

Growing food in the city: Urban agriculture in Quito, Ecuador, through a feminist lens

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Abstract

While much research has been done on urban agriculture (UA), globally, less is known about the impact of gender and the implications on access to food, social relationships, and power relations. More work is needed on how to link place-based UA case studies across different locations with varied levels of political support to promote transformational change in policy and development. In addition, more exploration is needed that analyzes gendered experiences of UA and how intersections of social location affect how a person experiences and accesses UA and its varied benefits. This preliminary research brief explores the potential for using intersectional experiences and feminist political ecology to assess UA programming in Quito, Ecuador. Exploring the intersectional experiences of UA and program development can influence increased access to nutritious food for the most

marginalized people, promote equality and inclusion, and improve urban environments.

Keywords

Urban Agriculture, Feminist Political Ecology, Intersectional Analysis, Gender

Introduction

This research brief will outline the preliminary results from a scoping research project I completed prior to embarking on a larger project that will ultimately become my dissertation. I traveled to Quito on this research trip to meet with community partners and urban agriculture (UA) participants to ensure that the larger project is participatory and will meet the needs of the community. There were interesting findings from the trip to share, especially in terms of how it fits within feminist political ecology theory. This paper explores the theoretical framework that will underline the larger project and begins to connect the dots from theory to practice. This is an ongoing process that will evolve as the project continues.

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Literature Review

Urban Agriculture

UA is a practice with multiple benefits for urban populations, the economy, and the environment. These benefits can be considered through social, economic, environmental, cultural, and health lenses. Socially, for individual growers, UA can increase access to food (Dubbelling, de Zeeuw & van Veenhuizen, 2011); increase social and economic empowerment (Sonnino & Hanmer, 2016); enhance self-worth, improve psychological well-being, reduce stress (Battersby & Marshak, 2013); provide leisure and recreation, and improve knowledge and skills (Renting & Dubbelling, 2013). For the community, UA can promote resilience (Adam-Brandford & van Veenhuizen, 2015); strengthen social ties in the community (WinklerPrins, 2017); increase social inclusion and reduce isolation (Battersby & Marshak, 2013); help to build supportive relationships (WinklerPrins, 2017); promote social justice and human rights (Sonnino & Hanmer, 2016; WinklerPrins, 2017); provide social cohesion (Battersby & Marshak, 2013; Renting & Dubbelling, 2013); and increase safety and improve neighborhoods (Battersby & Marshak, 2013; Renting & Dubbelling, 2013).

Through an economic lens, UA can alleviate poverty, increase food security, cut costs spent on food for consumption (Cabannes, 2015), provide employment within urban areas, promote enterprise development (Renting & Dubbelling, 2013), help growers increase and diversify their income (Cabannes, 2015), assist growers in incurring profit, provide crisis stability for households (Hovorka, de Zeeuw, & Njenga, 2009), and promote city self-sufficiency (Renting & Dubbelling, 2013; WinklerPrins, 2017).

Environmentally, UA can improve the overall urban environment, promote the “greening” of cities (Renting & Dubbelling, 2013; WinklerPrins, 2017), encourage a sustainable city (WinklerPrins, 2017), shorten food chains and the proximity to food, reduce the need for a global market (Dubbelling et al., 2010), promote adaptive capacity (White, 2015), provide disaster preparation (Adam-Brandford & van Veenhuizen, 2015), and increase ecosystem services (WinklerPrins, 2017).

Ecosystem services UA can affect include a reduction in the urban heat island, improved carbon storage and sequestration (Prain & Dubbelling, 2011), improved microclimate (Hovorka et al., 2009), prevention of flooding and erosion (Hovorka et al., 2009; Renting & Dubbelling, 2013), mitigation of urban storm water, provision of windstorm control (Lwasa & Dubbelling, 2015), lessened agrichemicals use (McClintock, 2010), climate change mitigation (Lwasa & Dubbelling, 2015; Renting & Dubbelling, 2013), increased species diversity (WinklerPrins, 2017), enhanced efficiency of resources (Hovorka et al., 2009), safe and productive reuse of urban wastewater (Renting & Dubbelling, 2013), organic waste recycling (Hovorka et al., 2009; WinklerPrins, 2017), lowered energy use for transportation, processing, and packaging (Renting & Dubbelling, 2013) and reduction of distance food needs to travel to the consumer, leading to less food waste (Prain & Dubbelling, 2011).

While UA has great potential to better the lives of vulnerable groups in cities, it also has many barriers that hinder access, which affects the practice’s capacity for positive change. Depending on the place, different aspects can impede the ability to participate in urban growing, like social category, political situation, or available land. Because UA varies so greatly, a place-based analysis based on intersectional identities of the participants and community members is necessary. Identity, whether that is gender, ethnicity, race, class, ability, or otherwise, affects the rights and responsibilities of individuals and affects power relations, which in turn affects their access to the benefits of practices like UA. The practice thrives in cities where there is political support for UA through programs, funding, and making appropriate space for growing, and Quito is a great example. If a municipal government is not supportive of the practice, it can inhibit individual citizens’ capacity to participate. Urban land is often in high demand, and it can be exacerbated in certain cities, which, again, limits the potential for urban food growth. There is a significant amount of UA research globally, as there are many proponents and critics of the practice. Because of its place-based nature, the research varies depending on the geographical location, making

it challenging to generalize. There have been several studies of the impacts of various social locations on access to urban agriculture, but more is needed, especially from the view of the theoretical framework of feminist political ecology (FPE).

Women's experiences with UA includes unique barriers that can be amplified based on their social location. While all women in a specific city may struggle with barriers to participation in UA, if a woman is also a part of an ethnic or racial minority, belongs to a lower class or caste in society, or has limited physical or mental abilities, the barriers can be intensified. When assessing UA programs, it is critical to provide an assessment of the situation based on the lived experiences of the participants. These experiences are affected by the social categories women belong to and affect their participation in UA based on power dynamics, divisions of labor, lack of resources including secure access to land, differing needs, and other challenges.

Feminist Political Ecology

FPE is a critical framework that can be used to analyze power relations and equality across scales. It makes an "...explicit commitment towards tackling gender disadvantage and inequality" (Elmhirst, 2015, p. 519). Elmhirst (2015) expresses that while there is diverse representation within FPE research, but some central tenets can be discussed. The framework emphasizes politics and power at multiple scales; highlights gendered power relations; commits to addressing gendered inequality and disadvantages; challenges dominant ways of knowing and leadership; promotes social and ecological change by empowering those who are marginalized; commits to feminist epistemology, methods, and values; explores the connection between nature and society; and finally, observes connections between dimensions of social location and subject formation. More recently, Elmhirst (2011; 2015) and Mollett and Faria (2013) have proposed ideas for a new FPE that is more open-ended and that opens the door for further explorations of the framework and how it can be used.

FPE has the capacity to address power and equity across multiple scales, which is significant for UA analysis as the practice varies between scales, as well as place to place globally and in the

same region. Due to the unique barriers faced by women in UA, more research is needed that takes their lived experiences into account. Their marginalized experience can be affected by their gender, race, ethnicity, class, ability, and others, and these can vary by both space and time. Advocates for a new FPE iterate that this new imagining must include intersectionality.

Intersectionality

Coined by Kimberle Crenshaw in 1989, the term intersectionality explores how social location categories are interconnected, socially constructed, and unfixed, and therefore are constantly changing. To analyze the power relations present within experiences of UA, we must look at the lived experiences of the people participating in urban growing. In UA, the daily performance of gender has to do with the roles and responsibilities of each gardener (in their garden as well as at home), the division of labor in both spaces, access to necessary resources, including secure access to land, control of decision-making, and access to the different spaces needed to benefit from urban agriculture (garden, market, etc.). The intersectional identities of each gardener affect their access to the practice. For example, if a woman has little control over the decisions of her household, she may not have the power to begin growing food for their household or to sell. If only certain classes of people are allowed to sell at the city market, the capacity of UA as a livelihood is diminished for those who are marginalized in those spaces. When considering the removal of barriers to the practice of UA, it is important to move beyond empowerment and explore how to create the conditions in society that allow for shifting power relations through accountability, inclusion, and nondiscrimination (Cornwall & Rivas, 2015).

Using early literature as well as the recent theorizations on what can change within FPE, a new framework is emerging that is well situated to analyze experiences of UA across scale. This framework analyzes how to change and shift power relations and increase equity. UA has immense transformative potential for individuals through enhanced livelihoods and food security, but also as a means of transforming power relations and creating a more just and inclusive society.

Urban Agriculture in Quito, Ecuador

Objectives

The objectives of this preliminary study were fairly open-ended. The intent of the trip to Quito was to meet with community partners, participants, and stakeholders to discuss the larger project and determine the focus in a participatory manner, as well as to evaluate if FPE could be used to assess the results. I intended to interview stakeholders who were a part of the development of the participatory UA program in Quito (AGRUPAR), those working within municipal secretariats related to UA, or those participating in the project currently. I was able to gain knowledge from key informants around at the beginning of the project and from those who were newer to it from both the municipal and grower perspectives. This allowed for a well-rounded analysis to guide the larger research project that will ultimately become my Ph.D. dissertation. The scoping research project allowed me to build a relationship with the research participants and to define the objectives of the larger project. The interviews focused on the history of UA in Quito, the key stakeholders in UA in the city, barriers and successes to the practice, and how Quito is connected into the regional food system. From this preliminary study, I have been able to design my proposal for future research based on information from stakeholders so that the research will be embedded in the community needs.

Methods

The research is situated in the municipality of Quito, Ecuador. The last two years have been spent working on the development of the project with partners in Quito through the RUAf international partnership on urban agriculture and sustainable food systems. I traveled to Quito for a scoping research project in July 2018 and completed 10 interviews and participant observation in six urban, peri-urban, and rural gardens as well as the organic markets (*bioferias*). In the interviews, I asked the following questions: What is the history of UA in Quito?; What actors were involved in the development of UA in the city?; Who are the actors currently involved in UA in the city?; What is working well in Quito's UA scene? (with a focus on

benefits, programs for women, and if they had many women leaders in UA in Ecuador); What could be improved in Quito's UA scene? (challenges, barriers, equal access, connections); Is Quito connected to the regional food system?; and What other cities participate in UA in Ecuador? The observations were less formal and were guided by the growers. I visited people's gardens, and they told me about their history with AGRUPAR, the different crops they grow, and the animals they raise. This allowed me to become more immersed in the culture of UA in Quito and will help guide the focus of further research.

I met my partners in Quito through the municipal economic development agency, CONQUITO, and the urban agriculture development program called AGRUPAR. AGRUPAR has been a partner of the RUAf organization for over 15 years, and the staff are very engaged in research within the city. The interviews and observations were organized through the research partner at AGRUPAR. I interviewed representatives from four municipal offices: CONQUITO, the Secretary of Environment, the Secretary of Planning, and the Metropolitan Urban Planning Institute. I also interviewed two representatives from the National Polytechnic School in Quito. Additionally, I was able to visit six gardens. I also attended one of the busiest *bioferias* in the city, La Carolina Market, where I was able to interview the growers who were selling veggies, fruit, meat, and prepackaged goods at the market. Assistance with language translation was through a local Quito resident who spoke both English and Spanish.

Study Area

Quito's innovative UA projects have won international awards, and the municipal government has supported the practice for over 15 years. Because AGRUPAR contributes not only economic sustainability for participants, but also social and environmental sustainability, it is interesting that it is housed solely within the economic department (Municipality of the Metropolitan District of Quito [MDQ], 2017). According to an interviewee who was a part of the development of AGRUPAR, the project initially was part of the social development structure to address vulnerable populations

(women, young people, vulnerable children, the disabled, and Indigenous and African Ecuadorians), but was moved after the establishment of CONQUITO in 2004, when the municipality split the social and economic sectors to help more people. AGRUPAR was seen as a tool for economic development for Quito's residents living in poverty through microloans, infrastructure development, and intensive training in UA.

Through an interview with CONQUITO staff, I was given updated statistics about AGRUPAR as of May 2018. As it stands now, participants in Quito's AGRUPAR project grow in over 3,600 gardens implemented across the city. They estimate that there are 4,500 beneficiaries of the program per year. Over 21,000 farmers have been trained by AGRUPAR to date on organic farming practices and market sales. There are 17 *bioferias* markets in Quito where AGRUPAR participants can sell their excess products to consumers. This provides approximately US\$175 of extra income per month to the growers, which is 3.5 times the government human development funding available to those living in poverty. Approximately 84% of the participants in this program are women.

According to the environmental secretary of the Metropolitan District of Quito (MDQ) (2016), as of 2010 the urban area within the city of Quito was home to 1.6 million people, while the entire MDQ had around 2.2 million inhabitants. From 2011 to 2016, the urban sprawl of the MDQ increased by 11.17% despite municipal planning and regulations. In the district, 72% of the population live in urban areas, while 28% are in the valleys and rural areas. The agricultural production sector is 35.5% of the total area occupied by the MDQ. Of this area, agro-productive systems are 28.2%. The recorded differing types of cultivation in the district are predominantly maíz (corn; *zea mays*) and frijoles (beans; *Phaseolus vulgaris*) (46.38%) followed by caña de azúcar (sugar cane; *saccharum officinarum*) (21.13%), frutas (fruits) (9.5%), flores (flowers) (9.44%), and papas (potatoes; *solanum tuberosum*) (6.72%). Other crops in the area include cebollas (onions; *allium cepa*), ajo (garlic; *allium sativum*), cereales (cereals), alfalfa (*Medicago sativa*),

vegetales (vegetables), palmitos (palm hearts), cebada (barley; *hordeum vulgare*), plátano (banana; *musa*) and fava (faba; *vicia faba*) (Environmental Secretary of the MDQ, 2016).

The city is situated in a valley surrounded by mountains and volcanos, which provide a picturesque setting but also many disaster risks. Over half (53%) of the food imported into Quito does so through the southern corridor. If there is an eruption of the Cotopaxi volcano, aside from the obvious issues that come with such a disaster, this corridor into the city would be blocked, and the food would be unable to be transported in. With the support of the Rockefeller Foundation's 100 Resilient Cities initiative,¹ Quito presented its Resilience Strategy in 2017. For the first time, food was taken into account in city planning, with a focus on three dimensions: urban agriculture, sustainable rural production, and the food system as a whole (Municipality of the MDQ, 2017). The environmental, planning, and resiliency secretariats in Quito whom I interviewed believe AGRUPAR is critical to sustainable agriculture in the MDQ and can also play an important role in increasing urban resilience and the capacity to supply food in times of crisis. For example, if an eruption of the Cotopaxi volcano occurs, the food grown through UA could be critical to survival. However, there is not currently enough food being grown via UA (only 5% of the total food consumed) to support the extensive population of the city. Many secretariats in the municipality are aware of this issue. Quito is highly dependent on food coming from other regions of the country and imported from other countries. There is great potential to build relationships and linkages between these different areas of government to build UA into existing and future plans for the city.

Results

The results of this preliminary study were found through an analysis of the semistructured interview data and participant observation notes. I coded the data based on recurring themes. While the AGRUPAR program is considered extremely successful for economic and social development of

¹ <http://www.100resilientcities.org/>

those living in poverty, according to this scoping research project, it has the potential for far greater impact. I observed three areas of potential growth: increased funding; knowledge sharing; and scaling up and out. While these are quite general results, they can guide the focus of future research and ensure that stakeholders' voices are included in the development of the larger research project. I propose that the impact of this project be assessed through the lens of FPE using intersectional analysis to discover the way forward. Because the project participants are 84% women, this type of analysis opens doors for an analysis of power relations and experiences and how those affect urban agriculture in Quito.

The research participants gave robust answers to the interview questions. Through these interviews, it was clear that with increased funding, the project could easily expand the number of beneficiaries, and through that, better safeguard Quito's food system for disaster resiliency by growing more food within the city. The participants thought funding could be achieved through increased municipal budgeting for AGRUPAR, partnerships with other municipal government secretariats, increased marketing and promotion of the program to the public, or increased self-sustainability with community partners. Additionally, the interviews indicated that the program's success could be shared with other cities in Ecuador by building UA networks to share this wealth of knowledge and experience from Quito.

Discussion

The areas of potential growth for the UA program in Quito were clear. The more intricate details given by participants indicate that change is needed to support more vulnerable residents and Quito as a whole. Future research will assess the program and make recommendations based on the assessment. As feminist political ecology addresses power and equity at multiple scales, I propose that it would be an excellent framework to assess the potential for UA in Quito. For this assessment, the lived experiences of the growers, as well as the situation of the city, need to be analyzed. This exploration can be done through the use of FPE, as it is a means of analysis that allows for intersectional

experiences and makes room for the most vulnerable within the assessment.


Through an FPE analysis of UA at the local level, we can work to determine how to make larger-scale change by building connection and developing good practices situated within lived experience. In order to discover the potential for scaling up and out for AGRUPAR in Quito, it will be necessary to examine the political situation in the city as well as how power is distributed throughout society (Elmhirst, 2015). First-hand knowledge of how power is disbursed within UA in communities can assist in forming solutions to make changes that can work toward a process of empowerment for those who are marginalized in the system. To promote new ways of knowing, we must include and connect these marginalized voices.

Again, to assess Quito's UA potential, different perspectives and experiences need to be included. A discovery of the dominant ways of knowing that influence development is needed. Is the dominant knowledge based on lived experience? If not, this can be remedied by the development of an ongoing construction of a network of those with lived experience and knowledge (Harcourt & Nelson, 2015; Rocheleau, Thomas-Slayer, & Wangari, 1996). This way, a conversation can happen, and learning and collaboration have the potential to build across the process. Additionally, the social location of the researcher needs to be taken into account, as their lived experience will provide a lens through which they see the results of the study. As a white researcher from the Global North, with a language barrier, my participation in this project could impact the results. Assessing UA through FPE needs to be an iterative process with flexibility and attention to the effects of the study on participants and the city as a whole, based on social location and other factors.

Conclusions

Urban agriculture in Quito is thriving through the support of AGRUPAR and CONQUITO, as well as the many eager participants who hold the project together with their hard work and knowledge of the system. Through the interviews with representatives from the municipality and the

UA participants, it is clear that the program can improve through increased funding, scaling up and out of the project, and knowledge-building through partnerships and networks. To assess the best way to move forward with these improvements in Quito's UA, a place-based analysis is needed of these areas through feminist political ecology. Allowing for a study that considers the intersectional identities of the participants, examines power relations across the system, and challenges dominant knowledge while including voices of those who are marginalized has the capacity to expand the project in a way that is holistic and mutually beneficial. UA in Quito is unique, with each participant's experience differing based on many

factors. In expanding the AGRUPAR program and linking with other city networks, this analysis has the potential to encourage increased access to nutritious food for the most marginalized people in Ecuador, promote equality and inclusion, and improve the urban environment for all the residents of the city. 

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