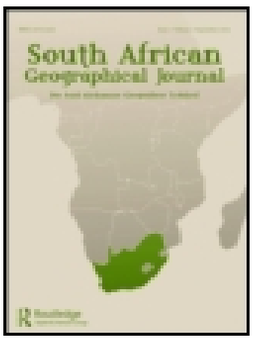

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Urban agriculture in Mitchells Plain, Cape Town: examining the linkages between urban gardeners and supporting actors

Tinashe Paul Kanosvamhira and Daniel Tevera

Department of Geography Environmental Studies & Tourism, University of the Western Cape, Cape Town, South Africa

ABSTRACT

Urban agriculture is an integral aspect of the urban food system in African cities. This is particularly so in Cape Town where despite frequent droughts and harsh physical conditions the activity has thrived largely as a result of the available organisational and material support to urban gardeners. While several supporting actors (e.g. government institutions and non-governmental organisations) provide various forms of assistance to urban gardeners in the Cape Flats, access to this support is little known. Moreover, there is limited knowledge on the level of coordination of activities among supporting actors in facilitating urban agriculture initiatives in the city. This study examines the linkages between urban gardeners and supporting actors in Mitchells Plain, Cape Town. It is based on a mixed methods approach that employs questionnaire and in-depth interviews to gather information from urban gardeners and supporting officials. The findings show that the nature and strength of the linkages between urban gardeners and supporting actors are critical in determining urban gardening success. The findings also show that there is minimal cooperation among non-state actors operating in Mitchells Plain. Since the success of urban gardeners hinges on external support, there is a need for increased collaboration and partnership among supporting actors.

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Social capital; urban gardening; supporting actors; Mitchells Plain; Cape Town

1. Introduction

Urban agriculture remains an integral aspect of the urban food system in African cities. It is one of the key strategies to augment household food security and income in the Cape Flats area of Cape Town despite the frequent droughts and water shortages (City of Cape Town IDP [CoCT IDP], 2017) and sandy soils which require natural manure and irrigation water in order to make them suitable for urban agriculture (Battersby, Haysom, Tawodzera, McLachlan, & Crush, 2014; Slater, 2001). When these conditions are not met, urban agriculture generally suffers. For instance, in 2018 during one of the most severe droughts that the city has experienced, officials implemented several water restrictions that were intended to curtail the use of municipal water for domestic purposes. Watering of

CONTACT Tinashe Paul Kanosvamhira kanostk1@gmail.com Department of Geography Environmental Studies & Tourism, University of the Western Cape, Cape Town, South Africa

vegetables, flowers and other vegetation around homesteads was banned with transgressions attracting heavy penalties (City of Cape Town IDP [CoCT IDP], 2017). However, despite water restrictions the support given to urban gardening in low-income communities by both state and non-state actors has given rise to an increasingly diverse urban agriculture sector in the city (Olivier & Heinecken, 2017). For instance, the city endorsed urban agriculture through the Urban Agriculture Policy of 2007 which has since been revised (Battersby & Marshak, 2013) and reincarnated as the Food Gardens Policy (Policy number 12399c) whose primary goal is to promote small-scale urban agriculture in low and middle income areas. Additionally, the Provincial Department of Agriculture (DOA) in the Western Cape has been instrumental in providing support to urban gardeners by encouraging residents to establish household and community gardens (Swanepoel, Van Niekerk, & D'Haese, 2017).

Through the Farmer Support and Development Program, the Provincial DOA provides participating residents with material and technical resources such as starter packs, training and monitoring (Swanepoel et al., 2017). According to Battersby et al. (2014) since 2008 the Western Cape Department of Agriculture (DOA) has supported 114 community gardens in low-income neighbourhoods mostly in the Cape Flats region of the city of Cape Town. Similarly, Non-Governmental Organizations have also played a role in the development of small-scale urban agriculture sector across the metropolis. This has been achieved largely through the provision of donor funding that is used to subsidise inputs and maintenance of individual and community gardens (Battersby et al., 2014; Karaan & Mohamed, 1998). NGOs such as Abalimi Bezekhaya, Schools Environmental Education and Development and Soil for Life are some of the major non-state actors that support urban gardeners in the Cape Flats region of the city. The majority of urban gardeners in the city are found in Cape Flats region where both home and community gardeners primarily cultivate a variety of vegetables and other food crops (Olivier & Heinecken, 2017). However, despite the material and technical support from the city, provincial government and NGOs, small-scale urban gardeners in Cape Town continue to face several challenges that impede urban agriculture activities (Battersby et al., 2014). This study contributes to the discourse on the organisation of urban agriculture by investigating the links between urban gardeners, state actors and non-state actors, that have shaped urban agriculture spatialities and the experiences of urban gardeners in Mitchells Plain. This is done through the analytical lens of the social capital theory which explores how the multidimensional linkages between urban gardeners and supporting organizations have shaped the form and development of urban agriculture in Mitchells Plain. It follows the argument by Frayne, McCordic, and Shilomboleni (2014) who have asserted that more case-specific inquiries are necessary for policymakers to formulate appropriate responses for urban gardening communities. Given the ubiquity of supporting actors on urban agriculture in Cape Town, this study is crucial as it helps identify the linkages and opportunities for synergies between different supporting actors so as to enhance the impact of their activities.

2. Social capital, supporting actors and urban agriculture

Social capital is defined as the links, values, and understandings shared within a community that enables individuals or groups to work together through networking in order to achieve a common objective (Putnam, 1993). Social capital envisions the concept that social bonds

are a crucial basis for acquiring sustainable livelihoods (Pretty & Ward, 2001). This makes the social capital theory an invaluable tool in providing a theoretical underpinning to explore the linkages among various forms of capital, especially bonding capital, bridging capital and linking capital. As Nieman (2006) argues, public institutions need to make deliberate efforts in order to strengthen this form of social capital within communities. Szreter and Woolcock (2004, p. 655) define linking as the connections '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 capital is crucial 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 resources required may not necessarily be found within the community borders hence the need to obtain them elsewhere. This relates to the context of Cape Town where urban gardeners need support in the form of material resources such as garden inputs, borehole infrastructure, fencing and land access among other resources from NGOs and Government. There is also scholarship which claims that social capital, on the contrary, also contains drawbacks (Das, 2004). For example, some scholars note that increasing bonding capital can result in the exclusion of other individuals. Nevertheless, there is a general understanding that social capital enhancing resource acquisition which results in the improvement of livelihoods of disadvantaged communities.

3. Materials and methods

This study adopted an analytical case-study research design because case studies allow substantial detail to be collected which is not easily obtainable through other research designs (Kothari, 2004). The selection of the case-study design follows the postulation by Frayne et al. (2014) who acknowledge the need to recognize contextual variables since they influence local urban agricultural practices and responses. The study employed a combination of qualitative and quantitative research methods in order to facilitate an in-depth understanding of the interactions between urban gardeners and supporting actors. The first phase of primary data collection was obtained through self-administered questionnaires with 60 selected urban gardeners from Mitchells Plain. Face-to-face administration ensured a higher response rate from the respondents. The second phase of the study entailed the use of semi-structured interviews to gather detailed information from NGOs' representatives, selected gardeners and the Provincial Department of Agriculture extension officer. Semi-structured interviews enable the interviewer to probe and keep the conversation open under the area of interest (Creswell, 2003). The purpose of the interviews with the NGOs and the Provincial Department DOA was to understand the roles of the respective organizations within the community. The interviews lasted between 30–40 minutes. A complementary method of archival research was carried out in order to gather pertinent information from journal articles and Municipal and Provincial government reports.

NGOs working in the study area were used as an entry point to access the gardeners. Transect walks could not be conducted due to security and safety concerns as Mitchells Plain has been referred to as a high crime area (Thompson, 2016). Consequently,

gardeners who had no ties with the identified NGOs were excluded from this study. After establishing contact with the two NGOs active in the study area, gardener registers were requested from the two NGOs operating in the area and these were used as the sampling frame for the study. A recommended sample size of 30 units was employed in selecting respondents from each NGO gardener register. Nyariki (2009, p. 94) notes that this sample size is applicable provided 'the population size is known'. Accordingly, the selected sample size was applicable since the total number of urban gardeners was determined by the gardener registers provided by the NGOs. Random sampling ensured that every urban gardener on the register had an equal chance of inclusion in the sample size. The actual random selection procedure was achieved through automated means. Moreover, there were problems with the gardener registers as they lacked accuracy and sufficient information in some instances. Consequently, there was difficulty in contacting some gardeners while some gardeners declined to be involved in the survey due to inactivity and other commitments. Therefore, such urban gardeners were dropped out of the sample and replaced by the next respondent on the random number table.

Key informants were purposively selected due to their involvement with urban gardeners in the study area. Unfortunately, efforts to interview the City of Cape Town Urban Agriculture Unit officer were in vain due to the collapse of the Unit. The semi-structured questions aimed at exploring the support for urban gardeners in the study area and more importantly the level of coordination and cooperation amongst the supporting actors. Purposive sampling was used to select the urban gardener interviewees and this was done repeatedly until a point of saturation was reached. Eventually, 20 gardeners were interviewed in order to probe further on issues which were discovered during the questionnaire survey. Before data collection commenced, an ethical clearance certificate (Reference Number: HS17/8/9) was obtained from the University of the Western Cape. Compliance with the ethical certificate ensured that issues regarding anonymity, confidentiality, and consent of the research respondents were upheld throughout the course of the study.

Quantitative data collected through questionnaires were followed by a data cleaning process before the data was coded and entered into a Microsoft Excel spreadsheet. The quantitative data was exported to the International Business Machines Statistical Package for Social Sciences (SPSS Version 25.0) for an array of data analysis procedures. Descriptive statistics were employed to describe the basic features of the gathered data. The interviews with state support organizations, non-state support organizations and selected urban gardeners, were tape-recorded and transcribed verbatim. The transcriptions were carefully studied, coded and content-analyzed according to the dominant themes. Emerging themes were then presented in prose to capture the views of each interviewee. Open-ended questionnaire responses were used to augment the respective quantitative responses, often as direct quotations. Regarding urban gardener interviews, codes were assigned whereby the individuality of the gardener quoted in each case was distinguished using a number ranging from 1 to 20, and an indication of the type of gardener (household or community gardener), their sex and their age range. For example, a female household gardener between 40 and 49 years old would be identified as (F1HG ≥ 49). The age range used for in-depth interviews is as follows: ≥29 (29 years and below), ≥39 (30–39 years), ≥49 (40–49 years) and ≥59 (50–59 years) and ≤60 (60 years and above).

4. Study area

The study was carried out in Mitchells Plain which is a predominantly colored township (Figure 1) in Cape Town harbouring a population of over 310 485 residents (Statistics South Africa [StatsSA], 2013). Geographically the township is located 20 kilometres to the south-east of the city centre. Following the Group Areas Act of 1957, Mitchells Plain which was established in the 1970s in order to alleviate housing shortages in the city is today home to over 91% of 'generally low-income and working-class' coloured residents (Haysom, Crush, & Caesar, 2017, p. 7). Mitchells Plain is located in a generally flat and sandy area with several open spaces (DPLG, 2011). The study area is located on a coastal region characterised by generally flat, sandy and infertile terrain. As a result, this presents a significant challenge for urban gardeners in the area as they require a significant amount of agricultural inputs to realize any meaningful output (Battersby et al., 2014). Mitchells Plain, like the rest of Cape Town, experiences a Mediterranean climate characterised by winter rainfall ranging between 500mm to 700mm annually and it faces occasional drought and water scarcity conditions (City of Cape Town IDP [CoCT IDP], 2017). However, an extensive groundwater resource underlies most of Mitchells Plain thereby presenting an opportunity for water harvesting through the drilling of boreholes.

According to the Department of Provincial and Local Government, the major challenges Mitchells Plain has grappled with for years are that of spatial marginalization, high crime rate,

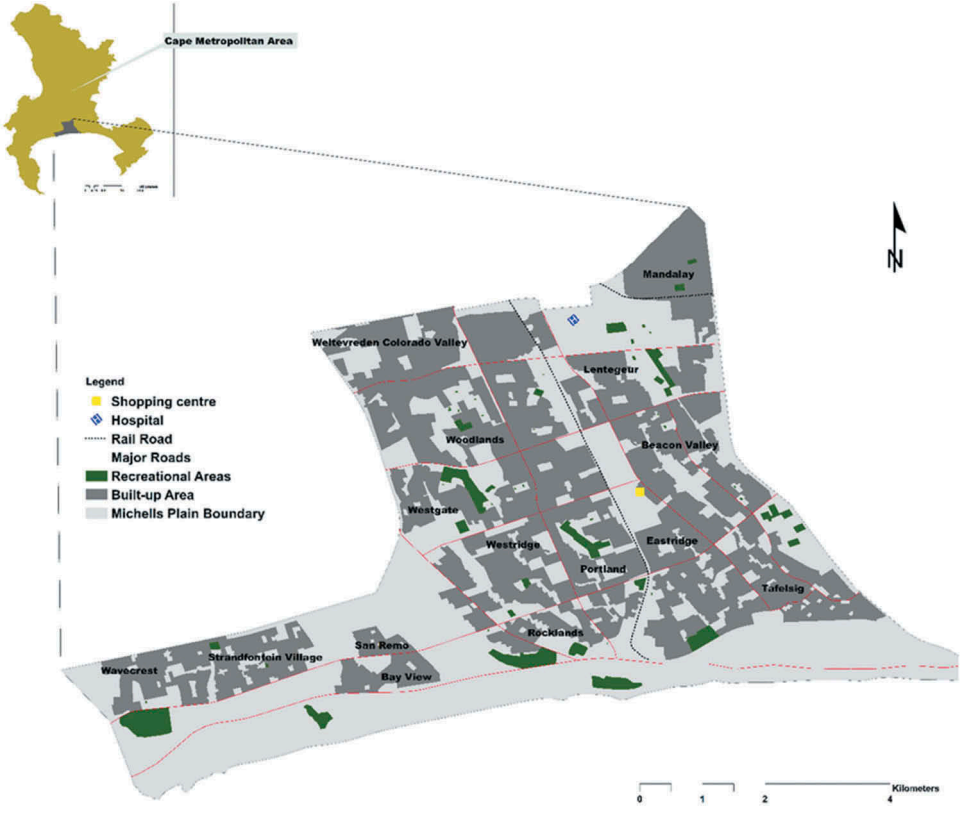

Figure 1. Mitchells plain map (Source: Authors, 2018).

overcrowding and limited access to public amenities (Department of Provincial and Local Government) [DPLG], 2011). A total of 63% of households fall within the low-income bracket of which 16.5% have no income (City of Cape Town [CoCT], 2016). Consequently, some of the residents engage in urban agricultural activities at a household level in order to argument household income and food security (Swanepoel et al., 2017). Several non-governmental organizations (NGO) have been active in the area and they have provided various forms of assistance to households. For example, an NGO called the Schools Environmental Education and Development (SEED) supports about a hundred household gardeners in the area who are engaged in permaculture activities. Both the Western Cape government and the City of Cape Town also offer support to urban gardeners in the area (Battersby et al., 2014; Swanepoel et al., 2017). From a broader perspective, the socio-cultural and economic conditions in Mitchells Plain reflect many similarities with other low-income urban gardening communities across the Southwestern part of Cape Town that is generally known as the Cape Flats area, hence the relevance of conducting the research in the area.

5. Results

5.1 Socio-economic characteristics of respondents

All the respondents (60) were born in different parts of the Western Cape Province and have been residing in the various sub-areas of Mitchells Plain for at least 5 years. A majority of the respondents belonged to the colored ethnic group (98.33%) whereas only a single respondent belonged to the black African ethnic group (1.66%). In terms of gender, 58.3% of the respondents were females. Regarding age, only 5% of the respondents were below 19 years; 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. In terms of education, the survey results indicate that as many as 43% of the respondents matriculated, while only 13.3% had post-high school certificates, diplomas or degrees. Only 10% of the respondents had primary school education (Grades 1 to 7) while 23.3 % had secondary education (Grades 8 to 12). Table 1 shows that 40% of the respondents were pensioners, 11.7% were unemployed, 16.7% were employed and 31.6% were self-employed. Additionally, it was discovered that the primary source of income came from formal/informal jobs (41.7%), 18.3% from spouses or relatives, and 40% from social grants, especially State Old-Age grants.

The respondents had been gardening in their backyards for an average of 7.85 years with one gardener having practiced urban gardening for at least 40 years while 7 had been gardening for just a year. The responses to the primary motivations for gardening,

Table 1. Employment status and the main source of income.

		The main source of income			
		Employment	Spouse/Relatives	Grant	Total
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

and how garden produce is used are varied and quite revealing. The main motivations for gardening were social benefits (41%), health benefits (35.8%), environmental benefits (19.8) and to a lesser extent financial benefits (3.3%). When the respondents were asked how they used the food harvested an overwhelming majority (81.7%) indicated that the produce was used strictly for household consumption whereas 1.7% indicated that produce was strictly for selling and 16.7% stated that the main goals were own consumption and to raise cash. The food items grown include tomatoes, onions, carrots, spinach and various herbs such as lemongrass and aloe.

5.2 Non-state actors

While Soil for Life (SFL) and the Schools Environmental Education and Development (SEED) are the two NGOs that were identified as the dominant non-state actors in the study area there are other organisations involved, but whose footprint on the foodscape has been limited. These include Abalimi Bezekhaya and the retailer Umthunzi Farming community. SFL and SEED have been operating in Cape Town for more than 10 years. SEED offices are located within Mitchells Plain (Figure 2) whereas SFL is located about 21km from the community but SFL uses a community garden as its agriculture hub (Figure 2). The spatial difference between the two organisations seems to have an impact on the frequency of interactions between urban gardeners and supporting actors. The main activities of the

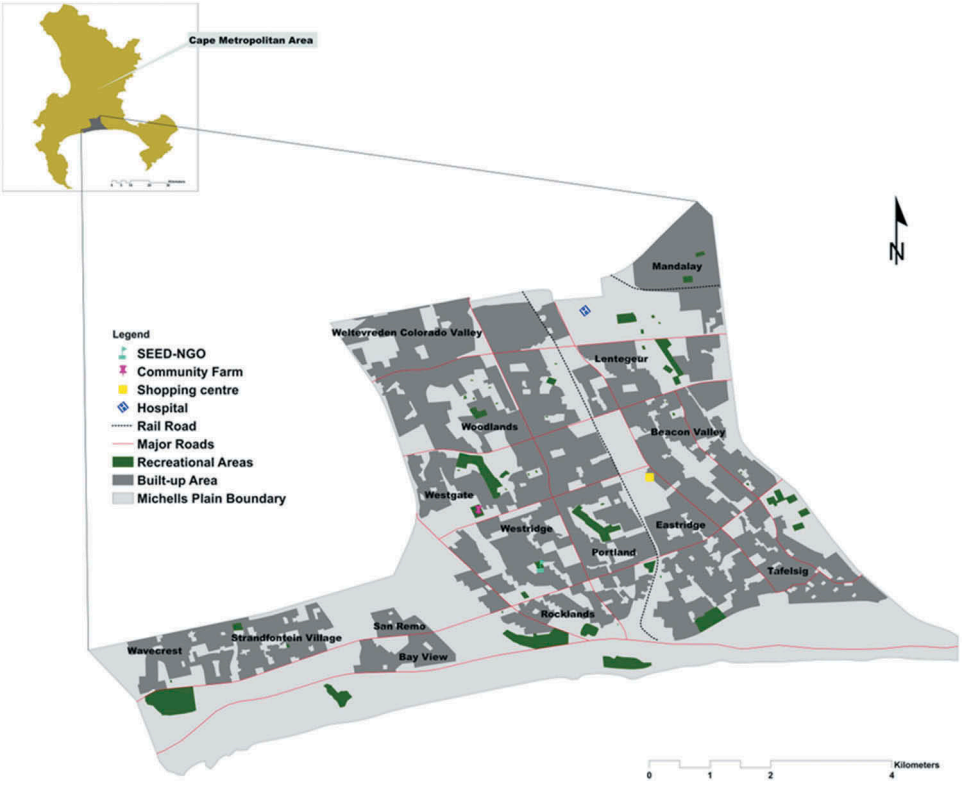

Figure 2. Location of SEED offices and SFL agriculture hub (Source: Authors, 2018).

NGOs include educating and supporting home gardeners to grow crops based on permaculture principles. While most respondents reported that regular membership gave them access to subsidised compost, seedlings and training offered, some respondents reported that a more sporadic interaction with the NGO was all they needed because their activities were self-sustaining. For instance, one respondent indicated that *'SEED helped me with the implementation of start-up urban gardening activities but after that, I was pretty much on my own' (F1HG≥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 challenges around urban agriculture such as pest problems, market access and water shortages.

On the other hand, 21.7% of the respondents indicated affiliation to more than one NGO operating in the area. The reason for this was to obtain additional material resources and broaden networks as indicated in the following extract:

> *'The more places you go to the more perspectives and growth one gets. There is always information … and I am curious to find out more. What else can I do to develop my garden and my knowledge? For me being a housewife … gives me a chance to connect with people' (F5HG≥49)*

Similarly, another respondent argued that her dual membership to different organisations was as a result of one NGO not providing a service that the other organisations provided. She explained this by stating that the second NGO registered with *'offers health workshops every March and October that teach us what to do with our crop and to manage crops' (F8HG≥49)*. An interview with the SEED project officer highlighted that the NGO was facing financial challenges, as a result, the support that it provided to household gardeners was curtailed. Resource provision has been downscaled thereby compelling some gardeners to register with alternative NGOs so as to increase chances that they continued to access resources they could no longer receive from SEED.

Generally, the survey results reflect that the relative success of urban gardening in Mitchells Plain is attributed to the support that is provided by NGOs. Asked about how the respondents had come to know about the NGO that currently supports them, 71.1% indicated that it was through the media, specifically the Plainsman which is a local newspaper (Table 2). As the SFL project coordinator pointed out, their NGO used diverse media including '*a website … Facebook page and also … radio*' to advertise its activities in communities. For this reason, they are able to access community members in Mitchells Plain and beyond. The next dominant means of awareness of NGOs was through friends, relatives or colleagues (21.7%). As evident in Table 2, only one gardener indicated that an NGO directly approached her. This atypical scenario was explained by the SFL project coordinator who mentioned that they had been impressed by her community garden hence their interest in using it as an agricultural-hub.

Table 2. Means of awareness of NGOs.

Valid	I approached them	3	5.0	5.0
	They approached me	1	1.7	6.7
	I was introduced by a friend/colleague/relative	13	21.7	28.3
	Media/newspaper etc	43	71.7	100.0
	Total	60	100.0	

Source: Fieldwork, 2018

The research also explored the nature of resources provided by the NGOs working in the area. The findings reveal that the respondents obtain various resources, such as starter packs (inputs), training and monitoring from NGOs. This finding is consistent with those by Tembo and Louw (2013) whose study of gardening projects in the Cape Flats several years ago noted that urban gardeners in this area were dependent on similar resources from NGOs. The NGO informants reported that training is advertised after which interested individuals register and attend the training workshops whose intention is to promote gardening as a source of urban food. From a broader perspective, the findings indicate that the urban gardeners were satisfied with the service rendered by the NGOs, especially SFL and SEED, primarily for household gardeners only. In other words, the identified NGOs operating in the area generally do not assist community gardeners with resources. This is attributable to two reasons; firstly, SFL has noticed that it is easier to work with household gardeners as opposed to community gardeners due to the dynamics involved in community gardening. This has influenced the NGO to support household gardeners. As the SFL project coordinator explained:

> *When Soil for Life started in 2008, … what they have found is that there are a lot of community dynamics where you have a garden (with 10 or 20 members) 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.*

Consequently, SFL has learnt that community garden initiatives within Mitchells Plain encountered sustainability challenges hence the desire to concentrate on household gardens. This point is amplified in a paper on urban agriculture in Cape Town, where Battersby and Marshak (2013) noted that SFL preferred to support home gardeners rather than community gardeners in Seawinds and Vrygrond for precisely the same reasons that were given above by the Soil for Life project coordinator during our survey.

Secondly, the nature of funding acquired by the NGOs is largely specific to the type of gardeners to be assisted. For example, SEED implements 'the Food Freedom Initiative … supporting home gardeners' (Brown 2013 in Haysom et al., 2017, p. 41). In other words, the Food Freedom Initiative specifically targets household gardeners (who use the available garden space at the homesteads) as opposed to community gardeners (who often use larger spaces on public land). The differences between household and community gardeners are typically to do with scale, the former use small spaces while the latter involves several individuals on larger spaces. In other words, household gardeners are the cultivators who grow vegetables or rear animals through the exploitation of interstitial space surrounding their small yards. This often involves growing plants in small spaces that can be used for urban agriculture. Conversely, community gardeners operate on a larger scale and in groups of by two or more producing food collectively both for own consumption and for local markets. Similar to home-based agriculture, community gardeners engage in the activity on a part-time basis to augment household food security although in some cases produce is sold to generate income.

Finally, there was an attempt to examine the level of coordination amongst the NGOs as well as with state actors namely the Provincial Department of Agriculture

(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. This point is captured by one NGO informant who highlighted that the NGOs often get their funds from the same donors and as a result they tend to struggle to keep their pool of household gardeners. One NGO informant explained that '*... other NGOs who are also supporting urban farmers 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. So such competitiveness could cause a fraught relationship between NGOs within the area. Similarly, a key informant from another NGO acknowledged that synergies were not as strong as they should. She stated that *'I would like to have a good relationship with all the people here in Mitchells Plain especially the other NGOs operating in the area'*. However, the competitive nature of the interactions between NGOs has not always facilitated the growth of urban gardening and its possible contribution to household food security.

In terms of coordination with state actors, the interviews revealed a rather disappointing finding as well. One NGO informant reported an uneasy relationship with the City of Cape Town, which is a primary supporting actor. According to the informant:

> *I have not come across or worked with the City of Cape Town officials involved with urban farmers, In fact, we were looking for them, ... but it is also like they do not want to work with us ... 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 gardeners) than the home gardeners'*. In other words, the relationship becomes weak considering that the NGO specifically runs a project working with household gardeners. The findings affirm the observation by Haysom and Battersby (2016) that there is generally weak coordination of activities between government actors and NGOs in urban South Africa. However, contrary to Haysom & Battersby's observation about urban South Africa in general, in Mitchells Plain there seems to be clear signs that improved 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'*. This is an indication that there may be room for the creation of a partnership between the two actors. Such a partnership would obviously be of help to urban gardening activities in the city and ultimately to improved household food security.

5.3. State actors

The identified state actors include the Provincial DOA and the City of Cape Town specifically the Urban Agriculture Unit (UAU). However, attempts to conduct an interview with the City of Cape Town UAU were fruitless due to the virtual collapse of the unit. This left the Provincial DOA as the sole major state actor accessible for interviews during this study.

The Provincial DOA plays a pivotal role in assisting urban gardeners across Cape Town (Swanepoel et al., 2017). Notwithstanding this reality, the findings identified two different extremes in this regards. Primarily, none of the respondents acknowledged receiving support for their household gardening activities. This was interesting considering that the DOA informant indicated that: '*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 gardeners were not aware of the services offered by the Provincial DOA. For example, one gardener explained that *'I have never done business with them (Provincial DOA). I want to find out how to do it' (F1HG≥49)*. Furthermore, the in-depth interviews revealed that a majority of the urban gardeners felt they were not sufficiently informed of the different actors which support urban gardeners. This further adds to the impression that there was limited knowledge of the services provided by the Provincial DOA. In contrast, the Provincial DOA informant highlighted that there were various means through which awareness was being raised among community members in Mitchells Plain. However, as he noted, the community in Mitchells Plain was not sufficiently interested in the practice of urban agriculture. 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, (unlike the high) demand in areas such as Khayelitsha'*.

On the other hand, 3 of the 4 community gardeners identified reported receiving support from the Provincial DOA. While this indicates that community gardeners are more knowledgeable of supporting actors as opposed to gardeners who strictly engage in household gardening, it also confirms that the community is aware of the urban agriculture promoting services offered by the Provincial DOA. In terms of services offered, the following quotation from a community gardener 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' (F3CG≥59)*

The other two gardeners had received more or less the same assistance which coincides with the DOA informant who stated that assistance was offered provided stipulated requirements were met. Only one community gardener 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' (M18CG≥59)*. This indicated that he was not aware of services offered by the Provincial DOA. Also, the fact that the garden has been in operation for a few years 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 relationship 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. Consequently, this resulted in the 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 other than [that] people do not want to work together, I don't know whether you have noticed this … there is that tendency for 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 gardeners if they had a good relationship they could act as a central point through which the DOA communicates its services. Another supporting actor identified as important is the City of Cape Town. Unfortunately, as already mentioned, efforts to secure an interview with the City of Cape Town Urban Agriculture Unit (CoCT UAU) were fruitless. At the time the City was approached it was communicated that the CoCT UAU office was vacant. 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 participants 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. 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' (F11HG≤60)*. This means any member of the community could have acquired a compost bin despite not practising urban gardening.

6. Discussion

This study sought to explore the linkages existing between urban gardeners, NGOs, the Provincial DOA and the City of Cape Town. In reference to the theoretical framework, these relationships are labelled as linking capital and typically they are formed beyond the immediate community. In the context of Mitchells Plain, this relates to the links the urban gardeners have to actors outside the community. Such linkages are crucial for communities when additional resources need to be acquired beyond the immediate territory (Woolcock, 2001). Therefore, the actors which can provide such resources include the Provincial Government and Municipal Government and NGOs (Malan, 2015). The study findings revealed that there is poor linking capital within the community. While the community is somewhat linked to the NGOs, linkages to Provincial DOA are limited and non-existent from the City of Cape Town.

The study established that linking to the state actors such as the Provincial DOA, although present, was limited to a few urban gardeners. Only community gardens were found to be linked to this state actor. This particular link was found to be important as it enabled the community gardeners to acquire resources such as boreholes, tools, tanks, containers and garden inputs. The importance of the Provincial DOA can be understood in the context that NGOs barely support community gardens, therefore, they are crucial in capacitating community gardeners with basic infrastructural resources such as borehole installation and perimeter fencing. 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 gardeners (Kanosvamhira, 2019). It can be assumed that without the involvement of the Provincial DOA community garden projects would not be able to access such support from elsewhere. The low linking specifically among the household gardeners can be explained by the following reasons. First, the Provincial 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 participants have no linkages to the state actor which reflects low linking capital.

Contrary to expectations, this study did not find any substantial level of linking between the community and the municipal government. In fact, the study findings indicate that linking capital with the City of Cape Town is non-existent. Worth noting is that although the City of Cape Town openly supports urban agriculture, there are very weak linkages between the city and urban gardeners in Mitchells Plain. This is reinforced by the fact that none of the participants reported receiving support from the City of Cape Town except a minority who reported receiving compost bins from the local council. Most gardeners were neither aware that the city had an urban agriculture unit nor an Urban Agriculture Policy. Arguably, this poor linking can be attributed to a low level of awareness among most participants. The popularity of NGOs is partly responsible for the poor linking capital to state actors within the community as well. The argument by Olivier and Heinecken (2017), that NGOs are crucial actors in improving linking capital to state actors in urban gardening communities, is not supported by the findings of this study. Instead, the dominant sentiment expressed by the respondents reveals that they are happy with NGOs and not the state actors because the former have enabled them to engage in urban agriculture through the provision of training and resources. Therefore, in their own right, they are linked to urban gardeners. 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 gardeners 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 Mitchells Plain community. In this case, one of the NGOs has offices within the study area (Figure 2). 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, non-state actors not only employ 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 have made them popular and accessible to urban gardeners and in this way, thereby improving their relationship with the community. Nevertheless, the NGOs were the entry point to the participants 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.

Besides NGOs, the aforementioned discussion indicates that linking to state institutions is generally limited. One of the issues emerging 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. This is because, contrary to the City's urban agriculture policy, both NGOs and the Provincial DOA reported a stagnant relationship with the now collapsed CoCT Urban Agriculture Unit. Furthermore, there was limited coordination of activities between the NGOs themselves due to the competitive nature of acquiring funds from donors. In this regard, these results differ from Olivier and Heinecken (2017) and Kirkland (2008), but they are broadly consistent with the assertion by Haysom and Battersby (2016) 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 gardeners to supporting state institutions (Kirkland, 2008; Olivier & Heinecken, 2017). This study has been unable to corroborate this claim due to the poor linking identified between the urban gardeners and state actors. In fact, the results of the present study suggest that there is limited coordination given that none of the household gardeners were 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 and this limits prospects for the development of linkages and resource sharing (Kanosvamhira, 2019).

7. Conclusion

The findings show that NGOs are crucial in ensuring that urban gardeners in Mitchells Plain successfully engage in their activities. These NGOs provide subsidized inputs, capacity building workshops and extension services for the urban gardeners. It is doubtful whether the urban gardeners would be able to conduct their activities without support from NGOs given the various challenges faced in Mitchells Plain. This finding validates the observation that NGOs remain significant in capacitating communities engaging in urban agricultural activities in the Cape Flats (Battersby et al., 2014; Olivier, 2018). Criticism has been raised on the sustainability of NGOs initiatives given that they are providing resources for urban gardeners which create a dependency syndrome (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 gardeners. The findings of this study indicate that NGOs operating in Mitchells Plain are attempting to reduce this dependence syndrome. This is seen through the various training programmes which promote self-help skills such as the training of local extension officers to ensure that the skills acquired by the urban gardeners remain in the community long after the withdrawal of the NGO. In addition, workshops conducted by the urban gardeners in Mitchells Plain have helped to capacitate aspiring urban gardeners in the community, thereby increasing the uptake of urban agriculture in the community.

Also, 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 gardeners, the Provincial DOA mainly works with community gardeners. As a consequence, NGOs can connect community

gardeners 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. It is clear that there is a link between the effectiveness of supporting actors in promoting urban agriculture and the physical presence of these actors. However, it is difficult for state actors such as the Provincial DOA to access the gardeners directly due to their unpronounced presence within the community. It is quite evident that NGOs maintain a local presence in Mitchells Plain and this has helped to improve their visibility and accessibility. Even NGOs without offices in the area, such as Soil for Life, have established agriculture hubs in Mitchells Plain for this purpose. Consequently, state actors need to localise the services they deliver to the community. The case of Mitchells Plain illustrates that there is an opportunity for urban agriculture activities to be enhanced through better coordination of activities between supporting actors. In other words, there is a strong need for enhanced stakeholder dialogue to reinforce partnerships and tweak the impact of urban agricultural initiatives.

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ORCID

Tinashe Paul Kanosvamhira http://orcid.org/0000-0002-6745-1151

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