

Growing better Cities

URBAN AGRICULTURE FOR SUSTAINABLE DEVELOPMENT

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Quito's Farms Produce Food, Enterprise, and Hope

The urban agriculture program the municipality of Quito first designed to ensure food security is now helping residents to organize, produce, and sell.

More than 460 gardens dot the narrow valley that cradles the metropolitan district of Quito, in Ecuador. People grow food within what used to be the confines of the colonial city, on the slopes of the eastern and western mountains encasing the centre, and in the ever-expanding neighbourhoods toward north and south.

One large garden lies just above a long string of four-story apartment buildings, half way up Itchimbía Hill. The 24 people who cultivate this land used to tend garden higher up as squatters living in temporary homes. After a long struggle, these migrants from rural areas negotiated with the municipality, not only the construction of their apartments, which they are paying for in affordable instalments, but also a new home for their vegetable patches.

"I love gardening," says Martha Rodríguez, a representative of the association these gardeners have recently formed. "It's part of my life. And for the family, it's a great help. I don't buy vegetables at the market anymore; I save something like \$10 to \$15 a month," referring to US dollars, as Ecuador abandoned the inflation-plagued sucre in 2000. This is an important boost to the family income, as Rodríguez does not even earn the minimum monthly wage of US\$300.

The expert advice and training the Itchimbía gardeners receive has played an important role in increasing the benefits they derive from urban farming. A technical advisor comes by regularly to show them organic farming methods and techniques to make their plots more efficient. This service, AGRUPAR (Agricultura Urbana Participativa — participatory urban agriculture), is part of a municipal program that is a continuation of a citywide consultation



Martha Rodríguez and Olga Zambano install strings on their cucumber vines on Itchimbía Hill.

IDRC: Louise Guénette

and pilot project, which was partially funded by Canada's International Development Research Centre (IDRC). The pilot was part of a 10-city research effort in the late 1990s to explore how municipal governments could support urban agriculture.

AGRUPAR's recommendations are on display in a communal area of the garden used for demonstrations. Though some of the individual plots are still lined with furrows as custom dictates in rural areas, the showpiece garden is neatly divided into metre-wide plant beds. This way, the ground

absorbs the water more efficiently as it squirts out at regular intervals from a pierced hose or drip irrigation system. To ensure a constant output, short-cycle plants such as lettuce, cucumbers, and radishes have replaced the potatoes, onions, and corn that take up to six months to grow. A small greenhouse shelters tomatoes, which are hard to cultivate at Quito's altitude of 2 800 metres.

Municipal guidance required

There are more than a hundred of these demonstration gardens in Quito and AGRUPAR has trained 3 700 people in agricultural techniques, organizing, and commercialization. Through AGRUPAR, the municipality is acknowledging that urban agriculture, which has always been a feature of the city, needs the recognition and guidance to make it an effective tool for development. Representatives from 33 cities in Latin America and the Caribbean, including Quito, committed their municipal governments to promoting urban agriculture when they met in the Ecuadorian capital in April 2000 to debate and analyze the results of the 10-city research initiative. The Quito Declaration was subsequently signed by another 19 of the region's municipalities.

Quito was chosen as the site for a pilot project to start putting into practice the lessons learned about local government support for urban farming. With funds from the Urban Management Program of UN-HABITAT and IDRC, the municipality of Quito began to create an urban agriculture program and test initiatives involving the processing and marketing of agricultural products in the centrally located El Panecillo neighbourhood. A change in the municipal administration interrupted the work, but in May 2002, AGRUPAR emerged within the Dirección de Desarrollo Humano Sustentable (sustainable human development division). Its objective was to improve food security — defined as the secure access to safe food — among the poor in the city core and its outskirts, through gardening and small animal husbandry, says Alexandra Rodríguez Dueñas, AGRUPAR's coordinator. Urban agriculture not only provides food security to the families directly involved but also to their neighbours who have the option of buying chemical- and parasite-free products in areas of the city where fresh produce is seldom available.

When a group with an interest in gardening approaches AGRUPAR, members are asked to find a space for their own garden as well as a demonstration garden. If the group cannot find enough land, the city government will try and identify vacant municipal properties which the group can then negotiate use of for a period of two years. The gardeners tend to this common plot and to their own gardens on the same lot, if there is room, or around their homes.

AGRUPAR supplies the gardening groups for some eight to nine months with seeds, organic compost, training, technical assistance, and educational material. It reduces its material support as the urban farmers learn how to make their own compost, organic fungicide and insecticide, and where to obtain seeds. Technical assistance, however, is

ongoing. Advisors continue to introduce the gardeners to the latest trends in organic farming; they also negotiate special prices with suppliers and identify commercial outlets for the produce.

The shift toward business

In early 2005, the municipality transferred AGRUPAR to the Corporación de Promoción Económica (CONQUITO — economic promotion corporation), created in 2003 to promote economic development. CONQUITO's board of directors comprises the Quito municipality, universities, chambers of commerce, and business associations. They aim to create an entrepreneurial, sustainable, and innovative city that generates employment and distributes wealth equitably, against a backdrop of years of political instability at the national level, an urban unemployment rate of 10%, and an underemployment rate of 40%.

AGRUPAR is by far Conquito's biggest initiative. The program fits within two of the Corporation's projects: employment training and small business development. The latter is for those food growers who have obtained food security and have the capacity for more. AGRUPAR encourages them to form micro enterprises and trains them in business planning, marketing, and accounting.

The gardeners on Itchimbia are fast exploring income-generating options, encouraged by their first tomato harvest, which sold extremely well and at a good price. They have begun a tree nursery to supply the municipality, which has agreed to be their main client. They are also assessing the feasibility of supplying the several hundred grocery baskets the cooperative from their apartment buildings regularly assembles. In low-income neighbourhoods, residents often pool their money and elect administrators who buy goods at wholesale prices on their



Rosa Mena sells in Quito's Ofelia market the produce grown by her association, Makichuray.

behalf. These initiatives are potential outlets for many gardening groups, if the selling price is not set too low.

Some urban farmers in Quito have ventured further into commercialization. For about a year, a women's association called *Semillitas y Ensueños* (Seeds and Dreams) has been selling vegetables, including greenhouse tomatoes and guinea pigs, in their neighbourhood of La Lucha de los Pobres.

The 18 women, who formed their association eight years ago, each had their own vegetable patch on property the municipality had ceded to the association; members consumed what they cultivated. Acting on AGRUPAR's advice, the women drew up a collective planting schedule, switched to short-cycle vegetables, and began to buy seedlings for a faster turnaround. Now when a member picks vegetables for her own use, she pays, albeit at a reduced rate, into a common pot to cover the operating costs and future investments. In June 2004, the association started to raise guinea pigs, fed in part with alfalfa grown in the garden. The women intend to invest their profits a few months more and then start taking some money home, says Marlene Córdova, the association's president.

A group of 10 residents from the Hinga Huayco neighbourhood, near Quito's northern limits, has been selling produce since November 2005 in Ofelia Market, one of eight sprawling open-air marketplaces run by the city. AGRUPAR has been negotiating with these markets to obtain spaces for its most productive urban gardeners.

The Hinga Huayco group approached AGRUPAR barely a year ago, when one of them read a newspaper article about the program, and their efforts soon took on a commercial bent. "Our objective is primarily income generation," says Rosa Mena, a member of the group which is in the process of incorporating as the *Makichuray* ("with our hands" in Quechua) Association. Mena runs a craft shop with her husband downtown but they do not earn enough for their family of four. Another member, Enrique Tashintuña, is a gardener by profession, but he cannot find enough clients and is hard pressed to pay for the education of his two children, nine and 13 years old.

Within a month of setting up at Ofelia Market and before they were even allowed to sell from within the market enclosure, the group had attracted regular clients who were willing to pay 5¢ to 10¢ more for chemical-free food. But their half truckload of produce often runs out by mid-morning. Other vendors at Ofelia bring in three times as much produce. Expansion is a priority. The group will continue to invest its income from sales in more water tanks and drip irrigation. It is also embarking on a composting venture. With AGRUPAR's help, *Makichuray* has convinced the market's administrator to send them two tons of biodegradable waste weekly. The members turn it into compost using worm culture, for use on their crops and to sell to other urban gardeners.



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Traditional Niche Market

Urban guinea pig breeding shows promise

Small animal husbandry is an important component of urban agriculture in Quito, and the species of choice is the guinea pig. The small rodents have been part of Ecuador's culinary tradition for more than a millennium, and breeders don't have to compete with large industrial producers as they would if they raised chickens.

The urban agriculture program, AGRUPAR, provides training on the care, breeding, and processing of the animals to more than 90 small guinea pig farms within the city limits.

A women's association called *Semillitas y Ensueños* (Seeds and Dreams) has been breeding guinea pigs for more than a year. It now sells about 10 of them a month within its neighbourhood but Marlene Córdova, the association's president, dreams of one day exporting them.

The idea may seem far-fetched, but César Jaramillo, the technical coordinator of the city's economic development corporation, believes there is a niche market in the export of frozen or prepared guinea pigs to the 800 000 Ecuadorians estimated to be working in Spain or the United States. For now, *Semillitas y Ensueños* can set its sights on local restaurants specializing in traditional Ecuadorian food.

"Let's see how far we get," Córdova says.

AGRUPAR estimates that about one-quarter of the 460 gardens have taken up the business challenge, at least partially. Among the program's efforts to find commercial outlets for its urban farmers is the idea of a weekly, centrally located Bioferia (ecological fair) that would also offer products from organic farmers in other regions of the country, to ensure a constant and varied supply of foodstuff.

Still a social program

Despite the drive toward income-generation, the program has not lost its original social assistance character. At least 33 gardens, some attached to schools and hospitals, are not likely to become commercial enterprises. For example, one AGRUPAR-assisted garden contributes to the meals prepared for men recovering from alcohol and drug addiction in a cash-strapped Centre located high in the mountains. Another garden run by a seniors' association supplements its members' diets and also provides a welcome pastime. The 35 members of the Vida Sana (healthy life) group combine their commercial ambitions with community work. They direct 40% of their production to a seniors' soup kitchen. "If we didn't, the kitchen would close and there are seniors who are almost destitute," says Bertha Sarango, a member of Vida Sana.

Urban agriculture has clearly become a rich opportunity for strategic municipal intervention in many aspects of Quito's development. It is still a small initiative, reaching some 48 000 beneficiaries and consumers, out of a population



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Seniors from the Friends of Nature Association in downtown Quito.

of more than 1.2 million. It continues to grow, however. Three or four new groups approach AGRUPAR every month.

"It is helping people develop themselves, people who do not have other opportunities in life because they have no education and no money," says Rodríguez Dueñas.

Who knows, the self-employment and income generation from urban agriculture might even help, as César Jaramillo, CONQUITO's technical coordinator, reflects, to stem the flow of Ecuadorians who see no other avenue but to leave their country to find work abroad.

This case study was written by Louise Guénette of IDRC's Communications Division.

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