



Rows of mustard spinach (mutshaina), a nutrient-dense leafy vegetable from Venda, known for its strong flavour Photo: HSRC

Feeding the community: urban farming in Johannesburg

*With more than [40%](#) of households in Johannesburg being food insecure, urban agriculture has the potential to significantly enhance the metropole's food security. Urban agriculture could also contribute to job creation, thereby reducing poverty. [Research](#) into the production and consumption of vegetables traditionally consumed by migrants now residing in Johannesburg shows that to fulfil this potential, urban farmers need more support since most of them are farming on infertile soils. **Henrice Altink** and **Tim Hart** write about the findings from a research project by the HSRC and its UK partners.*

There are more than [300 farms](#) in Johannesburg, and new ones are sprouting up across the metropole, including in informal settlements. This type of urban agriculture takes various forms – ranging from backyard and community gardening on land provided by churches and schools to larger-scale individually operated urban farms. It has the potential to significantly contribute to food security in the metropole in various ways.

Researchers from the HSRC, the University of York and the University of Newcastle are looking at the role of traditional food systems in rapid urbanisation as part of an interdisciplinary and collaborative two-year project funded by the British Academy.

Many urban farms in the city [were set up with support](#) from the government, NGOs and other organisations. The Rutegang Agricycling Co-op project, for instance, was set up in 2013 and has received seeds, manure and tools from the Gauteng Department of Agriculture and Rural Development.

A seedling farm in Braamfontein is supported by the [Urban Agriculture Initiative](#), a not-for-profit social enterprise that provides training and other support to grow fresh produce in limited spaces, such as rooftops.

Many urban farms are based on school land or land adjacent to schools. Some farmers have also taken over existing farms that have gone into decline. The farmers are driven largely by the social benefits that the farm can bestow on the local community.

One farmer we interviewed, Joseph, has a farm of approximately 2,000m² with some polytunnels close to the Protea Glen shopping mall. He grows spinach, kale, lettuce and other commonly consumed vegetables but also some leafy vegetables used for traditional food, such as pumpkin leaves, sweet potato leaves, okra leaves, and Venda mustard spinach (*mutshaina*), which are nutrient-dense and, therefore, can help reduce malnutrition.

Like most urban farmers we interviewed, Joseph sells his produce to community members who visit his farm. Since the land is adjacent to a school, the teachers and parents comprise a large proportion of his clientele. Joseph has plans to extend his clientele base by opening a spaza shop to sell his produce and wants to undertake a survey in the neighbourhood to better understand the vegetables that people would like to eat so that he can better meet the community's needs.

Like many of the other urban farmers we interviewed, Joseph is an organic farmer. He grows most of his crops in deep trenches (which improves soil quality) and uses only natural fertilisers and pesticides, most of which he produces on site. Recently, he started a scheme that offered a discount for vegetables to anyone who could bring him a jerrycan of urine. Urine is rich in nitrogen and phosphorus and has for centuries been used across parts of Africa and Asia as a fertiliser for plants. Joseph also has plans to keep rabbits on his farm – not only for manure, like some other urban farmers are doing, but also to improve the community's food security through access to nutrient-rich and affordable rabbit meat. Rabbit farming is growing in South Africa partly because the associated [start-up costs are relatively low and can be recovered within six to eight months](#).

Joseph is providing primary school learners with raised garden beds so they can grow crops to take home to their families. While enhancing their families' food security, the learners acquire key agricultural skills that could help them secure a job in the future or undertake their own cultivation of fresh produce. Joseph also feeds some members of the community directly. Every weekend, he and his wife cook for about 40 people from the local neighbourhood; and during the week, his wife cooks for the workers and some hungry community members. Like a few other farmers in the area, Joseph allows community members to freely pick the leaves of seasonal leafy vegetables (including blackjack and amaranth) that germinate after the first summer rains in the uncultivated

areas of the farm. Some migrants in the area like the leaves of young sweet potato and pumpkin plants, and Joseph allows them to pick these before the crops have matured.

Recommendations

Joseph and other urban farmers in the metropole need more support to scale up their enterprises so they can feed more people in the community and provide more local seasonal jobs. They need:

- **Land:** Many urban farmers we interviewed found it difficult to access land, did not hold a secure tenancy and cultivated land with poor soil. Joseph has an agreement with the school that he can use the land for 15 years. He is also starting to convert a former dump site into deep-trenched raised beds for the school children. However, there are large tracts of unused public and privately owned land in Johannesburg that could be used for more urban farms.
- **Water:** Urban farmers need access to a reliable supply of water. Many urban farmers we spoke to struggled to irrigate their land because of load-shedding.
- **Financial support:** Many urban farms in the metropole are largely driven by social benefits. Support to buy seeds, tools and other agri-inputs would enable them to balance their books.
- **Training:** Many of the farmers we interviewed had received training in agriculture. Some had a degree in agricultural sciences, while others had undergone training provided by NGOs. However, all of them would benefit from support from extension services, such as training in organic soil revitalisation, management and [climate-smart agriculture](#).
- **Market access:** Our research shows a demand among rural and African migrants, who are among the poorest in Johannesburg, for vegetables such as pumpkin leaves and chomolia (African kale), which are not widely sold in the city. Most urban farmers only grow produce that is commonly sold and eaten, such as spinach, kale, cabbage and tomatoes. Many traditionally consumed leafy vegetables can easily be grown locally, and there is a market for them. Joseph, for instance, sells rape, African nightshade (*managu*), chomolia and okra leaves to migrants from Zimbabwe and Mozambique. To supply the migrant market for traditional leafy vegetables, farmers need to link up with the traders of these vegetables, while migrants need to be made aware of where these vegetables can be purchased – directly from the farms or traders. Unfortunately, some desired traditionally consumed vegetables cannot be produced in South Africa because of the climate, but migrants have found alternatives to some of these.

- **Other support:** Urban farms need more appropriately trained staff to scale up their activities. The Rutegang Agricycling Co-op employs student interns from the George Tabor Campus of the South West Gauteng TVET college. However, most of the farms we visited used untrained individuals, and the farmer has to provide the training. Joseph had recently been offered a worker through a government learnership scheme, but he declined the offer because he would have had to spend much of his time instructing the person, since they lacked the skills, and seemingly also interest, in organic production specific to urban needs.

In his review of urban agriculture in Cape Town, [Tinashe Paul Kanosvamaha \(2019\)](#) has presented the formation of farmers' associations, which currently only exist at the national and provincial level, as an essential strategy to enable urban farmers to ensure that extension services and other relevant bodies meet their specific needs. Urban farmers in Johannesburg already come together in various groups.

Several of our interviewees, for instance, have attended the monthly farmers' lab organised by [Izindaba Zokudla](#), which teaches farmers practical organic techniques, such as land revitalisation and optimal cropping, while others benefited from seed-swapping groups. These groups can form the basis for forming a farmers' association that, alongside the support mentioned above, can help them improve food security in their locality.



A waste site earmarked for agricultural rehabilitation
Photo: HSRC

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Blackjack and swiss chard growing wild after the first summer rains Photo: HSRC