

# “There is food we deserve, and there is food we do not deserve” - Food injustice, place and power in urban agriculture in Cape Town and Maputo

Paganini, N. & Lemke, S.

Author post-print (accepted) deposited by Coventry University’s Repository

**Original citation & hyperlink:**

Paganini, N & Lemke, S 2020, “There is food we deserve, and there is food we do not deserve” - Food injustice, place and power in urban agriculture in Cape Town and Maputo', *Local Environment: The International Journal of Justice and Sustainability*, vol. 25, no. 11-12, pp. 1000-1020.

<https://dx.doi.org/10.1080/13549839.2020.1853081>

DOI 10.1080/13549839.2020.1853081

ISSN 1354-9839

ESSN 1469-6711

Publisher: Taylor and Francis

*This is an Accepted Manuscript of an article published by Taylor & Francis in The International Journal of Justice and Sustainability on 25/11/2020, available online: <http://www.tandfonline.com/10.1080/13549839.2020.1853081>*

Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

This document is the author’s post-print version, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.

*“There is food we deserve, and there is food we do not deserve”*

## **Food injustice, place, and power in urban agriculture in Cape Town and Maputo**

Urban agriculture (UA) is perceived to foster the self-determination of localised food systems and feed growing urban populations. We apply a food justice lens with a focus on place and power to explore UA’s contributions to livelihoods and food availability in Cape Town, South Africa and Maputo, Mozambique and to understand the power dynamics between actors. We conducted household surveys, focus group discussions, key informant interviews, participant observations, and farmer-led co-research from 2017 to 2019. In Cape Town, UA is an NGO-led, subsidised initiative regulating production decisions and market access, instead of enhancing self-determination. Food is produced in highly confined spaces in informal settlements, almost exclusively for a niche market of wealthy consumers in the city centre. Farmers are disconnected from consumers and from their own produce, with only 15% of farmers eating the vegetables they grow. In Maputo, UA emerged from farming traditions in the peri-urban green belt, producing leafy green vegetables for both the urban population and 99% of the farmers themselves, thereby contributing to local food availability. However, farmers depend on prices determined by intermediaries with farm association members of higher status and privilege holding leading positions and determining access to agricultural inputs and services. In both contexts, we revealed stark structural inequalities and highly uneven power dynamics. As one outcome of co-research in Cape Town, farmers established their own market channels and advocated for food councils that would enable them to have a voice in shaping urban agriculture and local food systems.

*key words:* Food Justice, Urban Agriculture, Alternative Food Systems, Cape Town, Maputo, farmer-led co-research

## Introduction

While urban agriculture (UA) is assumed to play a role in providing food for growing urban populations (Orsini et al., 2013; Poulsen et al., 2015), there is rising consensus that it is not possible to address (urban) food insecurity and malnutrition merely with urban farming activities (Frayne et al., 2014). Sub-Saharan Africa's population is increasingly urbanised (UN-Habitat, 2018) and the high prevalence of malnutrition, particularly in urbanising societies, is notable (Tacoli, 2019). According to Hermann and Goodman (2018, 2) malnutrition rates are linked to agricultural systems and to “social and structural issues of access, equity and justice.” Globally, contemporary food systems face substantial social, political, economic, and environmental challenges in a context of rising food prices and other price shocks, increasing market concentration, and severe climate change impacts (HLPE, 2017).

This paper seeks to contextualize UA through the lens of food justice to understand the role “place” and “power” play in two case studies—Cape Town and Maputo. We draw on Foucault's (1980) understanding of “power” as an interconnected system of dependencies and relations within the whole society. By “place” we refer to a space that is not merely located in a specific region, but a location created of interactions, relations, and connections with interrelations shaping identities, which do not only question concepts of the past, but also consider change for the future (Massey, 1999).

The contextualisation of UA is encouraged by Tornaghi (2014) who states that the place-based character of UA is apparent in questions around socio-environmental justice and inequalities. Similarly, Steel (2013), Agyeman and McEntee (2014), and Moragus-Faus (2018) call for a stronger link to the discussion around place in the food justice debate. The confined urban context amplifies the “place matters” concept (Paba and Perrone, 2010; Paba, 2010), particularly within emerging, rapidly growing neighbourhoods and complex, diverse societies (Turner, 2011).

This research formed part of a larger project<sup>1</sup> on urban agricultural production systems, value chains, and organisational structures. The stated aim and assumption were that UA could make

---

<sup>1</sup> The UFISAMO project (Urban Agriculture for Food Security and Income Generation in South Africa and Mozambique) was led by the Centre for Rural Development (SLE) at the Humboldt-Universität zu Berlin.

a significant contribution toward urban populations' food and nutrition security, as well as contribute to income generation opportunities for vulnerable communities (Engel et al., 2019).

During the course of the research presented here, participatory farmer-led co-research in Cape Town revealed deeper underlying structural issues as root causes of food insecurity, as illustrated by a female Capetonian farmer research participant who stated, "*There is food we deserve, and there is food we do not deserve.*" This resulted in a change of direction in ongoing research.

In this paper, we apply food justice theory beyond agricultural production and explore underlying issues such as structural inequalities and power dynamics between actors. We introduce a framework that was inspired by the work of Cadieux and Slocum (2015) who critically discuss the need to address structural inequalities and racial and gender discrimination as integral components of food justice. Specifically, we explore the marginalized position of farmers in terms of place and power and how this determines their access to markets, production decisions, and the factors and power dynamics influencing these decisions. Additionally, it is crucial to understand the role of the producers as consumers, hence, farmers' food choices and dietary patterns, including underlying economic and cultural reasons for their choices.

This paper contributes to existing food justice discussions by shedding light on the root causes of failed support strategies that are mainly determined in a top-down manner by the NGO sector and within farming associations. We apply a participatory farmer-led co-research approach which, to our knowledge, is missing in the context of UA in the two cities.

The research questions emerging from our co-research and which we seek to answer in this paper are:

- How "urban" are the farmers?
- What are the power relations between the different actors in the UA environment?
- Can urban agriculture bridge production and consumption in the immediate communities and for the farmers themselves?

This paper is divided into three sections. First, we briefly discuss the role of urban agriculture in alternative food systems and introduce food justice as a lens to explain why it is useful for exploring structural inequalities and power relations in the context of UA. Second, we present key findings from both cities to juxtapose the Cape Town and Maputo cases. Third,

we discuss these findings within the broader food justice discussion, which, so far, has largely focused on the North.

### **Urban agriculture as part of alternative food systems – promoting food justice?**

All over the world, social movements, civil society, and peasant organisations mobilise to support and develop alternatives to an increasingly commercialised and globalised food system, advocating for more justice, equity, food sovereignty, and environmental protection (Moragus-Faus, 2018; Siebert, 2019). The food system is defined as comprising “all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food” (HLPE, 2014, 29). Alternative food systems (AFS) have been associated with promoting social justice, local governance of food systems and economies, and ecological farming approaches, such as farmers markets, community-supported agriculture, food policy councils, or UA (Lemke and Bellows, 2016). Nevertheless, moving away from the initial vision of providing greater social justice, AFS, especially in the North, increasingly focus on consumer preferences and lifestyles (Cadieux and Slocum, 2015).

According to Alkon and Agyeman (2011b), AFS and food systems in general, are not “racially neutral” but are influenced by structural inequalities based on gender and race<sup>2</sup>, among other factors. AFS are often led by White upper-middle-class who lack consideration for disadvantaged communities’ access to affordable and nutritious food. This is because the focus of most AFS remains on food, instead of structural inequalities such as poverty or food deserts caused by misguided urban planning (Guthman, 2008a). This is notwithstanding the potential benefits of AFS, such as consumer awareness and education about organic agriculture, fair trade, or localised production and consumption. UA is often embedded within AFS, aiming to bring the scope of production closer to the consumer (Jarosz, 2008). AFS in the North are generally characterised by greater food system participation, while in the South AFS predominantly seek to enable food availability rather than voice and agency of the food insecure (Haysom, 2016).

---

<sup>2</sup> The ethnic terms “Black”, “Coloured”, “White” and “Indian”, intended by the apartheid laws for “racial classification”, are still widely being used in post-apartheid South Africa, although these terms are highly contested (Durrheim et al., 2011; Erasmus, 2008; Posel, 2010; Seekings and Nattrass, 2005). Moreover, we use the term “people of colour” as an umbrella term for Black, Coloured, and Indian South Africans, as is used in the broader South African context.

UA has been described by scholars as crop cultivation activities in urban and peri-urban areas, partly engaging in beekeeping, aquaculture, or livestock keeping (Mougeot, 2000; Van Veenhuizen, 2006; FAO, 2011; Santo et al., 2016), but also engaging in the processing, marketing, and selling of those products (Horst et al., 2017). Above all, UA received considerable attention for its multi-functionality and potential to build synergies with other aspects of urban life, such as greening public spaces, ecosystem services, or community building (Duchemin et al. 2008; Gieseke and Adidi, 2011).

The discussion around UA in the South remains limited to urban food insecurity and poverty alleviation (Battersby, 2013). Similarly, Tornaghi (2017) argues that UA is still a marginal and contradictory practice. According to Santo et al. (2016), UA is a place-based strategy supporting social capital, which partly attempts to address food injustice (requiring a deeper understanding of the historical context of its actors) as well as racial and social politics. Subsequently, Horst et al. (2017) cautioned that UA could amplify and entrench social inequalities by favouring more affluent population groups who compete for rare urban housing space. This could exclude and further marginalise disadvantaged households even if indirectly and unintentionally. It is therefore vital to address these concerns, especially where UA is claimed to promote food justice within food systems.

### *Understanding urban agriculture through the food justice lens*

Justice in food systems has been intensively discussed in a northern context, particularly in the US, and within the commercialised food system (Heynen, 2006; Gottlieb and Joshi, 2010; Alkon and Ageyman, 2011a; Alkon, 2012; Sbicca, 2012; Hislop, 2014; McClintock 2011) and also in the UK (Dowler, 2014). According to Glennie and Alkon (2018, 1), food justice “seeks to understand how inequalities of race, class and gender are reproduced and contested within food systems,” encompassing the growing or purchasing of food, diet-related health disparities, but also access to land, wages, and working conditions in agriculture, food processing, and restaurant work. Food justice is further embedded in questions around historical inequalities and marginalities shaped by policy, historical legacy, and (racial) prejudices (Alkon, 2012; Herman and Goodmann, 2018; Morales, 2011).

The framing and analysis of our results is inspired by the work of Cadieux and Slocum (2015) who characterise food justice based on the respective location-specific histories and

societal contexts, those involved, and the power relations between them (see Fig. 1). A central argument of their work is that food security challenges can only be addressed if questions of structural injustice in the food system are understood, and, building on these insights, if systemic solutions are developed. Nevertheless, Cadieux and Slocum (2015), like Guthman (2008), caution that projects or organisations committed to food justice, albeit with good intentions, may impede transformation. For example, focussing too much on the consumer side, instead of uncovering systemic barriers, will hinder equal participation in food systems for marginalized communities. Having sufficient and adequate food is not just about being fed and nourished, but also about socio-cultural aspects (Mares and Peña 2011). It is important to recognise producers as consumers with distinct dietary patterns and food preferences. Cadieux and Slocum (2015) highlight the growing importance of understanding UA within the wider food justice discussion, particularly in understanding aspects of food access and food consumption.

Drawing on Tornaghi (2017), we add a place-based perspective which is not yet widely debated in food justice discussions.

*Figure 1: Food justice lens applied in this study; inspired by food justice principles based on Cadieux and Slocum (2015), and a place-based perspective based on Tornaghi (2017)*

## **Study contexts: Cape Town, South Africa and Maputo, Mozambique**

### *South Africa*

The agricultural sector in South Africa is highly divided and reflects stark inequalities in race and class, despite efforts by the government to redress past injustices (Lemke and Jansen van Rensburg, 2014). The unequal distribution of land is a result of racially discriminatory laws preceding apartheid, such as the Natives Land Act of 1913. This restricted the Black peasantry's access to land to the so-called 'homelands' (13% of the country's land), gradually forcing Black farmers into wage labour on White-owned farms, resulting in loss of access to land and land-based livelihoods for the majority of South Africans (van Onselen, 1996). The shift from labour-intensive to capital-intensive mechanised agriculture in the 1960s and removal of state subsidies post-1994 (Wegerif et al., 2005) was accompanied by concentration of ownership among fewer farmers, along with drought and farm insolvency, among other factors (Atkinson 2007). These post-colonial structures coupled with neoliberal economies led to a 'normalisation' of food

poverty for most of the population (Haysom, 2020). Large-scale, highly technical production systems are mostly managed by White South Africans, while small-scale peasant agriculture is conducted mainly by people of colour (Bernstein, 2013). UA in South Africa has been linked to poverty alleviation and food security strategies, such as in the National Policy on Food and Nutrition Security 2014, the Roadmap for Nutrition in South Africa 2013–2017, and the provincial Household Food and Nutrition Strategy 2016, with all of these policies regarding UA as a coping strategy to address increasing urban food security (Swanby, 2018). A study conducted in Hammanskraal, Pretoria showed community food gardens’ contribution to provide additional food to households, especially against the backdrop of skyrocketing food prices (Nkosi et al., 2014). Other case studies in the greater Johannesburg area show that community gardens require contextual backing and a deeper understanding of urban food systems to be successful in the longer term (Ruysenaar, 2012). Clearly, a holistic view of the interconnections between economic and social challenges is required to address urban food insecurity; urban agriculture alone cannot be seen as a remedy to these challenges (Battersby and Marshak, 2013).

### *Cape Town*

The city is densely populated with an estimated 4.2 million inhabitants, 36% of whom live below the poverty line, mostly in informal settlements or so-called townships (CoCT, 2018). Migration to the country’s urban centres is not a new phenomenon, dating back to the pre-apartheid and apartheid era when cheap labour was sought in the mines and continues today as people move to the cities in search of employment. Urban farmers<sup>3</sup> find themselves in a highly segregated city, in the outskirts of the city centre in an area called the Cape Flats. Farmers grow in backyard gardens in minimal space or in the hundreds of small food gardens which have been established mainly on public grounds such as schools, hospitals, or municipal land (Engel et al., 2019; Haysom et al., 2017). Previous research on UA in selected disadvantaged communities showed that less than 5% of the surveyed population are actively farming and those who are farming make a low contribution to urban food security (Battersby, 2011). The City of Cape Town has supported UA since 2007 through an Urban Agriculture Policy and since 2013 with a Food Garden Policy that ambitiously aimed to “improve household food

---

<sup>3</sup> In the following, we refer to “urban farmers” when using the term “farmers”, most of whom are people of colour.



security” and “job creation and income generation” (CoCT, 2007, 4). A conclusion from previous research is that the promotion and subsidisation of fragmented UA projects, instead of a broader holistic and systemic change in spatial planning, does not contribute to just food systems (Battersby and Haysom, 2019).

### *Mozambique*

Since colonial times, Mozambique’s agricultural system has been predominantly family agriculture. This changed after independence (1975) into a socialist system with small-scale farmers being organised in cooperatives. This systemic change resulted in the marginalization of the peasantry followed by a collapse of the agriculture sector that supplied the domestic market (Cruz e Silva, 2006). The strategy of pursuing cooperative production did not improve livelihoods, but led to a new economic transition involving World Bank policies and increased national dependency on international aid programs with the FAO supporting urban agriculture activities in Maputo and Inhambane (DoA, personal communication, 10 May, 2018). Among the challenges experienced in recent decades are recurring economic crises, droughts, and cyclones, which have impacted food security and the farming sector (Ferrão et al., 2018). Being a traditional primary-sector economy, Mozambique has received recent foreign investment from China, India, Brazil, and neighbouring South Africa to support the agricultural sector, mainly with inputs such as mineral fertilisers. However, agricultural production has not increased as much as the growing population’s food demands, leading to the increasing challenge of becoming nationally self-sufficient (ibid).

### *Maputo*

The capital city of Maputo is in the south of the country and the influence of South Africa and Eswatini (former Swaziland) is strong, especially in terms of food imports (Paganini and da Fernanda, 2019). In recent years, Mozambicans from all over the country migrated to the city, which led to explosive growth.

Around ten thousand farmers are organised in 26 peri-urban farming associations under the umbrella of the agricultural union *união*, mainly in the two fertile urban valleys of Infulene and Mahotas in the so-called *zonas verdes* and the neighbouring city of Matola, the island of KaNhaca, and the peninsula of KaTembe (Paganini et al., 2018). Infulene and Mahotas have

historically been the most productive horticulture areas in the country (Cruz e Silva, 2006). These areas provided farmland during colonial times to agricultural holdings. During the above-mentioned systemic change, land was occupied by small-scale farmers or left abandoned (ibid). In Maputo, due to increasing food insecurity in the city, the establishment of associations was initiated by the government to enhance the situation in the country's capital and to "provide food for the urban poor" (KULIMA, personal communication, 8 May, 2018). The municipal council (CMM) coordinates the activities of the associations and promotes trade fairs and agroecological production techniques in cooperation with one civil society organisation (ABIODES). Although farming is an economically relevant activity for some ten thousand producers (Chicamisse et al., 2019), mainly women (Sheldon, 1999), previous research has shown that the impact of UA on household food security is overstated (Crush et al., 2016).

Drawing on these insights from previous research in the contexts of Cape Town and Maputo, clearly a deeper exploration and analysis is required into underlying structural inequalities related to place and power, and whether, within these structural conditions, UA is able to contribute to sustainable local livelihoods and food availability, framed within a food justice perspective.

### **Mixed-methods approach for exploring food justice in urban agriculture**

We adopted a co-research approach, inspired by participatory research framed by Chambers et al. (1989) and Paulo Freire's (1970) work on learning processes and problem-posing methods for oppressed and marginalized groups. Co-research consists of learning in and from communities, the pursuit of transformation, and the democratisation of the knowledge process (Stöber, 2005) and places actors who are still largely being excluded from research that is relevant to them at the centre of the research (Pingault et al. 2020). Co-research includes research participants in all steps of the research process from the problem identification, study design, data collection and, crucially, the mutual interpretation and validation of the findings, to the scaling and dissemination of these findings. As Cadieux and Slocum (2015, 2) put it, we should "work with" instead of merely "reporting on" marginalised communities, "guided by a feminist, antiracist, and anti-colonial commitment", while acknowledging our own White privileges. Engaging in co-research with farmers and giving equal consideration and voice to their knowledge and experience became central in this research.

## *Methods*

Data were gathered between 2017 and 2019 through a mixed-method approach. Selected results from initial baseline surveys conducted with enumerators in both cities in 2017<sup>4</sup> are presented in this paper (n=112 in Cape Town, and n=369 in Maputo). Additionally, a consumer survey “Over the Fence” (n=87) was piloted in Cape Town with community members who live close to five food gardens. All surveys were coded and descriptively analysed in SPSS stratified according to gender and race. Key informant interviews were conducted with 302 farmers, members of NGOs and other civil society organisations, governmental institutions, researchers, consumers, and market organisations and allowed a narrative and problem-centred approach (Lamnek and Krell, 2016). The sampling of these interviews was informed by stakeholder mapping of the larger UFISAMO project (Engel et al., 2019). Content analysis was applied to cluster themes dominating the discussion that emerged from the actors’ perspective around UA.

The first author spent 15 months in Cape Town and 5 months in Maputo. This enabled the author to engage in participant observation, being involved in activities such as farming, cooking, and grocery shopping. Participating in these daily activities and interactions among farmers allowed for a deeper understanding of the local context and the challenges and barriers small-scale farmers face in pursuing urban farming. The potential bias that might occur because of these close relationships and interactions was addressed by engaging in regular feedback and reflection sessions within the larger supervisory team. It is important to note that the research during this phase was driven by the involved urban farmers who were co-researchers and that the first author of this paper supported this process as a facilitator, not in a leading role. This co-research approach is filling a gap that was recently highlighted (Nature editorials, 2020), with a meta-analysis of research into small-holder schemes showing that most studies fail to involve farmers in research and are therefore of little practical relevance and impact. This clearly calls for a shift in research priorities and approaches, as was applied in this study. In Cape Town, the research process involved farmers (12 women, 8 men) as co-researchers. Creating a safe and trusting space enabled co-researchers to collectively frame the research questions, engage in 22 focus group discussions (FGD) and five multi-actor workshops, and co-analyse findings. This also allowed for continuous reflection, validation, and triangulation of findings. Perceptions and outcomes were mapped, clustered, and validated. In Maputo, in-depth research was

---

<sup>4</sup> The baseline survey was conducted within the UFISAMO project in 2017 in Maputo by the first author, together with Luisa Chicamise, Ivo Cumbana, and Anja Schelchen and in Cape Town by the first author and Abdulrazack Karriem

conducted with six FGDs and two multi-actor workshops, with a core group of twenty farmers (11 women, 9 men).

## **Urban agriculture in Cape Town and Maputo: Evidence from the field**

### ***Place: How “urban” are the urban farmers?***

The UFISAMO project hypothesised that UA is an activity of rural migrants, mainly older women, who have traditionally been smallholder farmers and who continue farming in the city. In Cape Town, key informants from the NGO Abalimi Bezekhaya associated UA farmers with a “rural heritage” and assumed their obvious connection to farming (personal conversation, 29 November, 2016, 02 December, 2016, 17 July 2018). Our findings confirm that UA in Cape Town is an activity mostly conducted by older Black women (64% above 55 years). The unemployment rate is 84% among female Black farmers (80% Coloured female), compared to 76% among Black male farmers (67% Coloured male). Most farmers have lived in Cape Town for decades, with only 11% having arrived after 1994 (post-apartheid) and only 4% having settled since 2007. UA is, therefore, not an activity of recent migrants, but rather a recent activity of urban dwellers, with 88% having engaged in food production within the last ten years. Only 21% of farmers who migrated to Cape Town post-1994 produced food in their hometowns. Most (94%) of the farmers have not had access to agricultural education or larger farmland in the past.

In Maputo, the situation is different. Farming activities are also mostly conducted by female farmers. Most farmers are between 26 and 55 years old (58% of the female farmers, 51% of the male farmers). The unemployment rate is higher among female farmers (84%) compared to 62% for men. Rural Mozambicans migrated to the city with the aim of farming in the peri-urban belt (*zonas verde*) which has been a traditional horticulture area ever since the colonial era. Some migrant workers passed by on their way to the greater Johannesburg area in search of employment, but remained in the *zonas verdes* as vegetable production workers. According to the baseline survey, 39% of the farmers arrived before 1992 (being the year when the civil war ended) and only 3% arrived after 2007. Farming is a tradition mainly practised and passed on from one generation to the next: 69% of Maputo’s farmers have been producing for longer than ten years.

### ***Actors discussion – key emerging themes***

To understand the roles of and dynamics between actors involved in UA, they were interviewed at repeated intervals between 2016 and 2019 to validate information obtained in baseline surveys and participant observation (Figure 2). Six themes were identified in a qualitative content analysis of the interviews, with “organisation” (membership in farmer networks, NGOs, and associations), “marketing”, and “climate change”. As becomes obvious from Figure 2, there are two main differences. In Maputo, “food production” is of higher relevance, while in Cape Town, “structural inequalities” and “policy and governance and land access” are more relevant.

*Figure 2: Discourse themes UA actors touch upon in interviews and personal conversations. Source: Field research 2016-2019 (n=304)*

*Figure 3: Content analysis of interviews, various actor groups in Cape Town. Source: Field research 2016-2019 (n=196)*

*Figure 4: Content analysis of interviews, various actor groups in Maputo. Source: Field research 2016-2019 (n=108)*

It is notable that the UA context in Cape Town (Figure 3) is more politicised than in Maputo (Figure 4). The interviews highlighted that a diverse environment of organisations, consultants, activists, and chefs has emerged and engage on issues around food in the last thirty years in Cape Town. While this could hold potential for collaboration among these actors, the food environment is riddled by lack of transparency and differing interests. For example, a female farmer interviewee pointed out that there is competition for donor funding and competition for farmers’ affiliation to particular organisations when she said, “*Who are all these people, coming to my garden, taking photos and asking to join their organisation?*”

Additionally, various dependencies between farmers and intermediaries, NGOs, or policy actors were highlighted by farmer participants. Farmers mentioned, for example, that ward officials decide on land leases and extension officers decide who receives subsidies such as seedlings and gardening tools. The term “power” was mentioned by various interviewees; for example, by an official of the City of Cape Town who said, “*From day one of the UA policy, dependency started, and not a single person is food secure with UA, all it holds is power,*” by a female farmer who shared that, “*They are really bullying small farmers and farmers are too scared to speak,*” and by a female civil society representative who emphasised that “*farmers are victims in a power system.*”

The discussion in Maputo (Figure 4) is strongly related to the themes “production” and “market access”. Farmers stated that production challenges are mainly related to their lack of knowledge of pest control and, as a result, inadequate use of pesticides. They reported that market access is hampered by intermediaries’ lack of price transparency and by the flooding of local markets with cheap vegetable imports from South Africa negatively which renders local production of vegetables other than leafy vegetables not economically viable. The theme “structural inequalities” that relates to hierarchies within farmers associations and with government institutions was rarely mentioned in interviews nor in multi-actor workshops. In focus groups, farmers criticised governmental extension services for excluding farm association members while providing services only to those in leading positions in associations such as the president, production manager, and irrigation manager. Concerns were also raised by farmers on the inscrutable system of fines which must be paid, for example, for truancy at association meetings.

### ***Uncovering unequal power relations***

Power relations among UA participants were mapped by farmers in the two cities as illustrated in Figure 5 (Cape Town) and Figure 6 (Maputo). The discussion focuses on actors deemed by farmers as most influential in power relations in UA.

#### *Cape Town - the power of intermediaries and NGOs*

*Figure 5: Actors map of UA in Cape Town. Source: Paganini (as cited in Engel et al., 2019)*

The strongest dependency in UA identified by Capetonian farmers is on intermediaries as illustrated by a thick black arrow in Figure 5. Two intermediaries active in retailing produce during the period of this research were: 1) Harvest of Hope (HoH), an economic program created by the NGO Abalimi Bezekhaya, which sells vegetable boxes to private households and restaurants and 2) Umthunzi, a township-farmer-initiated social enterprise which evolved into a for-profit business without farmer representation/ownership that currently sells vegetable boxes to private households and restaurants. Of the farmers in our sample (n=112), 71% sell

exclusively to Harvest of Hope. This means that most of their produce is sold outside of their communities to the affluent, mostly White population in the city centre or suburbs. A systemic issue is evident here as this practice removes food from those for whom it was initially intended: the poorer urban population.

Although Capetonian farmers produce for an affluent market, their income is small, fluctuating, and irregular with an average of R500 (30USD<sup>5</sup>) per month. This was validated by diaries of farmer co-researchers between 2018 and 2019 (n=20). Only five of twenty farmers reported that they maximize their earnings by selling through a box scheme and only one farmer stated that she prefers using intermediaries as a primary marketing channel. For most of the farmers, UA is not an economically viable activity, especially when the subsidies provided by NGOs are considered. As concluded by the larger UFISAMO project, UA's role extends to other important aspects beyond production including community building and education (Kanosvamhira and Tevera, 2019; Karriem et. al., 2019).

Capetonian urban farmers are primarily people of colour from the lower-income class, while NGOs are mostly operated by White middle-to upper-class people. Even though NGO staff provide training and other support strategies for farmers (or potentially because of these support structures), farmers have not developed independent marketing strategies or markets within their own communities. This has resulted in dependency on subsidies provided by the city's former UA Unit and the Department for Social Development, from the provincial-level Department of Agriculture, and from NGOs concerning access to land, affordable farm inputs, and above all, to markets. Farmers perceive themselves to be "price-takers" who remain dependant on intermediaries' decisions around if and how much produce to purchase, with production cycles being determined by NGOs.

### *Maputo – the power of intermediaries and associations*

*Figure 6: Actors map of UA in Maputo. Source: Paganini, Chicamisse, Cumbana, Engel, as cited in Engel et al. 2019, p.43*

---

<sup>5</sup> Currency conversion, November 2020, oanda.com

The strongest power hierarchies identified by farmers in Maputo are found within associations, as illustrated by the short, thick arrow in the second inner circle of Figure 6. Farmers pointed out lack of transparency around the associations' inherent dynamics where central positions like president or production manager were filled according to membership in a specific political party or class affiliation. The associations do not work according to a cooperative structure. Thus, farmers cultivate and sell their products individually, negatively impacting their bargaining power and information flow.

Regarding access to markets, 90% of Maputo farmers sell to *maguevas* or informal intermediaries who purchase directly from fields and sell to city markets, informal markets, or street vendors as Figure 6 shows. Prices vary daily and are influenced by seasonal fluctuations and unforeseen rainfalls, floods, or droughts. Information exchange among farmers on price fluctuations does not take place. The City of Maputo's Market Department estimates that there are 10,000 informal intermediaries. As one city official stated, the high number of food-insecure people and the increasing need to supply people with jobs while there is a lack of employment opportunities are the reasons not to formalise the market system (yet) and to accept this informal system.

### ***Bridging production and consumption***

It is essential to shed light on people's motivation to engage in farming to better understand the role UA plays in their livelihoods. In Cape Town, according to the stated aim of the NGO Abalimi Bezekhaya, backyard gardeners grow food to contribute to their food security and market gardeners grow food to generate income. While social enterprises like Umthunzi aim to achieve food security for urban farmers through their business model, farmers state self-sustenance and income generation are secondary drivers for their participation in UA since UA cannot provide sufficient income. Instead, benefits deriving from NGO affiliation were mentioned as the primary reason to engage in farming by Black female farmers (n=37), particularly in the areas where Abalimi Bezekhaya is active (Figure 7). Social grants are the main income source for almost half of the farmers, followed by informal employment, such as domestic work. People living in informal settlements who largely lack access to public services and other support structures are unable to engage in farming because they lack the financial, physical, and other resources to do so. Farmers from the coloured community were mainly engaged in backyard gardening during this research, with farming providing food for their household, but not contributing to their household incomes (Figure 8).



In Maputo, the NGO ABIODES' management perceives food security to be the main driver for farmers' participation in UA, while farmer surveys reveal that self-sustenance and income generation are the main reasons for their participation. Farming activities are the main income source for most farmers. NGO encouragement does not play a role (Figures 7, 8).

*Figure 7: Main reasons for farmers to grow food in cities. (CT: n=112; MP: n=369)*

*Figure 8: Main income source of farmers. (CT: n=112; MP: n=369)*

### *Farmers as consumers*

To understand why farmers in Cape Town are not consuming their own produce, we applied a fork-to-farm approach during FGD and participant observation to obtain deeper insights regarding food choices, sources, and origins. Low household incomes prevent farmers from consuming healthier foods, with most of their available funds being spent on staples such as rice, maize, wheat flour, sugar, and oil. The same farmers grow and sell vegetables to intermediaries as local, organic, and fresh or as #vegwithimpact<sup>6</sup>. It is striking that only 15% of farmers consume their own produce regularly, while 47% sporadically add certain crops to their diets (mostly spinach) and 38% do not consume any crops from their gardens. Food from supermarkets, preferably processed and internationally imported, is perceived as higher value than their own produce. The vegetables bought in supermarkets or spaza stores<sup>7</sup> are produced by large commercial farms. Farmers spend, on average, less than R500 (30USD<sup>8</sup>) on their weekly food supplies (with R500 being the average monthly income from farming activities) and less than R100 per week (6.15USD) on fresh fruit and vegetables.

In Maputo, on the other hand, farmers produce mostly leafy vegetables, such as cabbage, kale and lettuce, which are also consumed by 99% of the farmers. Buying imported food from South Africa (potatoes, onions, tomatoes, and processed food), Portugal (dairy products), Brazil (frozen chicken), or Angola (frozen fish) is regarded by farmers as a symbol of wealth; however, most of their income is spent on food purchased from small shops in their neighbourhoods. In

---

<sup>6</sup> #vegwithimpact is a hashtag regularly used in Umthunzi social media campaigns

<sup>7</sup> Informal or convenience stores in townships run from a person's home to sell food and other groceries.

<sup>8</sup> Currency conversion rate, November 2020, oanda.com

both cities, final validation workshops participants suggested UA can be an entry point to discussions around nutrition and the right to good food and healthier diets.

### *Food surplus and food waste*

Vast amounts of food surplus is created in food gardens in Cape Town (Figures 9, 10) which was an unexpected result in an environment of food insecurity and deprivation, while in Maputo the demand for urban produce exceeds supply. In Cape Town, this resulted from poor production planning within NGO-mediated marketing channels which encourage farmers to grow non-traditional food for more affluent markets. The financial collapse of the leading intermediaries (Harvest of Hope and Ethical Cop) at the beginning of 2018 led to huge surplus of produce for most farmers with no immediate market opportunity. In 2017 before the intermediary systems collapsed, four out of five farmers stated they regularly have surplus in their gardens and throw away up to 70% of the vegetables in their fields, a remark later validated by the Department of Agriculture, NGO field workers, and farm records diaries. According to interviews with the intermediaries' packing teams, at least an additional 20% of food waste occurs during packaging and retailing.

Exploring why farmers do not consume their surplus (Figure 10) revealed that there is a lack of knowledge on how to cook and consume these vegetables, which highlights the disconnect between farmers and their crops. Some farmers perceive their crops as food for “White people”.

*Figure 9: Food production surplus and use of surplus in Cape Town and Maputo. Source: Own data from 2017 baseline survey 2017 (CT: n=112; MP: n=369)*

*Figure 10: Farmers' reasons why their production surplus is not consumed at home. Source: Own data from baseline survey 2017 (n=112)*

### *Insights on producer–consumer linkages from co-research in Cape Town*

When neighbours living within 200m of urban food gardens were queried on their vegetable consumption, co-researchers discovered a further disconnect between farmers and their community: only 20% of neighbours considered nearby gardens as a potential source of fresh vegetables.

A key finding was that there is a disconnect between the farmers and the surrounding community. Only 20% of the neighbourhood residents considered the food garden as a source of fresh vegetables. The weakest links appeared to be around a garden facilitated by the NGO SCAGA in Khayelitsha, where only 3% of neighbouring residents considered the garden as a source of food; stronger links existed around independent food gardens in Gugulethu (38%) and Ottery (24%). Here, farmers proactively approached their neighbours to offer their produce. The highest daily consumption of vegetables by neighbourhood residents was found in Gugulethu (90%) and Ottery (78%), compared to Khayelitsha (50%) and Mitchells Plain (37%). More available income would lead 20% of the surveyed neighbours to consume more fresh fruit and vegetables and organic food. Of those neighbours who bought vegetables from the urban gardens, 90% considered the prices fair or less expensive than in supermarkets. This was a positive and surprising outcome for farmers who had not previously considered their neighbours as potential consumers and who were not aware that there is a willingness to pay similar or higher prices than those they receive from intermediaries. Farmers realised that the convenience of marketing through the existing intermediary system (packaging, pricing, delivery, and customer relations) might come at the cost of their own communities' food security and their profit.

## **Discussion**

### *Place*

Food is intimately connected to family heritage and culture: our food choices are shaped by where we are in place and time. The place where UA takes place has been described as a conglomerate of contradictory stories, people, and visions (Certomà and Tornaghi, 2019), which we found in both cities, albeit with distinct differences. First and foremost, Maputo's peri-urban area has more physical space for farming activities than Cape Town's townships which are also marked by an inscrutable tenure system in informal settlements, vandalism, and ongoing land access challenges. While UA in Maputo contributes to farmers' livelihoods and food security, UA in Cape Town is almost exclusively geared toward more affluent consumers with limited benefits to farmers' livelihoods. Conversely, Maputo's city-agriculture relationship is associated with the countries' traditional, rural peasant farming and the *zonas verdes* in the peri-urban belt remain a strong symbol of self-sufficiency during the civil war and, in present times, the pursuit of livelihoods and income gain. However, an official of the

City of Maputo voiced concern over the increasing urbanisation, particularly along the seaside of Costa do Sol, posing a threat to farmland (City Council of Maputo, personal communication, 10 May, 2018).

In Cape Town, UA is a newly introduced NGO activity targeting people of colour. Being uprooted, marginalised in townships, and excluded from land access during apartheid, Black and coloured farmers state that having a space to grow food—even on a few square meters—gives them dignity as soil improvers, food growers, and community focal points. Despite their perceptions and visions, Cape Town’s UA produces a large variety of organically grown vegetables that go largely wasted and do not significantly contribute to access to healthy and culturally appropriate food for farmers’ own food-insecure communities. Haysom (2016, 14) speaks of a “spatial disconnect” and of an absent linkage between producers and markets. Rosenberg and Cohen (2018) also argue that proximity to healthy food has little effect on consumption of healthy food, yet in Maputo, proximity increases the consumption of locally grown food.

### *Power*

Co-research with farmers in Cape Town allowed us to understand that “power” frames the context of UA with farmers being mostly people of colour and intermediaries being White middle-class people. Guthman’s concern is that AFS tend to attract mainly privileged people who largely continue to define the narrative, spaces, and bigger mission to transform the food industry (2011). While most initiatives are well-intentioned, they perpetuate the patronising of farmers, dis-empowerment rather than empowerment, and fail to address structural inequalities. (White) people speaking from their privileged position and, in the words of Mares and Peña (2011, 200), continue to “marginalise those who are most vulnerable to the enduring and cumulative effects of the structural violence and intergenerational historical trauma that have undermined local food systems”.

In Maputo, farmers sell their produce mainly within their own neighbourhoods. However, individual farmers who aim to increase their bargaining power by selling their produce collectively through farmer associations note the lack of price transparency and lack of support for cooperative structures as a result of power relations within associations (Chicamisse et al., 2019).

A central argument of Cadieux and Slocum's (2015) work is that food insecurity can only be addressed and overcome if structural injustice in the food system is understood and challenged and systemic solutions developed. These systemic solutions can be developed by engaging in co-research with farmers, first and foremost, and facilitating their understanding of their lack of opportunities to participate equally in decision-making processes within food systems (Barnhill and Doggett, 2017). However, we agree with Guthmann (2008a,b, 2011) and Tornaghi and Dehane (2019), that structural inequalities need to be addressed through appropriate policies to mitigate previous power relations and bridge disconnects within food systems. Farmers primarily rely on governmental and non-governmental support as they lack access to microcredit and lack knowledge on where and how to apply for funding. We observed farmers developing promising bottom-up business concepts with the potential to generate more income than through existing intermediary programs being hindered by power dynamics. In one case, Black farmers who had formed a collective were not able to obtain seedlings from a White male seedling retailer despite offering a cash payment. The reason given by the retailer was that he would only accept registered organisations as buyers. Also, as was reported on different occasions by individual farmers, they were not able to sell directly to restaurants in the CBD of Cape Town.

These examples of power and dependencies could be perceived as intentional racism or unintentional white privilege. We caution against simplifying these interpretations and classifying farmers as losers and intermediaries as winners in AFS. Still, we emphasise that more attention needs to be placed on the link between UA and food justice. The frequent loss of fresh produce attributed to poor planning by NGO-affiliated intermediaries displays dependencies and imbalances in the food system. Farmers in Cape Town and Maputo could potentially achieve a stronger bargaining position if they sell collectively rather than relying solely on intermediaries. This will require them to establish trusting and collaborative relationships among themselves and with consumers as a pre-condition for more equitable UA.

Previous work and critical discussion on AFS have largely focused on cases from the North (Alkon, 2012; Guthman, 2008, 2011; Blay-Palmer and Knezevic, 2015). Haysom (2016) discusses differences between cases in the North and South and links these differences with food system agency, stating that traditional (Northern) value chains do not work for poor urban residents, often limit marginalised communities' access to food, and do not allow them a voice and equal participation in food systems (ibid, 14).

Talking about power dynamics, it is further important to reflect on complex dynamics and relationships in research projects. The larger UFISAMO project was initiated and framed at a university in the North with somewhat pre-determined outcomes and without the involvement of “the researched”. This was addressed by refining the research approach and adopting co-research in the later stages of the project. A challenge was that one of the local NGOs in Cape Town was a formal project partner and had a strong self-interest in how research should be conducted and how results should be interpreted and presented. This led to continuous tensions throughout the process. Therefore, it was crucial to constantly validate findings with co-researching farmers to counteract potential manipulation(s) and threats.

### *Limitations*

While we recognise that our Cape Town and Maputo case studies cannot represent situations across the South, some of the findings might apply in other contexts with similar characteristics. For example, the “ending of hunger” in Belo Horizonte in Brazil was driven forward by its holistic food system planning linking UA to school feeding programmes (Chappell, 2018) and hence embedding UA within a “local” instead of an alternative food system by providing political participation and reinventing food policy councils to address food insecurity (Chappell, 2018). Considering the impact of the Maputo case within the informal sector as a job provider, similar benefits were reported in Accra, Ghana (Obosu-Mensah, 2018) and Kigali, Rwanda (Kinka et al., 2014) where UA supplies urban households with leafy vegetables and maize and has created many (informal) jobs in food delivery and food processing.

A limitation of this study is its lack of a gender perspective, although our results show women play a strong role in both cities in food production. Future research should examine women’s roles in (urban) food systems and focus on gender inequality among producers and consumers in addition to racial and class disparities, to close the identified gender gap in research (Alkon, 2012). Further, future research could compare the Cape Town context with Johannesburg, which has a thriving UA environment based on farmer-led market channels (Malan and van der Walt, 2019).

### **Conclusion**

Amidst rising urban hunger, urban agriculture, as one form of localised food systems, serves as an entry point to unpack food injustice patterns, such as the power of place, the

historical context of those places, the political and emotional conversation on the right to land and cities, and the structural inequalities related to race, class and gender. The urban farmers in our research face barriers and challenges around lack of land access, lack of subsidies, and dependency on marketing intermediaries, yet government and non-governmental organisations continue to address their challenges with a production focus, rather than untangling the real problems around food marginalisation, systemic change, and agency for the food insecure.

We draw three main conclusions. First, the “urban” is a heterogeneous and confined place where diverse participants shape narratives around food. This calls for a stronger link to food justice discussions, with the aim of addressing challenges within contemporary food systems. As the Cape Town case particularly shows, UA does not contribute toward more just food systems. On the contrary, the intermediary-led marketing systems resulted in a greater disconnect between producers and their surrounding communities and between producers and their produce. Second, the power hierarchies of AFS should be uncovered, challenged, and redesigned to support less-powerful, emerging small-scale farmers. Third, this research was coined by a methodological approach that emphasised research with—instead of about—the local actors concerned enabling a deeper level of analysis and insights. While UA often does not fulfil expectation to significantly contribute to (urban) food security, it does hold great potential as a platform to discuss food injustice and to overcome disconnects between the involved actors.

## Bibliography

Agyeman, Julian, and Jesse McEntee. 2014. "Moving the Field of Food Justice Forward Through the Lens of Urban Political Ecology." *Geography Compass* 8(13): 2011-2020. doi: 10.1111/gec3.12122.

Alkon, Alison Hope. 2008. "From value to values: sustainable consumption at farmers markets." *Agriculture and Human Values* 25(4): 487-498. doi: 10.1007/s10460-008-9136-y.

Alkon, Alison Hope, and Julian Agyeman. 2011a. "Introduction: The Food Movement as Polyculture." Chapter in *Cultivating Food Justice*. Edited by Alkon, Alison Hope, and Julian Agyeman, 1-20. Massachusetts Institute of Technology.

Alkon, Alison Hope, and Julian Agyeman. 2011b. "Conclusion: Cultivating the Fertile Fields of Food Justice." Chapter in *Cultivating Food Justice*. Edited by Alkon, Alison Hope, and Julian Agyeman, 331-348. Massachusetts Institute of Technology.

Alkon, Alison Hope, 2012. "Food Justice. An overview." Chapter in *International Handbook of Food Studies*. 295-305. Routledge. 10.4324/9780203819227.ch27.

Atkinson, Doreen, 2007. "Going for broke: The fate of farm workers in arid South Africa." Cape Town: Human Sciences Research Council.

Barnhill, Anne, Doggett, Tylor, 2017. "Food ethics I: Food production and food justice". *Philosophy Compass*. No. 13. doi: 10.1111/phc3.12479

Battersby, Jane, 2011. "The State of Urban Food Insecurity in Cape Town". Urban Food Security. Series, No. 11. Queen's University and AFSUN. Kingston and Cape Town

Battersby, Jane, and Maya Marshak, 2013. "Growing Communities: Integrating the Social and Economic Benefits of Urban Agriculture in Cape Town." *Urban Forum*. 24:447-461. Doi: 10.1007/s12132-013-9193-1

Battersby, Jane, 2013. "Urban Agriculture and Race in South Africa. Chapter in *Geographies of Race Food Fields Bodies Markets*. Edited by Slocum, Rachel and Arun Saldanha, 115-130. Ashgate, Farnham.

Battersby, Jane and Gareth Haysom, 2019. "Linking urban food security, urban food systems, poverty and urbanization." In: *Urban Food Systems Governance and Poverty in Africa*. Edited by Battersby, Jane and Vanessa Watson. London.

Bernstein, Henry, 2013. "Commercial agriculture in South Africa since 1994: 'Natural, simply capitalism.'" *Journal of Agrarian Change* 13(1): 23-46. doi: 10.1111/joac.12011.



Blay-Palmer, Alison and Irena Knezevic, 2015. “*Building sustainable communities through alternative food systems.*” In *Handbook on the Globalisation of Agriculture*. Edited by Robinson and Schmallegger. Edward Elgar Publishing: Cheltenham, UK and Northampton, MA, USA.

Cadieux, Kirsten, and Rachel Slocum, 2015. “What does it mean to do food justice?” *Journal of Political Ecology* 22(1):1-26. doi: 10.2458/v22i1.21076

Certoma Chiara, and Chiara Tornaghi, 2019. “Politics and the contested terrain of urban gardening in the neoliberal city.” In: *Urban Gardening and Politics*. Edited by Certoma Chiara, and Chiara Tornaghi. doi: 10.1080/24694452.2017.1365582.

City of Cape Town, 2007. “Urban agriculture policy for the city of Cape Town.” Cape Town

City of Cape Town, 2018. “State of Cape Town 2018.” Compiled by the Organisational Policy and Planning (OPP) Department: Research Branch. Cape Town

Chambers Robert, Pacey Arnold and Pacey Thrupp, 1989. “Farmer First: Farmer Innovation and Agricultural Research”. London: Intermediate Technology Publications.

Chappell, Jahi, 2018. “Beginning to end hunger: food and the environment in Belo Horizonte, Brazil, and beyond.” University of California Press Oakland, California.

Chicamisse, Luisa, Cumbana, Ivo, Luis, Alberto, Mahalambe, Alzira and Nicole Paganini, 2019. “Pensando fora da caixa: Como os jovens agricultores podem mudar o futuro da agricultura urbana em Maputo Visões de futuro baseadas em resultados de pesquisas da UFISAMO.” *SLE Briefing Paper 01/2019*. doi: 10.13140/RG.2.2.14741.37603

Crush, Jonathan, Chikanda, Abel, and Ines Raimundo, 2016. “The Urban Food System of Maputo, Mozambique”. *Hungry Cities Report No. 2*. Waterloo and Cape Town

Cruz e Silva, Teresa, 2006. “The general Union of Cooperatives of Maputo: An Alternative Production System?” Chapter in: “Another Production is possible. Beyond the Capitalist Canon.” Edited by de Sousa Santos Boaventura. Verso. London.

Dowler, Elizabeth, 2014. “Food banks and food justice.” In: Riches, Graham and Tiina Silvasti (Eds.), *First World Hunger Revisited*. 160-175. Basingstoke: Palgrave Macmillan.

Duchemin, Eric, Wegmuller, Fabien and Anne-Marie Legault, 2008. “Urban agriculture: multidimensional tools for social development in poor neighborhoods.” *Fields Action Science Report*.

Durrheim, Kevin, Mtose, Xoliswa, Lyndsay Brown, 2011. “Race Trouble: Race, Identity and Inequality in Post-Apartheid South Africa.” Lexington Books, Plymouth.

Engel, Erik, Paganini, Nicole, Chicamisse-Mutisse, Luisa, Cumbana, Ivo, Fiege, Karin Fiege, Kühn, Anja, Kanosvamhira, Tinashe, Halder, Severin, Schelchen, Anja, Mfaku, Abongile, Swanby, Haidee Swanby, Seichter, Zita, Tobies, Anita, Karriem, Abdulrazak, Quive, Samuel, Tevera, Daniel, Luis, Alberto, Mahalambe, Alzira, João, Estevão, Siueia, Matias, Khan, Zayaan, Mpayipeli, Babalwa, Stofile, Liziwe, Caesar, Clifford, Sityebi, Sibongile, Mountford, Sonia Mountford, Schuurman, Ria, Nomahe, Noncedo, Hermann, Jakob, Bila, Candida and

Urban research farmer group Cape Town, 2019. "Farming in Cities. Potentials and challenges of urban agriculture in Maputo and Cape Town." *SLE Discussion Paper*. doi: 10.18452/20559

Erasmus, Zimitri, 2008. "Race." Chapter in *New South African Keywords*, edited by Shepherd, Nick and Steven Robins, 169-181. Ohio University Press.

FAO, 2011. "The place of urban and peri-urban agriculture (UPA) in national food security programmes." Integrated Food Security Support Service (TCSF) Policy and Programme Development Support Division Technical Cooperation Department. Rome.

Ferrão, Jorge, Bell, Victoria, Cardoso, Luis, Fernandes, Tito, 2018. "Agriculture and Food Security in Mozambique." *Journal of Food, Nutrition and Agriculture*. doi: 10.21839/jfna.v1i1.121.

Foucault, Michel, 1980. *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*. Harvester Press. London

Frayne, Bruce, McCordic, Cameron and Helena Shilomboleni, 2014. "Growing Out of Poverty: Does Urban Agriculture Contribute to Household Food Security in Southern African Cities?" *Urban Forum*. 25. Doi: 177-189. 10.1007/s12132-014-9219-3.

Freire, Paulo, 1970. *Pedagogy of the Oppressed*. Herder and Herder. New York

Giseke, Undine, and Abdelaziz Adidi, 2011. "When the Old Becomes the New: Agriculture as a Multifunctional Urban Landscape." Chapter in *Urban Agriculture Casablanca. Design as an Integrative Factor of Research* edited by Undine Giseke, 6-7. Technische Universität Berlin. Special Topos insert- The International Review of Landscape Architecture and Urban Design, 74.

Glennie, Charlotte, and Alison Hope Alkon, 2018: "Food justice: cultivating the field." *Environ. Res. Lett.* 13 / 073003. doi: 10.1088/1748-9326/aac4b2.

Gottlieb, Robert, and Anupama Joshi, 2010. *Food Justice*. Cambridge: MIT Press

Guthman, Julie, 2008a. "If They Only Knew: Color Blindness and Universalism in California Alternative Food Institutions." *The Professional Geographer*, 60(3): 387-397. doi: 10.1080/00330120802013679.

Guthman, Julie, 2008b. "Bringing good food to others: investigating the subjects of alternative food practice." *Cultural Geographies* 15:431–447. 10.1177/1474474008094315.

Guthman, Julie, 2011. "If they only knew: The Unbearable Whiteness of Alternative Food." Chapter in "Cultivating Food Justice." Edited by Hope Alkon, Alison, and Julian Agyeman. Massachusetts Institute of Technology.

Haysom, Gareth, 2020. "Urban Food Governance Perspectives in Changing African and Southern Cities." *HCP Discussion Paper No. 39*, Waterloo and Cape Town.

Haysom, Gareth, Crush, Jonathan and Mary Caesar, 2017. "The Urban Food System of Cape Town, South Africa." *HCP Discussion Paper No. 39*, Waterloo and Cape Town.

Haysom, Gareth, 2016. "Alternative food networks and food insecurity in South Africa." *Working Paper 33*. Cape Town: PLAAS, UWC and Centre of Excellence on Food Security.

Herman, Agatha, and Michael Goodman, 2018. "New spaces of food justice" *Local Environment*. doi: 10.1080/13549839.2018.1527302.

Heynen, Neil, 2006. "Justice of eating in the city: The political ecology of hunger." Chapter in *Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism* edited by Heynen, Neil, Kaika, Maria and Eric, Swyngedouw, 129–142. New York: Routledge.

HLPE. 2017. "Nutrition and food systems". A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome

HLPE, 2014. "Food losses and waste in the context of sustainable food systems". A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

Holt-Giménez, Eric and Miguel Altieri, 2013. „Agroecology, Food Sovereignty, and the New Green Revolution" *Agroecology and Sustainable Food Systems* 37(1) 90-102. doi: 10.1080/10440046.2012.716388

Horst, Megan, McClintock, Nathan, and Lesli Hoey, 2017. "The Intersection of Planning, Urban Agriculture, and Food Justice: A Review of the Literature" *Journal of the American Planning Association* 83(3) 277-295. doi: 10.1080/01944363.2017.1322914.

Jarosz, Lucy, 2008. "The city in the country: Growing alternative food networks in Metropolitan areas". *Journal of Rural Studies* 24(3):231-244. doi: 10.1016/j.jrurstud.2007.10.002.

Kanosvamhira, Tinashe, and Daniel, Tevera, 2019. "Urban agriculture as a source of social capital in the Cape Flats of Cape Town." *African Geographical Review*. Doi: 10.1080/19376812.2019.1665555

Karriem, Abdulrazack, Paganini, Nicole, Khan, Zayaan, Kanosvamhira, Tinashe, Mfaku Abongile, Tevera, Daniel and the research farmer group, 2019. "Rethinking required - How can urban agriculture in Cape Town still become sustainable in the future food system? Policy Recommendations and Results of the UFISAMO project. *SLE Briefing Paper 02/2019*.

Kinka, Hilary, Onwudiegwu, Chimdindu, Smeallie, Caroline and Vajjhala, Shalini, 2014. *Kigali, Rwanda: Urban Agriculture for Food Security?* Doi: 10.4135/9781526483935.

Lamnek, Siegfried, and Claudia Krell, 2016. *Qualitative Sozialforschung*. Weinheim.

Lemke, Stefanie, and Fanie (NS) Jansen van Rensburg, 2014. „Remaining at the margins – case study of farmworkers in the North West Province, South Africa." *Development Southern Africa* 31(6). 1–16. doi: 10.1080/0376835X.2014.951990.

Lemke, Stefanie and Anne C. Bellows, 2016. "Sustainable food systems, gender, and participation: foregrounding women in the context of the right to adequate food and

nutrition”. In: *Gender, nutrition, and the human right to adequate food: toward an inclusive framework* edited by: Bellows Anne C., Valente, Flavio, Lemke Stefanie, Núñez Burbano, Maria. 254-340. Routledge, Taylor and Francis Group.

Malan, Naude and Juanita van der Walt, 2019. “Building Digital and Real Communities for Change: The Design of iZindaba Zokudla Groups”. 10.13140/RG.2.2.13983.51367.

Mares, Teresa, and Devon Peña, 2011. “Environmental and Food Justice: Towards Local, Slow, and Deep Food Systems”. Chapter in *Cultivating Food Justice* edited by Hope Alkon, Alison, and Julian Agyeman. Massachusetts Institute of Technology.

Massey, Doreen, 1999. “Power - Geometries and the Politics of Space – Time.” Hettner Lecture 1998. Heidelberg: University of Heidelberg, Institute of Geography.

McClintock, Nathan, 2014. “Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture’s contradictions.” *Local Environment* 19(2):147-171. doi: 10.1080/13549839.2012.752797

Moragues Faus, Ana, 2018. “A critical perspective on the transformative capacity of food justice”. *Local Environment* (23) 11. 1094-1097. doi: 10.1080/13549839.2018.1532400

Morales, Alfonso, 2011. “Growing Food and Justice: Dismantling Racism through Sustainable Food Systems.” Chapter in “Cultivating Food Justice.” Edited by Hope Alkon, Alison, and Julian. Agyeman. Massachusetts Institute of Technology.

Mougeot, Luc, 2000. “Urban agriculture: Definition, presence, potentials and risks.” Chapter in *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda* edited by Gundel, Sabine, Dubbeling, Marielle, De Zeeuw, Henk, Bakker, Nico and Ulrich Sabel-Koschella. 1-42. Deutsche Stiftung für internationale Entwicklung (DSE).

Nature editorials, 2020. “To end hunger, science must change its focus” *Nature* 586, 336 doi: 10.1038/d41586-020-02849-6

Nkosi, Sibusiso, Gumbo, Trynos, Kroll, Florian and Michael Rudolph, 2014. “Community Gardens as a Form of Urban Household Food and Income Supplements in African Cities: Experiences in Hammanskraal, Pretoria.” *Policy Brief*. Doi:10.13140/2.1.4905.4401.

Obosu-Mensah, Kwaku, 2018. “Food Production in Urban Areas: A study of urban agriculture in Accra, Ghana”. doi:10.4324/9780429456978.

Onselen, Charles, 1996. “The Seed Is Mine: The Life of Kas Maine, a South African Sharecropper, 1894–1985.” New York: Hill and Wang.

Paba, Giancarlo, 2010. *Corpi urbani. Differenze, interazioni, politiche*. Milano: FrancoAngeli.

Paba, Giancarlo and Camilla Perrone, 2010. “Contesti: città, territorio, progetti; Partecipazione e politiche territoriali.” In: *All’Insegna del Giglio*. 1-128. Firenze

Paganini, Nicole, Lemke, Stefanie and Ines Raimundo, 2018. "The potential of urban agriculture towards a more sustainable urban food system in food-insecure neighbourhoods in Cape Town and Maputo." *Economia agro-alimentare / Food Economy*. 20(3): 399-421. doi: 10.3280/ECAG2018-003008

Paganini, Nicole, and Rosa da Fernanda, 2019. "Mercados Locais na Cidade e Província de Maputo, Relatório de Pesquisa Qualitativa". SLE Series. Berlin.

Pingault, Nathanaël, Caron, Patrick, Kolmans, Alicia, Lemke, Stefanie, Kalafatic, Carol, Zikeli, Sabine, Waters-Bayer, Ann, Callenius, Carolin, Yong-Jun, Quin, 2020. "Moving beyond the opposition of diverse knowledge systems for food security and nutrition." *Journal of Integrative Agriculture* 19(1): 291–293. doi: 10.1186/s40066-015-0023.

Posel, Deborah, 2010. "Races to consume: revisiting South Africa's history of race, consumption and the struggle for freedom." *Ethn. Racial Stud.* 33. 157–175.

Poulsen, Melissa, McNab, Philip, Clayton, Megan and Roni Neff, 2015. "A systematic review of urban agriculture and food security impacts in low-income countries." *Food Policy*, 55. 131–146. doi: 10.1016/j.foodpol.2015.07.002.

Orsini, Francesco., Kahane, Remi, Nono-Womdim, Remi, and Giorgio Gianquinto, 2013. "Urban agriculture in the developing world: A review". *Agronomy for Sustainable Development*. 33 (4), 695-720. doi: 10.1007/s13593-013-0143-z.

Rosenberg, Nathan, and Nevin Cohen, 2018. "Let Them Eat Kale: The Misplaced Narrative of Food Access" *Fordham Urban Law Journal* 45(4): 1092-1120. doi: 10.1377/hlthaff.2013.0512.

Ruysenaar, Shaun, 2012. "Reconsidering the 'Letsema Principle' and the Role of Community Gardens in Food Security: Evidence from Gauteng, South Africa." *Urban Forum*. 24. Doi: 10.1007/s12132-012-9158-9.

Santo, Raychl, Palmer, Anne, and Kim Brent, 2016. "Vacant lots to vibrant plots: A review of the benefits and limitations of urban agriculture" Technical Report. Johns Hopkins Center for a Livable Future. doi: 10.13140/RG.2.2.25283.91682.

Sbicca, Joshua, 2012. "Growing food justice by planting an anti-oppression foundation: opportunities and obstacles for a budding social movement." *Agriculture and Human Values* 29 (4):455-466. doi: 10.1007/s10460-012-9363-0

Seekings, Jeremy and Nicoli Nattrass, 2005. "Class, Race, and Inequality in South Africa." Yale University Press.

Sheldon, Kathleen, 1999. " 'Machambas' in the city: urban women and agricultural work in Mozambique." *Lusotopie: enjeux contemporains dans les espaces lusophones*. 121-40.

Siebert, Anne, 2019. “Transforming urban food systems in South Africa: unfolding food sovereignty in the city.” *The Journal of Peasant Studies*. 1-19. doi: 10.1080/03066150.2018.1543275.

Steel, Carolyn, 2013. *Hungry city: How food shapes our lives*. Random House.

Stöber, Silke, 2005. “PLA – a catalyst for good local governance” Chapter in *Sixth IFSA European symposium, Farming and Rural Systems, European Farming and Society in Search of New Social Contract – Learning to Manage Change* edited by Cristóvão, Artur. 723-734. Villa Real.

Swanby, Haidee, 2018. “Nutrition and food habits & Urban Agriculture in Cape Town.” UFISAMO Study. Berlin. doi: 10.13140/RG.2.2.10010.59848

Tacoli, Cecilia, 2019. “Editorial: The urbanization of food insecurity and malnutrition.” *Environment & Urbanization* 31(2): 371–374. doi: 10.1177/0956247819867255.

Tornaghi, Chiara, and Michiel Dehaene, 2019. “The prefigurative power of urban political agroecology: rethinking the urbanisms of agroecological transitions for food system transformation.” *Agroecology and Sustainable Food Systems*. doi: 10.1080/21683565.2019.1680593.

Tornaghi, Chiara, 2017. “Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment” *Antipode* 49 (3) 781–801 doi: 10.1111/anti.12291

Tornaghi, Chiara, 2014. “Critical geography of urban agriculture”. *Progress in Human Geography*. 38(4), 551–567. doi: 10.1177/0309132513512542.

Turner, Bethaney, 2011. “Embodied connections: Sustainability, food systems and community gardens”. *Local Environment*. 16(6), 509–522. doi: 10.1080/13549839.2011.569537

Van Veenhuizen, Renè, 2006. “Cities farming for the future.” Chapter in *Cities farming for the future: Urban agriculture for green and productive cities* edited by Renè van Veenhuizen. 1-17. RUAF Foundation, IIRR, IDRC.

Wegerif, Marc, Russell, Bev and Irma Grundling, 2005. „Still searching for security: The reality of farm dweller evictions in South Africa. Polokwane North and Johannesburg” Nkuzi Development Association.

UN-Habitat and IHS-Erasmus University Rotterdam, 2018. “The State of African Cities 2018: The geography of African investment.” United Nations Human Settlements Programme (UN-Habitat).