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# The potential and limitations of community-led urban agriculture in the Brazilian urban periphery<sup>1</sup>

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Food insecurity affects over 64 million people in Brazil, with the majority (84 per cent) living in urban areas (IBGE 2024). Concurrently, the proportion of the population considered overweight has increased over the past decade, reaching 55.4 per cent in 2019 (Mendoza 2021). While hunger is primarily driven by poverty, obesity is often linked to limited access to nutritious, affordable and healthy diets (FAO 2019). Recent research has highlighted that food environments mediate the relationship between inadequate diets and nutrition-related noncommunicable diseases (Cannuscio et al. 2019). The lack of access to fresh food and the prevalence of low-cost, ultra-processed foods disproportionately affect urban areas inhabited by poor and socially marginalised groups (Honório et al. 2021). In response to these combined challenges, urban agriculture has been identified as a promising approach for improving access to fresh food and fostering healthy eating habits, particularly among vulnerable groups (Orsini et al. 2013).

Beyond improved food security and dietary diversity, urban food gardens are seen to contribute positively to a range of challenges, including climate change mitigation, social development and cohesion (Weidner et al. 2019). However, critical voices have noted urban agriculture's limited contribution to enhancing food security among the urban poor (Badami and Ramankutty 2015), questioning its capacity to support self-sufficiency in densely populated cities in the Global South (Martellozzo et al. 2019). Others have emphasised how initiatives are constrained by "social, political, technical, environmental and economic difficulties" (Cunha and Cardoso 2022: 2), necessitating further investment and government support.

Against the backdrop of the COVID-19 pandemic in Brazil, this article explores the potential and challenges faced by an urban agriculture project in the periphery of São Paulo. *Mulheres do GAU* (Women's Urban Agriculture Group) is a women-led social collective that manages an urban garden in União de Vila Nova, a low-income neighbourhood in the city's eastern periphery. This initiative illustrates how urban agriculture can foster social inclusion, economic empowerment, and healthier eating habits in the community. However, achieving these goals requires sustained access to additional income sources, such as government grants and subsidies. We show how the collective's reliance on fixed-term, project-based funding undermines its sustainability and how the garden's dependence on external markets limits its contribution to local food security. The collective played an important role during the COVID-19 pandemic as food insecurity became more widespread, underscoring the importance of local initiatives in mitigating shocks and building more resilient food systems. Finally, we argue that the potential of urban gardens can be enhanced through their inclusion in government-funded social protection programmes that adopt a holistic view of food systems.

## **Mulheres do GAU: Urban agriculture and female empowerment in São Paulo's periphery**

### *Foundation and maintenance*

União was established in 1987 by families relocated to the area after being evicted from nearby land occupations. In the mid-1990s, São Paulo's municipal government moved families from flood-prone areas to União and initiated an urbanisation project in the neighbourhood. After multiple delays, the Housing and Urban Development Company of São Paulo (*Companhia de Desenvolvimento Habitacional e Urbano*—CDHU) completed infrastructure and public service improvements in the late 2000s.

Responding to community demands raised during participatory workshops, the CDHU reserved a green area for a social project aimed at promoting environmental education and income generation. A community vegetable garden was established, which operated for about six years until the funding ended. Subsequently, community leaders proposed a new project and petitioned for the loan of a plot of land that was being used as a dumping ground at the time. This initiative led to the creation of *Quebrada Sustentável*, an initiative offering environmental education to both young and senior citizens. It was also funded by the Municipal Labour and Social Development Secretariat, which provided 10 scholarships for educators to develop an urban garden and a plant nursery. According to Vilma, one of the leaders of *Mulheres do GAU*:

*"When the Quebrada Sustentável project and the scholarships ended, we wondered what to do next. Up until then, this place was like this: once the projects finished, everyone left and just one or two people remained. Then we thought of starting the Mulheres do GAU collective, an urban agriculture group led by women and focused on women's empowerment. And here we are now, empowering women, generating income and, especially, providing healthful, natural and organic food for these women, their families and the community."*

This experience highlights both the crucial role of government support in providing resources for social initiatives and the challenges in sustaining them beyond the lifespan of funding schemes. While resources are often available to start new projects, funding for maintaining existing ones is rarely provided, hindering their longevity. The creation of *Mulheres do GAU* was possible through support from the CDHU, the legal owner of the land, which



Photo: Mulheres do GAU—Urban garden (left), kitchen and social area (right). Brazil.

Source: Mara Nogueira, 2022.

covered the costs of private security to prevent invasions and utility bills. However, this support was linked to the urbanisation project, and when we last visited the garden in 2023, the funding had ended, placing the collective's financial viability at risk.

### **Social inclusion and protection**

Most members of *Mulheres do GAU* are migrants from the Northeast region of Brazil—a group that has historically faced discrimination in São Paulo. Many are also older women with limited labour market prospects. In our discussions, they described the garden as a means to reconnect with their regional traditions and identities by working the land and cultivating vegetables typical of the Northeast. As noted by Orsini et al (2013: 701-702), urban agriculture can be particularly beneficial for marginalised social groups (e.g., immigrants, women, unemployed, senior citizens, people with disabilities) as it promotes social inclusion and well-being. The collective has been described as a space for healing, supporting women through struggles with trauma and material deprivation, including domestic violence and reintegration following incarceration.

As of 2023, the project employed nine women whose livelihoods depended on the garden. There was a desire to expand production to a new plot of land lent by the CDHU. However, the limited workforce hindered efforts to rehabilitate the contaminated land, formerly used

as a dump, while also maintaining the original garden and seeking new revenue-generating opportunities. Although the two gardens could accommodate more workers, *Mulheres do GAU* could not guarantee stable income for its members without additional government support. This situation highlights the challenge in balancing multiple objectives: expanding production to improve community access to fresh and organic food is constrained by the need to generate income.

### **Pandemic breakdown and new partnerships**

When the COVID-19 pandemic broke out, the collective's financial viability was jeopardised by limited opportunities to sell produce to middle-class consumers willing and able to pay a premium for organic vegetables. At the same time, food insecurity increased in Brazilian urban peripheries due to rising unemployment (Nogueira et al. 2020) and restricted mobility. *Mulheres do GAU* initially responded by donating organic food baskets to neighbours, a financially unsustainable initiative for the collective's members.

These conflicting goals were reconciled through a partnership with the Centre for Recovery and Nutritional Education (*Centro de Recuperação e Educação Nutricional—CREN*), an NGO focused on combating child malnutrition and promoting nutritional awareness. CREN is integrated into the Brazilian federal healthcare system, working closely with governments across the country. In São Paulo, CREN has a long-standing relationship with the municipal

“The lack of access to fresh food and the prevalence of low-cost, ultra-processed foods disproportionately affect urban areas inhabited by poor and socially marginalised groups.

government and operates a base in União, where it provides low-income families with nutritional assistance through educational activities and meal provisions for children, adapting these initiatives into a food donation programme during the pandemic.

For *Mulheres do GAU*, the partnership with CREN was essential for the survival of the initiative during this period.

Vilma explains:

*“We were here, desperate, not knowing what to do. Everything closed [due to lockdown]. People didn't come here to buy anything because everyone was at home, very afraid of the pandemic. That's when this partnership with the CREN through the [NGO] Kairós Institute came up... [D]uring the pandemic, CREN couldn't assist families at its centre—those with children suffering from malnutrition and obesity. They didn't know what to do with these families. That's when they came up with the idea of buying organic produce from urban farmers, putting together food baskets, and donating them to the families who couldn't go to their centre.”*

Through CREN, *Mulheres do GAU* channelled their production locally, helping to alleviate some of the pandemic's impacts in União. While this shift made a modest contribution to household needs, it illustrates how local agricultural production can remain inaccessible or unaffordable to low-income urban residents, indicating the



“... urban food gardens are seen to contribute positively to a range of challenges, including climate change mitigation, social development and cohesion...”



Photo: Mulheres do GAU's expansion. Contaminated land (left) and small garden planted for land rehabilitation (right). Brazil. Source: Mara Nogueira, 2022.

Source: Gareth A. Jones (2022).

importance of partnerships to address these conditions.

Urban agriculture can offer opportunities for income generation and improve access to healthy food in impoverished communities. However, aligning these objectives requires targeted interventions. For *Mulheres do GAU*, the partnership with CREN represents inclusion in a broader network that spans the public and third sectors for food security. This collaboration ensures both stable income for the project and the ability to serve the community. In our conversation, Vilma expressed frustration over the lack of government support in recent years but was optimistic about the return of the National Council for Food Security and Nutrition (*Conselho Nacional de Segurança Alimentar e Nutricional*—CONSEA). Established in 1993 but shut down in 2019, this participatory council was responsible for monitoring and coordinating national policy on food security and nutrition. For Vilma, its reinstatement represented a renewed focus and commitment to food security.

#### **Building social protection from below**

In this article, we analysed an urban agriculture project in the periphery of São Paulo, focusing on a women-led collective that promotes social inclusion, income generation, and, in their own words, women's empowerment. We demonstrated how initiatives such as *Mulheres do GAU* can positively impact access to healthy food in low-income

areas. While the literature often presents urban gardens as potential solutions for alleviating poverty and enhancing food security, we show that these two goals can sometimes conflict.

Support for urban agriculture projects in peripheral neighbourhoods—including integration into broader social protection networks—is essential to ensure they function as social inclusion hubs and generate income for the community while contributing to a healthier food environment. Without such support, financial constraints can limit their effectiveness in serving the communities they are part of. Partnerships, such as the one between CREN and *Mulheres do GAU*, facilitated by the CDHU, can be integral to a more sustainable social protection network aimed at addressing urban food security through a multi-pronged approach. These partnerships can provide income for the women involved and offer broader opportunities for socialisation. They can also improve food accessibility by supplying subsidised (or free) fresh produce to low-income residents while ensuring that the food provided is both healthy and culturally relevant. ●

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