

HOW THE MUNICIPALITY OF QUITO SUPPORTS VULNERABLE CITY DWELLERS THROUGH URBAN AGRICULTURE

Alexandra Rodríguez Dueñas
Project Manager, AGRUPAR



Female participant in the AGRUPAR program in her urban garden
©AGRUPAR

Alexandra Rodríguez Dueñas is an agronomist specialized in business administration and organic food production. She has been responsible for the Participatory Urban Agriculture Project (AGRUPAR) within the Municipality of Quito, Ecuador, since 2005. She is also the vice-president of the National Committee for the Evaluation of Organic Supplies. She has promoted Quito's adherence to important global food-related networks such as the Urban Food Policies Pact of Milan, RUAF Foundation and Cityfood Network, and supported the creation of the Multi-Pacto Agro-Food Pact Platform of Quito PAQ to promote the construction of a food policy for the city.

Quito's Participatory Urban Agriculture Project (AGRUPAR) was created in 2002 with the goal of empowering vulnerable sections of the population through food security, income and employment by providing technical support, capacity building, infrastructure, entrepreneurship management, microcredit access, and applied research on agroecology along the entire food supply chain. AGRUPAR's embeddedness in local government allows urban farmers to be supported with far-reaching and cross-sectoral policies. International partnerships have also provided the conceptual, methodological and knowledge support that was needed for Quito to develop a local urban agriculture policy as part of a broader food system. Although changes of administration, budget cuts, and restrictive land-use legislation remain important challenges to the program, AGRUPAR has become a model of food and urban agriculture policy, providing valuable lessons for cities of the region and beyond. The program won the Future Policy Silver Award 2018, awarded by the World Future Council in partnership with FAO and IFOAM – Organics International.

Quito's Participatory Urban Agriculture Project (AGRUPAR) was created by the municipality in 2002 to support urban agriculture. What were the main drivers of the creation of AGRUPAR and how has it evolved so far?

Alexandra Rodríguez Dueñas: Although agricultural activities in Quito are ancestral, the process of designing and implementing strategic plans to organize them in the name of economic, environmental and sanitary goals is relatively recent.

In the late 1990s, Quito faced a pressing context where a diversity of factors contributed to an increased interest in urban agriculture. As the city hosted waves of migrants from the countryside and from abroad, Quito saw its population double from 780,000 to 1.4 million from 1980 to 2000. It is today estimated that the city's population will grow from 2.5 million to more than 2.8 million by 2022. Ecuador faced a severe economic crisis in the late 1990s, which further increased the urbanization process and created massive unemployment and poverty. In fact, 48% of Quito's population lived below the poverty line at that moment. Families in settlements and poor *barrios* started using small-scale agriculture to feed themselves, although it was yet unrecognized by the authorities. On top of these issues, Quito's mountainous location makes it highly vulnerable to landslides, which occur more frequently due to higher temperatures, less rainfall, and extreme rains that have come along with climate change. So addressing food insecurity and overcrowding was a foremost challenge for the city.

The municipality of the Metropolitan District of Quito (DMQ) started gaining interest in developing an agricultural project for the area. To further this goal, it hosted the International Seminar "Urban Agriculture in Cities of the 21st Century" in 2000. At the end of the seminar, all Latin American and Caribbean local government representatives present ratified the landmark Quito Declaration, which formalized, for the first time, cities' commitment to actively promoting urban agriculture initiatives.

In the same year, the city organized the Urban Consultation of Quito, which gathered a broad range of stakeholders such as the municipality, local organizations and international institutions, to establish the basis for the institutionalization of a municipal urban agriculture project. It was followed by a plan of action that implemented a pilot program in El Panecillo, the historic center of Quito, aimed at increasing food production in home gardens, reusing organic waste and building a community plant nursery.

The success of this first experiment led the Municipality of Quito to create AGRUPAR in 2002, in order to improve food security for the DMQ's vulnerable populations. First managed by the Department of Sustainable Human Development, in 2005 AGRUPAR came under the authority of the Agency for Economic Promotion, ConQuito, which objective is to promote socioeconomic development based on employment, equality, entrepreneurship, sustainability and innovation.

AGRUPAR is a municipal program, strongly backed by the City and a wide range of partners. To what extent have its governance and organization been success factors for rolling out the initiative?

A.R.D.: Several reasons explain the success of the AGRUPAR program, and its governance and organization have been key to developing and scaling up the initiative.

The success of AGRUPAR is directly related to its embeddedness within the municipality of the Metropolitan District of Quito (DMQ). This public entity has provided a reach, an impact, and a durability that would not have been possible otherwise

First of all, the success of AGRUPAR is directly related to its embeddedness within the DMQ. This public entity has provided a reach, an impact and a durability that would not have been possible otherwise. Unlike developed regions of the world, urban agriculture here in Quito – and more broadly in Latin America – is not only practiced as a hobby or a recreative activity but rather as a means of

survival for people to be fed and have their main source of revenue. Local government needs to be involved for the program to reach areas of high necessity that are not easily accessed by NGOs or by the private sector. It also allows us to link urban agriculture with other types of city-driven actions, such as the regularization of settlements, citizen participation, sports, culture, education, health and environmental management, since it can perform different and numerous purposes around the theme of food security.

AGRUPAR was officially recognized as an independent organizational structure with its own budget within ConQuito in 2010, allowing urban agriculture to become an integrated and permanent service within the local public structure. The 2018 budget was US\$283,336, in addition to US\$27,000 of its self-management fund. Out of this, 10% is used for supplies and logistics, and for developing food-related policy, and 90% is allocated to the teams, who are constituted of technical, but multidisciplinary, operational staff. They include agronomy engineers, food engineers, drivers, managers, etc., who can bring technical assistance and better infrastructure to farmers. We are in direct contact with the program's teams in order to educate them but also to learn from them, recognizing the ancient



Couple of AGRUPAR participants - ©AGRUPAR

knowledge that Andean populations bring with them from the countryside.

Thirdly, our work through ConQuito allows us to work in close cooperation with its other departments (entrepreneurship, economics, training, popular and solidarity economy, productive chains, social responsibility, etc.) and stakeholders, both at the national and international scale.

At the national level, the directory of ConQuito is constituted of 174 partners, who come from academia, sectoral chambers, ministries, and even some representatives of the United Nations (UN). This mode of governance has enabled us to include urban agriculture in many other policy areas, such as health, environment, education, economic development, social inclusion, territorial development plans, and resilience. This has contributed to the program's broad reach, strength and sustainability.

At the international level, our international partnerships have been fundamental in the rollout of an urban agriculture project at the municipal level. Above all, the RUAF Foundation conceptualized what could and should be reached through urban agriculture, which it had developed with other cities, and inspired the conceptual basis of our own program back in the early 2000s. Our ongoing partnership has allowed AGRUPAR to share its experience with other cities among global alliances related to sustainable food systems, such as the Milan Urban Food Pact, the 100 Resilient Cities network, the Cities Climate

Leadership Group (C40), the International Council for Local Environmental Initiatives (ICLEI), and the CITYFOOD Network supported by the RUAF Foundation and ICLEI.

The UN Food and Agriculture Organization (FAO) is also another longstanding partner. In urban agriculture exclusively, it has financed two projects for associations of producers, one for vegetable producers and one for honey producers. From 2015 to 2017, Quito was one of the eight cities in the world whose food system was diagnosed by the FAO and the RUAF Foundation as part of their joint City Region Food Systems Project, which uncovered the relations between the various inter-connected units and phases of this complex system (food production, transportation, distribution, supply chains, consumer habits, etc.). This study had an unprecedented impact on how food systems are perceived and embedded in their relation to sustainability and resilience. Consequently, in 2018, we invited various actors involved in Quito's food system from agriculture, academia, the private sector, farmers, social movements, and local and regional governments, to form the Quito Food Pact. This multi-stakeholder platform induces reflections on Quito's food system, aimed at designing effective and coordinated food policy for the first time. Local institutions and departments at all levels are seeing a whole new generation of public policies, one of which increasingly acknowledges the interconnectedness of policy areas, including urban agriculture's various roles and impacts, be it the city's strategy in resilience, waste reduction or employment creation.

On a day-to-day basis, what are AGRUPAR's main activities in Quito?

A.R.D.: AGRUPAR's mission is to promote urban agriculture in order to further food security, gender equality, social inclusion, and income-generating activities in Quito. The program particularly targets the empowerment of women and children, vulnerable communities (the elderly, people with disabilities, the unemployed, people in rehabilitation, etc.), and minorities (indigenous people, refugees, migrants, etc.). Most of our participants are poor, have a low level of education and often receive government financial support.

AGRUPAR explicitly recognizes and furthers the inherent linkages of urban agriculture interlinked with wider policy areas at the city level, such as social, environmental and economic policy. Its main implementation strategies are the following: technical assistance provision and capacity building, creation and improvement of infrastructure and urban livestock, microentrepreneurship management, marketing and promotion, microcredit access, and applied research on agroecology. These actions are undertaken along the entire food chain:

- a. **Production:** We support organic/agroecological food production by urban gardens, whether they are managed by families who grow on their own land, by communities that manage the use of municipally owned land, by schools, or by institutions. We offer training, provide seeds, seedlings, poultry, bees, inputs and equipment, and build infrastructure for climate change adaptation, such as composting, the creation of controllable conditions for culture, and other agroecological systems (micro-green greenhouses, drip irrigation systems, etc.).
- b. **Market-orientation:** The program encourages producers to go beyond household food security and commercialize their products through the creation of microenterprises, providing them with business planning, marketing and accounting skills. Producers often diversify their production away from fruits and vegetables to meat, jams, sweets, bakeries, dairies and drinks. We also developed innovative ways to overcome poor farmers' restricted access to capital: producers have gathered in grassroots investment societies, where members contribute with a small sum of money that is used as micro-credit to finance farmers' productive necessities.
- c. **Distribution:** AGRUPAR has also developed *bioferias* (organic produce markets or bio-fairs), in which only fresh and processed food grown by the project's participants can be sold. These exclusive points of sale allow urban farmers to sell the surplus of their food production at a fair price for both parties. This came as a solution to sell organic, locally grown food, after failing to compete in regular municipal markets with imported, cheap and pesticides-exposed foods. Moreover, farmers have formed networks to deliver directly their produce to food processing companies, hotels and restaurants.

- d. **Consumption:** Bio-fairs aim at improving access to vegetables and increasing the visibility of food-related issues, contributing to AGRUPAR's educational role in promoting healthy food consumption patterns and fighting malnutrition in Quito, which affects 46% of children in certain places of the urban axis.

AGRUPAR operates on a cost-sharing basis with the participating farmers. For instance, it shares the costs with participating producers to guarantee their organic certification (currently, farmers cover 100% of the annual cost); around 20% of investments in productive infrastructure are covered by farmers themselves (the tendency of the last five years is for farmers to finance the entire cost of a micro-greenhouse or a drip irrigation system, with the exception of highly vulnerable beneficiaries), and farmers must pay US\$1 or US\$2 to attend a training session or to receive technical assistance.

Even though AGRUPAR mostly intervenes in urban areas, we also support projects in peri-urban and rural areas as Quito is a metropolitan district consisting of 32 urban parishes and 33 rural parishes. We cover the entire territory in an attempt to deepen the link between these different types of areas, as long as the cultivated land measures below 7,500 m² (above this threshold, farms fall under the responsibility of the government of the province and the national government).

What results and societal impacts has AGRUPAR achieved so far?

A.R.D.: AGRUPAR's impacts can be classified in four main categories: (1) improved availability of healthy food for poor city dwellers, (2) increased economic opportunities for urban farmers, (3) environmental benefits, and (4) significant changes in consumers' behavior.

In 17 years, the main achievement of AGRUPAR is improved access to better food for vulnerable populations. It has enabled the creation of 4,400 gardens covering 40 hectares of the DMQ, and these numbers are expanding greatly, as 200 new gardens open and 3 additional hectares are covered every year. These generate yearly production of more than 1,200 kg of food products. Roughly half is used for home consumption, strengthening vulnerable families' food security and diversifying their nutritional intake.

The other half of the total food produced is marketed, providing urban farmers with better opportunities in terms of revenue and thereby supporting their livelihoods. As of today, AGRUPAR has reached 4,500 vulnerable urban, peri-urban and rural farmers annually, covering 94% of the district. It has capacitated and supported more than 21,000 people, of whom 84% were women, through more than 16,000 training sessions and 82,000 cases of technical assistance, on top of the more than 2,000 production structures it has constructed. The program has created 15 weekly or biweekly *bioferias* (more than 6,500 have



A Quito resident buys vegetables from a local farmer in a *bioferia* - ©AGRUPAR

Key figures of the AGRUPAR program

4,500
vulnerable urban, peri-urban and rural farmers

Yearly production of more than
960,000 kg
of food products

The project has supported more than 21,000 people, of which
84%
were women

been organized in total) where 105 types of organic food are sold, generating US\$350,000 a year. Forty-eight community banks and several Collectives of Urban Farmers have also been created, offering better commercialization opportunities for their 3,000 members. Participants have seen a US\$175 increase in their monthly income, achieving an average income of US\$3,100 a year. The program has also led to the creation of around 340 jobs and 180 small enterprises, which are mostly formalized.

The program has also had important environmental benefits. Advanced agroecology techniques guaranteed by AGRUPAR help protect the soil, save resources like water and recycle waste (0.65 tons of waste per family per year), which constitute important adaptations to climate change. Seventy-two edible plant species are also maintained in gardens, contributing to the preservation of Quito's biodiversity. In addition, local, in-city production requires less transportation, refrigeration and packaging, which contributes to reducing energy and plastic consumption. The program has also helped rehabilitate formerly abandoned land into productive land.

We have also observed significant changes in consumer behavior in urban dwellers, as food-related issues have come forward in the national debate, pushed by the visibility of our educational actions. People are more aware of the value of local consumption, the negative effects of pesticides, the role of farmers in food systems, and the importance of a diversified, balanced diet.

Overall, the program has directly benefited a total of 74,000 people, and indirectly more than 100,000, which include responsible consumers who have learned about health and nutrition and diversified their diets.

Being part of a city program explains, at least partly, the success of AGRUPAR throughout the years. Even so, have you also faced challenges related to governance, notably in a context of reduction of public expenditure?

A.R.D.: It's sure that one of the most obvious difficulties is related to changes in local administration, as it causes uncertainty on the level of support that the new government will attribute to AGRUPAR. The reduction of the program's budget has also forced us to look for external funding by cooperating with NGOs and other organizations.

There are other challenges worth mentioning. Historically, we have struggled to find space in the different local laws and regulations, since we do not have our own ordinance. Rather, there is a large range of different ordinances related to different themes, and we have fought for these to include urban agriculture. This is the case for the Climate Action Plan, the Resilience Strategy, the Social Responsibility Ordinance, the Waste Management Strategy,

and others, which now have come to evoke the importance of urban agriculture, recognizing the intrinsic connection between different policy areas.

The use of public space for farming purposes also imposes important restrictions, since it can only be exploited by a legally formed association. However, urban agriculture is mostly used by communities who will be unlikely to form a legal entity, since everyone selling food grown on municipal land must pay US\$500 a month – an inaccessible sum of money to AGRUPAR’s vulnerable participants. Thus, only 30% of our gardens are located in municipal spaces for now. Although we have already identified and mapped all different vacant public spaces that could be put to productive use, we still need to make progress in changing the city’s restrictive land legislation for these spaces in order to contribute to subsistence entrepreneurship and employment creation. We need to consolidate this with a high risk of occupancy, which occurs often here.

We are currently attempting to implement a project in a closed airport. The city ordinance has allocated a large area of this new park to the implementation of urban agriculture activities. Our ambition is that this area becomes a center for transmitting Quito’s urban agriculture, a productive space destined for community usage, and a showroom for different irrigation systems and cultivation techniques (drip systems, vertical farming, cultivated boxes, etc.). We would like to show park visitors (10,000 per weekend) that farming is accessible to everyone, and modifiable to every scale.

If you were to provide advice to other municipal agencies across Latin America or even across the world, what key lessons would you draw from your experience at AGRUPAR, if they are at all transferable?

A.R.D.: I absolutely think that AGRUPAR’s model is easily transferable to other cities, be they in Ecuador, other Latin America countries, or other vulnerable contexts, to serve for the development of national or local-level food policy. A local urban program must, above all, be sustainable and entrenched in the long term. That is why AGRUPAR has never attempted to adopt a political stance, rather opting for discretion. As a result, it has survived through four changes of municipal administrations, and is not the target of strong opposition from any party. Moreover, AGRUPAR is not a welfare program but a participative one: instead of handouts, it shares costs with participants, who must be strongly committed to the program to build a garden and learn the skills to maintain it. Even if AGRUPAR disappears,

these people’s activities will not. The program has also been able to respond and to adapt to the changing needs of the farmers – by, for instance, developing micro-credit activities.

At the national level, urban agriculture is practically invisible, since Ecuador’s status as a major agricultural exporter (of bananas, cacao, broccoli, flowers, etc.) has contributed to the mentality that food is destined to be sold, resulting in a fragile internal food sovereignty – 95% of food is imported (from other provinces of the country and other countries) – and very little consideration is paid to small farmers who feed the cities. Quito has emerged as a country and region-wide model in which food sovereignty

is implemented at the smallest scale: that of the urban farmer, who plays the key role of locally supplying the city. It has demonstrated the importance of generating employment and entrepreneurship, of enhancing access to vegetables, and of reducing food dependence from other regions, adopting a true social responsibility role. While other Ecuadorian cities have attempted to roll out urban agriculture, such as Cuenca and Manta, Quito has

demonstrated that this is a process that takes time, as it implies gaining the trust of vulnerable people, the backing of significant political will, as well as a strong, official and long-term-oriented team. It is worth mentioning that AGRUPAR has an “open door” and cooperation approach to other cities, as we strongly encourage exchanges on experiences, lessons and methodology.

Lastly, our experience has taught us that in developing urban agriculture policy, the city needs to adopt a holistic approach: we need to look beyond simply the construction of gardens with a single objective (education, recreation, etc.) and adopt a broader outlook to understand how a municipal program can respond to the needs of different groups of the population. For example, school-aged children need to learn about the origins of food, nutritional diversity and the problem of food waste – information they can transfer to their parents. This differs from a garden meant for adults with disabilities, whose focus will be on developing senses such as scent and touch, and on giving a feeling of usefulness and integration in society. Meanwhile, urban farming can be the main resource-generating activity of a woman-led household, empowering women by allowing them to work at home while taking care of their children. Lastly, migrants and refugees, from the countryside and from Colombia and Venezuela, can be integrated into society through farming and supported when they leave their roots and arrive in Quito with nothing. AGRUPAR has been able to respond to the multi-dimensionality of Quito’s varied societal needs.

The city needs to look beyond the construction of gardens with a single objective (education, recreation, etc.) and adopt a broader outlook to understand how a municipal program can respond to the needs of different groups of the population