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How do we get the community gardening?: grassroots perspectives from urban gardeners in Cape Town, South Africa

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ABSTRACT



Urban agriculture offers numerous environmental, economic, and social benefits. However, it is often hampered by limited engagement in cities of the global South. This article offers bottom-up perspectives on how to increase the uptake of urban agriculture activities. It draws on urban gardeners' perspectives in the low-income neighbourhood of Mitchells Plain, Cape Town. The mixed-methods approach combined a questionnaire survey, semi-structured interviews with urban gardeners, and interviews with civil society actors and a state official. The results indicate that climate and soil conditions are major deterrents to urban agriculture. However, community dialogues about urban agriculture's social and environmental benefits could play a crucial role in increasing uptake and in facilitating conversations about urban agriculture and food more generally. The paper offers recommendations for future interventions seeking to promote urban agriculture and support actors in low-income neighbourhoods in Cape Town and other African cities.

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Introduction

Urban agriculture has generated significant interest across the African continent due to its capacity to promote household food and nutrition security, incomes, better physical health, and greener cities (Simatele, Binns, and Simatele 2012; Smart, Nel, and Binns 2015; Poulsen et al. 2015; Ziga and Karriem 2020; Modibedi, Masekoameng, and Maake 2021; Musosa et al. 2022). Rapid urbanisation and climate change-induced extreme weather events have increased the demand for sustainable ways to achieve nutrition and food security in urban areas (Tiraieyari and Krauss 2018). Urban agriculture is one potential tool to enhance household nutrition and mitigate

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the effects of climate change (by, for example, reducing the impacts of flooding and improving water infiltration and environmental sanitation). Urban agriculture has a multi-dimensional capacity to increase the sustainability of urban centres (Tiraieyari, Ricard, and McLean 2019). It contributes to United Nations Sustainable Development Goals (SDG) 2 - food security, SDG 11 - sustainable cities, and SDG 13 - climate action. More radical scholarship has also outlined urban agriculture's capacity to support broader social justice issues like food justice (McClintock 2014) and the right to the city (Matamanda, Mandebvu-Chaora, and Rammile 2022).

Despite this scholarly and policy consensus, relatively few people in southern Africa engage in urban agriculture (Crush, Hovorka, and Tevera 2018; Smit 2016). A 2008–2009 multi-city survey conducted by the African Food Security Urban Network (AFSUN) in twelve southern African cities found that only 22% of surveyed households engaged in urban agriculture (Frayne, McCordic, and Shilomboleni 2014). While 23% of households engaged in urban agriculture in Maputo, only 9% did so in Manzini and a mere 3% in Windhoek and Lusaka. Similar trends were observed in South Africa: only 9% of people in Johannesburg and 5% in low-income areas in Cape Town participated (Frayne, McCordic, and Shilomboleni 2014). Another study from the Eastern Cape found that only 21% of households participated in urban agriculture activities, despite high levels of poverty and unemployment (Thornton and Nel 2007). In addition to its generally low uptake,¹ urban agriculture in southern Africa is dominated by an ageing population (mostly people over 40) (Tembo and Louw 2013). Despite the multi-dimensional benefits, attracting youth to urban agriculture remains a major challenge (Tiraieyari and Krauss 2018).

There are many reasons for low engagement in urban agriculture activities in South Africa. Simatele, Binns, and Simatele (2012) attribute the low uptake to African cities' intolerance of urban agriculture and limited institutional support. Furthermore, Webb and Kasumbu (2009) noted that the benefits accrued from urban agriculture are relatively modest. Since urban agriculture in southern Africa has traditionally been promoted as an economic programme (Rogerson 1993; Hampwaye 2013), households may only consider participating if it is deemed economically beneficial (Rogerson 1993). This is evidenced by gardeners who leave urban community gardens upon receiving better employment opportunities. Reuther and Dewar (2006) reported that members of the Siyazama Community Allotment Garden Association in Khayelitsha (Cape Town) left the garden whenever alternative employment opportunities arose. Similarly, Rogerson (1993) noted that residents preferred to use any backyard space to erect buildings for rentals (not for urban agriculture). However, most urban gardeners' motivations transcend economics to include social benefits (Kanosvamaha and Tevera 2020; 2022a).

Activities like urban agriculture create green infrastructure, which is crucial for achieving sustainable cities in light of rapid urbanisation in Africa (Russo et al. 2017). However, urban gardening is likely to decline due to its limited participation and ageing population. Youth participation is essential for ensuring that these activities are passed from generation to generation. More research is needed on how best to engage youth and increase urban agriculture activities across South African cities and neighbourhoods. This article begins to address this gap by reviewing the perspectives of urban gardeners from Mitchells Plain in Cape Town's Cape Flats. The findings contribute to debates on increasing community participation in urban agriculture activities and achieving sustainable cities. Specifically, the paper offers a bottom-up perspective on how to improve engagement in urban agriculture activities across communities in South Africa (and beyond). The paper elevates the voices of urban gardeners themselves by exploring ways to promote urban agriculture.

Materials and methods

This study utilised a mixed-methods approach. Data were collected through questionnaires, semi-structured interviews, and secondary data sources from 2017 to 2018. The questionnaire consisted of open and closed questions and targeted urban gardeners in Mitchells Plain. Access to the gardeners was negotiated through two major non-governmental organisations operating in Mitchells Plain: Soil for Life and SEED. The NGOs were informed of the study objectives and granted access to 60 urban gardeners (30 from each NGO). The urban gardeners were randomly selected from the NGOs' membership registers. Respondents were informed of the study, and interviews were conducted during the week, generally at the respondent's home garden or at the NGO's garden site.

Sixty (60) questionnaires were administered face-to-face to urban gardeners. These questionnaires were designed to collect basic socio-demographic details and their own experiences with urban agriculture in their community. The questionnaires gathered baseline data and helped select suitable respondents for the second phase of the study—semi-structured interviews. Twenty (20) urban gardeners were intentionally selected for semi-structured interviews to provide in-depth details on the themes of the initial survey. This selection was based on the willingness of respondents to participate in the semi-structured interviews and the respondents who engaged most with other community members. The Western Cape Provincial Department of Agriculture senior extension officer and two NGO representatives also participated in semi-structured interviews, which discussed their respective initiatives to increase urban agriculture activities in the study area.

Ethical clearance (Reference Number: HS17/8/9) was issued by the University of the Western Cape before data collection. Data captured through

the questionnaire was uploaded into the Statistical Package for Social Sciences (SPSS) Version 25.0 for analysis. Data from the interviews and open-ended questionnaire questions were transcribed and analysed through an inductive content analysis process which involved examining the main themes, similarities, and differences in interviewee responses. The urban gardener interviews are attributed using a number (1–20) and information about the type of gardener (household or community gardener), gender, and age range.²

Study area

Mitchells Plain is a low-middle-income township with an estimated population of about 310,485³ (StatsSA 2013). The township is located at the southern edge of the Cape Flats of Cape Town (Figure 1). Mitchells Plain was established in the 1970s through the apartheid regime's Group Areas Act of 1957. This legislation forced racially-mixed populations out of their areas of residence (e.g. District Six). By the late 1990s, large areas of Mitchells Plain had become a sprawling low-income and working-class Coloured settlement characterised by a duality of formal and informal dwellings.

Significant challenges in Mitchells Plain include spatial marginalisation, high crime rates, and overcrowding. Almost two-thirds (63%) of households in Mitchells Plain are considered low-income, and 16.5% have no income (CoC 2016). According to the 2011 census, less than 50% of the working-



Figure 1. Mitchells Plain Map Showing Major Land Uses and Sub-Areas (Source: Authors).

age population is employed. These high unemployment rates are exacerbated by the township's physical location; at about 25 kilometres from the city centre, Mitchells Plain is far removed from areas of economic opportunity. High transportation costs pose a challenge for residents and consume a significant portion of household incomes. Mitchells Plain's economic activities are concentrated in the retail sector located in the township's central business district.

Residents of Mitchells Plain face above-average levels of food insecurity, so food-related land use issues are slowly gaining prominence. Some residents have household-level urban food gardens, mainly to supplement household income and food security. However, like all of Cape Town, Mitchells Plain is situated in a water-deficit area that experiences frequent droughts (CoC IDP 2017), so urban gardening is a challenge. Climate variability puts severe pressure on local food systems (the city experienced its biggest water crisis in living memory in 2018). However, an extensive groundwater resource underlies most of the Cape Flats, presenting an essential opportunity for water harvesting through boreholes. The scarcity of nutrient-rich soil in the generally flat and sandy coastal region also hinders urban cultivators. Supporting actors, such as the Western Cape Provincial Department of Agriculture and non-governmental organisations, have helped reduce the costs associated with urban gardening by providing basic resources such as compost, seeds, and water (Kanosvamhira and Tevera 2019a).

Socio-economic characteristics of respondents

All of the respondents have resided in Mitchells Plain for more than 10 years. Of the 60 respondents, 98.33% were of Coloured⁴ ethnicity, and a single respondent belonged to the Black ethnic group (1.66%). Most (58.3%) of the surveyed population were women. The largest groups of respondents were above the age of 60 (38.8%) or between 50 and 59 (25%). There were fewer younger participants: only 13.3% were between 40 and 49, 16.7% between 30 and 39, 1.7% between 20 and 29, and 5% were younger than 19. This sampling reflects broader statistics confirming that the elderly are the main participants in urban agriculture in the Cape Flats.

The survey results indicate that 43% of the respondents matriculated (completed high school), but only 13.3% pursued any higher education (courses, certificates, diplomas, or degrees). Ten per cent (10%) of the respondents only completed primary school (grade 1 to grade 7), while 23.3% of the respondents left school between grades 8 and 12. Many respondents (40%) were pensioners, 31.7% were self-employed, 16.7% were employed, and 11.7% were unemployed. Respondents' primary sources of income came from employment (41.7%), social grants like state pensions (40%), and their spouses or relatives (18.3%).

The respondents had been gardening for an average of 7 years. One gardener had practised urban gardening for at least 40 years, and seven respondents had only gardened for a year. Their main crops included onions, tomatoes, spinach, chillies, and various medicinal herbs. When asked about their motivations for gardening, the participants listed social (41%), personal health (35.8%), environmental sustainability (19.8), and financial reasons (3.4%).⁵ Engel and Anja (2019) also identified urban gardeners' multi-faceted motivations in the townships of Khayelitsha, Gugulethu, and Nyanga. Most respondents (81.7%) used garden produce for household consumption; only 1.7% exclusively sold the produce, and 16.7% cultivated for both purposes.

Community perceptions of urban agriculture

Interviewees were asked to rate community perceptions of urban gardening on a five-point Likert scale. Most indicated a generally poor perception of urban agriculture in Mitchells Plain (Figure 2), with nearly 55% rating perceptions as either poor or very poor. While this is not a first-hand account from the community members themselves, the aim was to understand what the interviewees thought about the attitude of the community towards urban agriculture. Interviewees believed that most people were generally too busy and considered urban gardening to be expensive and laborious. For instance, one female home gardener stated 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” (F5HG ≤ 49). Other

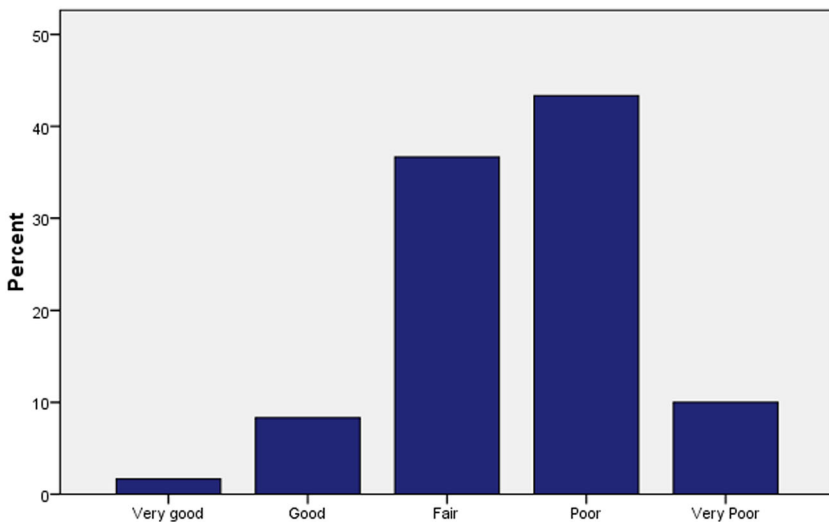


Figure 2. Community's perception of urban gardening (Source: Field Survey, 2018).

interviewees attributed the community's poor perception of urban gardening to stigmatisation. Finally, intensive (Level 6b) water restrictions also discouraged community members from engaging in urban gardening (since they often witnessed other urban gardening projects fail). The gardeners sometimes reported a fraught relationship with their immediate community. For example, one male home gardener explained, "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" (M17HG \leq 39). Battersby and Marshak (2013) also reported that theft was a problem for urban gardeners in Vrygrond (Cape Town).

Despite these negative feelings, 36.7% of the respondents believed community perceptions were fair, while 8.3% considered them good, and 1.7% even believed they were very good (Figure 2). These respondents added that community perceptions were improving since food prices were increasing and more individuals were incentivised to grow some of their vegetables. One female home gardener mentioned that "the people that I know they are now into it because everything is expensive, so they have to eat from what they grow" (F6HG \leq 59). However, some respondents stated that community members were either unsure of how to start or lacked the necessary resources. Most respondents believed it was crucial to aid community members and provide relevant support for their gardens. As one elderly female home gardener indicated, "if they do get the things [they need] in the beginning ... I think they will do it by themselves" (F9HG \leq 60). She explained that the poor soils required significant work before produce can be realised; therefore, support for compost and related resources was needed.

Just over half (55%) of the urban gardeners reported occasionally receiving enquiries from prospective gardeners, 28% described the enquiries as frequent, and 16.7% had never received enquiries about urban gardening from community members. Almost all these enquiries (98%) were about the logistics of starting a garden; only 2% were about obtaining support to start gardening.

Increasing community participation in urban agriculture

In Cape Town, household participation in urban agriculture is generally low (Frayne, McCordic, and Shilomboleni 2014), despite its multi-faceted benefits. This study asked urban gardeners how best to increase community participation, and the semi-structured interviews captured several ideas. These qualitative responses were coded into major themes: knowledge sharing, presenting interesting entry points, resource provision, demonstrating the financial capacity of the activity, and the need for proactive gardeners.

One common issue hindering community participation in urban gardening was a lack of knowledge about the benefits and techniques of starting a

garden. As a female home gardener explained. “when people look at gardening, when they think about it, they think I need a particular set of skills before I start” (F2HF \leq 49). For this interviewee, this lack of knowledge and fundamental skills informed her decision to be more actively involved in urban agriculture promotion:

I actually get ten people at a time in here, and the whole idea is to teach them how to start a garden. 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 (F2HG \leq 49).

Interviewees also thought it was important for prospective gardeners to realise the multiple benefits of urban agriculture activities, and they achieved this by encouraging conversations about urban agriculture. Such conversations demystified perceptions of urban agriculture (e.g. that it was a practice for the elderly and belonged in rural areas). These discussions revealed urban agriculture’s capacity to produce more organic food crops and its role in promoting a more active food system. Most interviewees believed supporting organisations like NGOs and the city could do more to raise awareness and build capacity among potential gardeners. However, these supporting actors explained that they already advertised their services and products to the community. The provincial DOA senior extension officer explained that their office received more requests from other lower-income areas in the Cape Flats, where demand was higher, and believed the publicity for services and products was sufficient.

Another interviewee believed it was essential to involve youths “from a very early age so they can grow with the garden” (F3CG \leq 59). This interviewee considered it cumbersome to teach older children about gardening, a practice they have stigmatised from an early age. One of the NGO representatives, whose office was located at a primary school, reiterated this point and advocated incorporating urban gardening into the school curriculum.

One female home gardener believed that success stories should be more widely disseminated to the community. This idea resonated with most interviewees, who agreed that people would be more interested in participating if they witnessed successes. One community gardener suggested establishing more visible community gardens in the area. Some individuals were even willing to share their crops with community members to encourage recipients to start their own gardens.

Most of the interviewees had received training about the benefits of gardening and promoted this information within the community. For example, one male home gardener 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 to fill the gap” (M15HG \leq 39). This meant that potential urban gardeners could obtain training from a community network (even without NGOs). The NGO informants revealed that they also had placed local trainers in the community to disseminate their skills and knowledge.

Some respondents believed that awareness was crucial for increasing uptake since community members seemed unaware of the multiple benefits of gardening. They highlighted the need to identify interesting entry points when introducing urban agriculture to the community and, specifically, the youth. For example, one female home gardener explained, “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” (F1HG \leq 49). Another female home gardener stated:

I think it needs to be just opened up in a garden, start in a garden and have people walk around ... having balloons or maybe music, people love music so you attract 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 happens with a seed (F4HG \leq 39).

This approach seemed to resonate with most interviewees, who felt it was important to get the youth interested at an early age to ensure a love of urban agriculture. They understood that countering the stigmas associated with the practice was essential in making it more exciting for the younger generation.

Most interviewees believed that supporting actors—like NGOs and the local and provincial governments—played a major role in enhancing community participation. Interviewees believed these organisations had the capacity to build technical skills and provide physical resources for beginner gardeners. Urban gardeners in Cape Town need to invest in the (generally poor) soil before realising any gains. As one individual explained, “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” (M17HG \leq 39). NGO support plays a crucial role in subsidising some of the costs associated with starting a garden. The Soil for Life programme manager explained that members (who pay a standard fee) receive “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”. This programme capacitates prospective gardeners for success by providing them with skills and inputs. Interviewees also noted that NGO monitoring was equally important in ensuring that initiated projects were successful. The NGOs attempted to promote urban agriculture’s multifaceted benefits beyond potential financial gains. For example, Soil for Life provided bi-

monthly holistic health and wellbeing workshops for members (e.g. on body functions, lifestyle diseases, mental and physical health, healthy food choices, and home food gardening).

Five interviewees (particularly two community gardeners) emphasised the importance of demonstrating the financial capacity of urban gardening to incentivise community involvement. Most interviewees felt this was a language the community understood; therefore, it was critical in raising awareness for urban agriculture. This sentiment is best captured by one female respondent:

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 just to capture them that is the only way we are going to get the youth interested, see the youth love making money (F3CG ≤ 59).

Some urban gardeners even sold crops and processed products like jam to spark interest in the community.

However, some interviewees understood participation in urban agriculture to be a personal decision made by the individual; therefore, little could be done to increase community participation. They underscored how the difficulties of starting a garden potentially hindered prospective gardeners. For example, one female home gardener emphasised that “the beginning to kick it off is hard work, to get it right is no joke ... at the end of the day you must have a love for it” (F5HG ≤ 49). Generally, these interviewees believed most gardens failed due to wavering commitments. As one female community gardener explains:

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 (F7CG ≤ 59).

According to this respondent, passion is a prerequisite—without it, a potential gardener cannot sustainably garden, especially considering Cape Town’s physical constraints. These gardeners have stopped actively encouraging community members to engage in the practice. Instead, they wait for interested individuals to approach them and assist where they can.

Discussion

The respondents perceived a generally negative attitude toward urban agriculture in the community. This supports Thornton’s (2008) findings of negative attitudes toward urban gardening activities in Grahamstown and Peddie (South Africa). Gardens are widely perceived to be rural vestiges, out-of-

place in modern city life. According to the respondents, most people in the community are not interested in urban agriculture. Additionally, some community members may not relate to gardening, as they have roots in the city centre (but were resettled during apartheid). Other communities, who have moved to the city, may bring their farming practices with them. Improving the image of urban agriculture requires demonstrating its multiple benefits and incorporating it into other activities.

Some community members are certainly interested in urban agriculture, as evidenced by the enquiries most urban gardeners receive. Most respondents reported that interested individuals request technical assistance in starting a garden. This supports the interviewees' views that the limited engagement with urban agriculture activities is partly due to limited knowledge about how to start a garden. Therefore, capacity-building and training programmes may increase the uptake of urban agriculture activities. Similarly, some interviewees believed that urban gardening would soon increase due to the stringent economic conditions in the country. Scholarly work also notes higher uptake of urban agriculture during economic hardships (Crush, Hovorka, and Tevera 2018). For instance, urban agriculture increased among Zambians after the country's economic meltdown following the closure of mines in the 1980s (Smart, Nel, and Binns 2015). There was also increased promotion of urban agriculture activities during the COVID-19 pandemic (Paganini et al. 2021; Kanosvamhira and Tevera 2022b).

Previous research has shown that a dependency system exists between urban gardeners and supporting actors (Paganini and Lemke 2020). These actors provide crucial infrastructural and technical resources that are required for successful engagement in urban agriculture. However, supporting actors should be better organised and improve the impact of their activities, through information dissemination and advertisements. Previous studies have described poor interactions between NGOs and the provincial DOA in Mitchells Plain (Kanosvamhira and Tevera 2019a). Few gardeners in the area were aware of the provincial DOA's services; thus, improved synergies between key players can only enhance supporting actors' visibility for prospective and first-time gardeners.

Urban gardeners also play a major role in promoting urban cultivation. Although gardeners would like to help increase the uptake of urban agriculture activities, they currently do so in a rather ad hoc, less effective manner. Some gardeners conduct workshops in their own homes, while others simply answer enquiries from potential gardeners. A more coordinated effort is required to ensure that urban gardeners can reach a broader audience in the community. The interviewees' varied responses revealed several ideas about how to increase the uptake of urban agriculture. If urban gardeners were more organised, they could offer training programmes for interested community members and avoid the duplication

of efforts. This is feasible since most interviewees have training and could use community gardens as demonstration plots. With improved visibility, community gardens can attract many residents (Wakefield et al. 2007). They also offer an essential platform for communities to discuss food justice issues, facilitate local food democracy (Adelle et al. 2021), and promote the consumption of local food. Given the funding challenges faced by NGOs, there has never been a better time for urban gardeners to create community-based organisations to keep their skills in the community and promote sustainability (Malan 2015). This would bring training closer to the community, strengthen advocacy, and increase the community's engagement with urban agriculture activities. The Gugulethu Urban Farmers Initiative is one such example of a network of urban gardeners actively promoting urban gardening activities and food rights in Cape Town (Paganini et al. 2021b).

It is also important to demystify several negative perceptions about urban agriculture. For example, urban gardening is widely considered a time-consuming activity. However, even formally employed residents in Zambia's Copperbelt successfully used gardening as a complementary livelihood strategy (Smart, Nel, and Binns 2015). This perception is likely based on experiences with traditional agriculture but does not necessarily apply to urban agriculture. Urban gardeners generally use smaller pieces of land—in most cases, their backyards or spaces within close proximity. Backyard gardening is usually a household activity involving assistance from household members, neighbours, and friends (Kanosvamhira and Tevera 2019a). Therefore, people can often manage a home garden alongside other commitments.

When gardeners cultivate on communal land, resource access issues can present problems. For example, in Gweru (Zimbabwe), some community gardeners discontinued gardening after their boreholes broke and long walks were required to fetch water for the crops (Mwakiwa et al. 2018). In the case of home gardeners in Mitchells Plain, NGOs working in the area have helped capacitate prospective gardeners to grow plants in the limited available space. Therefore, we must demystify the idea that urban agriculture—especially home gardening—is a labour-intensive or time-consuming activity. Urban agriculture has many social and environmental benefits (Battersby and Marshak 2013; Slater 2010; Kanosvamhira and Tevera 2019a), which should be clearly communicated and fully understood by the potential beneficiaries. Moreover, urban agriculture in Cape Town generally seems to have modest (but noteworthy) benefits, so it's important for interventions to truly increase capacity and not merely raise awareness.

The physical conditions in Cape Town also discourage engagement with urban agriculture activities. The poor soils, water restrictions, inadequate composting, and little access to irrigation all deter urban agriculture

uptake in Mitchells Plain. Similarly, chronic water shortages in Windhoek and Oshakati (Namibia) presented problems for urban agriculture and may deter potential gardeners (D'Alessandro et al. 2018). Therefore, supporting actors, such as NGOs and the provincial DOA, are critical in promoting the uptake of urban agriculture activities in such cities. They can subsidise the costs of improving soil fertility and educate on water conservation techniques (Kanosvamhira and Tevera 2019a). For example, NGOs in Mitchells Plain provide starter packs that include compost to improve soil fertility. They also teach urban gardeners how to generate their own compost, which helps reduce costs. Finally, NGOs teach water conservation techniques that enable home gardeners to manage their gardens with water constraints. Nonetheless, NGO involvement must be sustainable to ensure the longevity of the gardens. An over-reliance on NGOs can negatively affect gardeners if/when projects are terminated (Paganini and Lemke 2020; Kanosvamhira 2021).

Conclusion

Urban context is an essential factor in determining the level of urban agriculture uptake across cities in southern Africa (Frayne, McCordic, and Shilomboleni 2014). The case of Mitchells Plain in Cape Town indicates that several factors—poor access to resources and inputs, poor soils, water restrictions, and social stigma—discourage engagement in urban agriculture. Youth involvement should be a priority for urban agriculture in Cape Town and other southern African cities (to supplement the ageing urban gardening population).

Urban agriculture offers multi-dimensional benefits. If properly incorporated into policy and practice, it could contribute toward Sustainable Development Goal 11 (sustainable cities and communities). Participation in urban gardening also encourages communities to adopt healthier habits, such as consuming fresh, locally-grown vegetables. Urban agriculture developmental programmes in Cape Town should frame urban agriculture broadly to include its economic, environmental, and social benefits, which appeal to younger generations. For example, urban agriculture can be promoted as a lifestyle choice to alleviate the challenges of living in an urban setting.

There is a significant effort from NGOs to raise community awareness of urban agriculture. However, these discussions should be driven by gardeners themselves; community dialogues can broadly promote the benefits. Success stories also allow community members to witness the potential of urban agriculture. At the same time, supporting organisations should improve institutional issues like land access and resource provision, activity coordination, and resource support. Increasing urban agriculture

uptake requires multifaceted solutions and should combine efforts from all major stakeholders, particularly the state, civil society, and urban gardeners. This study's findings may be relevant to other gardening communities in Cape Town, where engagement in urban agriculture activities remains a challenge. It also contributes to wider knowledge on innovative ways to improve the uptake of urban agriculture activities in low-income neighbourhoods. Importantly, gardeners themselves should lead any such initiatives.

Notes

1. Uptake refers to the number of people engaging in various forms of urban agriculture activities.
2. For example, a male community gardener between 50 and 59 years old would be identified as (M1CG \leq 59). The age ranges used for the semi-structured interviews with urban gardeners were: \leq 29 (29 years and below), \leq 39 (30-39 years), \leq 49 (40-49 years) and \leq 59 (50-59 years) and \leq 60 (60 years and above).
3. This figure could be much higher due to urbanisation and natural increase.
4. The apartheid regime resulted in racially separated development. The term "colored", born from this regime, refers to mixed-race people.
5. Social reasons included food sharing, community building, education and activism. Environmental reasons included urban greenery, and waste recycling. Health and nutrition benefits included enhancing household food and nutrition security. Money-saving was the main financial reason.

Disclosure statement

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Notes on contributor

Tinashe's research is located within the domain of Urban Geography with sub-Saharan Africa as the geographical focus. His research interests are drawn from a broad range of socio-spatial issues including, governance, livelihood strategies of the poor, food security and food systems.

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