collective action applicable?			
	Which of the following do you think affects you joining/forming a network/group? (select 1)	Lack of time		1
		Lack of resources		2
		Different views		3
		Distance between farmers		4
		Lack of support from supporting actors		5
		Lack of interest		6
		Other		7
35	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 Kanosvambira 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 Kanosvambira

Researcher



Prof. D. Tevera

Supervisor

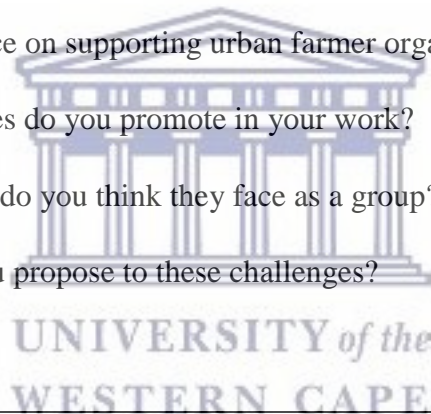
Questions

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 exist 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 Kanosvambira 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 Kanosvambira
Researcher



Prof. D. Tevera
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?

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 exists 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



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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 Kanosvambira 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 Kanosvambira
Researcher



Prof. D. Tevera
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



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APPENDIX V: SEMI-STRUCTURED INTERVIEW GUIDE FOR VUFA REPRESENTATIVE

Research topic: Organization of urban agriculture in Mitchells Plain

My name is Tinashe Kanosvambira 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 Kanosvambira
Researcher



Prof. D. Tevera
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

Researcher



Prof. D. Tevera

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?



APPENDIX VII: INTERVIEWEE CODES

- F1HF \geq 49: Female household farmer between 40 and 49 years old.
- F2HF \geq 49: Female household farmer between 40 and 49 years old.
- F3CF \geq 59: Female community farmer between 50 and 59 years old.
- F4HF \geq 39: Female household farmer between 30 and 39 years old.
- F5HF \geq 49: Female household farmer between 40 and 49 years old.
- F6HF \geq 59: Female household farmer between 50 and 59 years old.
- F7CF \geq 59: Female community farmer between 50 and 59 years old.
- F8HF \geq 59: Female household farmer between 50 and 59 years old.
- F9HF \leq 60: Female household farmer 60 years old and above.
- F10HF \leq 60: Female household farmer 60 years old and above.
- F11HF \leq 60: Female household farmer 60 years old and above.
- F12HF \geq 49: Female household farmer between 40 and 49 years old.
- F13CF \leq 60: Female community farmer 60 years old and above.
- F14HF \leq 60: Female household farmer 60 years old and above.
- M15HF \geq 39: Male household farmer between 30 and 39 years old.
- F16HF \geq 49: Female household farmer between 40 and 49 years old.
- M17HF \geq 39: Male household farmer between 30 and 39 years old.
- M18CF \geq 59: Male community farmer between 50 and 59 years old.
- F19HF \geq 59: Female household farmer between 50 and 59 years old.
- F20HF \geq 49: Female household farmer between 40 and 49 years old.

APPENDIX VII: ETHICAL CLEARANCE CERTIFICATE



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23 April 2018

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

Ethics Reference Number: HS17/8/9

Project Title: Organization of urban agriculture on open spaces in Mitchells 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.

A handwritten signature in black ink that reads "Josias".

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

PROVISIONAL REC NUMBER - 130416-049