

Urban and Periurban Agriculture in Latin America and The Caribbean: A Reality



Latin America and The Caribbean: Adapting To Change

Throughout the world, the development of countries is affected by accelerating and unplanned processes like urbanization, the economic recession, increasing food prices and the impacts of climate change. The combined effects of these processes threaten the possibility of achieving sustainable and equitable development.

and unemployment. It should be remembered that the poor and indigent spend more than 50% of their income on food.

Urban expansion also leads to the loss of food production areas in the outskirts of cities, an increase in the demand for water and an increase in urban solid and liquid wastes, among other problems.

Over the next 20 years, climate change will bring with it a series of real threats and impacts, which consist of both less available water and more water shortages, as well as increased precipitation which, in some areas, is already causing flooding and mudslides. In addition, the increase in average temperatures will have an effect on agricultural crop growing cycles and on the quality of life of the population.

In Latin America, urban expansion is generating growing rates of urban and peri-urban malnutrition, especially for the poor and extremely poor. The situation is critical, due to the high volatility of food prices and the impact of the economic recession

In this context, there are more and more local, regional and national governments that are implementing urban agriculture programs, seeking to fight poverty, improve food and nutritional security and the environment and help to improve incomes, especially of the

poorest. In addition, many NGOs, universities, social movements and even socially responsible members of the private sector are also promoting urban and peri-urban agriculture (UPA).

The thousands of community gardens located in community kitchens and vacant spaces (for example on the land underneath high-voltage lines or next to highways and waterways), gardens on land belonging to institutions, like hospitals and companies, and the thousands of family gardens in back yards, rooftops, and schools, are only some examples that demonstrate the growing presence of agriculture in cities.



Contributions made by UPA for Food Security, Adaptation to Climate Change and Sustainable Development

URBAN AND PERIURBAN AGRICULTURE

We understand Urban and Peri-Urban Agriculture (UPA) to be a multi-functional and multi-component activity, which includes the innocuous production or transformation of agricultural products and livestock in intra- and peri-urban areas, for household consumption or for sale, thus efficiently and sustainably (re) using local resources and inputs, respecting local knowledge and know-how and promoting gender equity through the use and co-existence of appropriate technologies and participatory processes to improve the quality of life of the urban population and to foster the socially and environmentally sustainable development of cities.

FOOD AND NUTRITIONAL SECURITY

UPA provides access to food for self-consumption, allowing families to save money on food, improve and diversify their diet and food habits, value and reintroduce native crops with high nutritional value, and improve the availability of food that is fresh and rich in micronutrients, at competitive prices in local markets. In El Alto, Bolivia, recent evaluations show that urban farmers significantly increased their dietary consumption and variety by going from 6 to 15 varieties of fruits and vegetables in their basic food basket. In Villa Maria del Triunfo, Peru and Bogota (Colombia), the frequency of vegetable consumption has increased, including of local native species, thus improving the ingestion of vitamins, minerals and fiber. In Antioquia, Colombia, the consumption of fruits and vegetables has increased

significantly, from 47 to 62 grams per capita per day, after only 6 months of implementing a program sponsored by the government and international cooperation organizations.

COMBATING URBAN POVERTY

UPA creates jobs and income through the sale of surplus products from intensive production practices which do not require skilled labor nor large investments to set up.

Recent studies show that with an investment of US\$500, it is possible to generate a job in urban agriculture, benefitting the poor and extreme poor, among which are rural migrants and displaced persons, black and indigenous populations and women of low-income areas with limited education. Cities like Montevideo, Uruguay; Rosario, Argentina; Porto

Alegre, Recife and Salvador, Brazil have diversified commercialization systems that include community farmers markets, points of sale at the farms and in the local community, the delivery of food baskets door-to-door, etc.

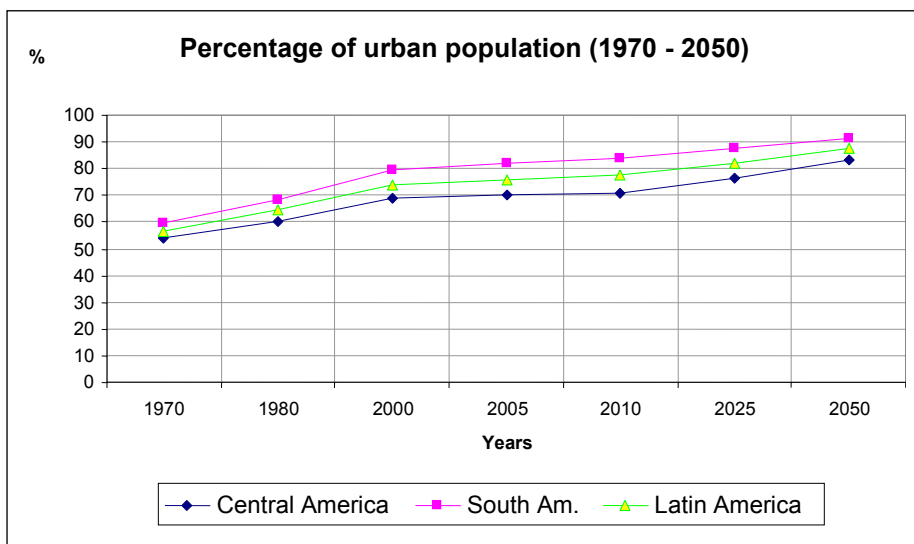
UPA can build the capacities of vulnerable and excluded groups, thus empowering them as active stakeholders in improving their quality of life. For example, 63% of the urban farmers of Rosario, Argentina and 76% of the urban farmers of Villa Maria del Triunfo (Peru) are women, poor and with a low level of education.



SUSTAINABLE PHYSICAL PLANNING, INCREASING URBAN RESILIENCE AND ADAPTATION TO CLIMATE CHANGE

UPA improves the sustainable management of urban spaces, by encouraging the sustainable use of urban land. In Teresina, Brazil, 192 hectares of vacant urban and peri-urban spaces are used for community gardens. Meanwhile, in Rosario (Argentina), public and private spaces are used (under signed agreements) to develop community farms and Garden Parks that occupy more than 10 hectares of urban land located in high-risk areas.

UPA helps to mitigate the effects of climate change and to increase the resilience of urban areas. In desert



Source: UN World Urbanization Prospects. The 2007 Revision Population.

cities like Villa Maria del Triunfo, Villa El Salvador or Tacna, Peru, where it rains 25 mm per year, UPA has increased the amount of green areas, helping to improve the landscape and the quality of the environment through urban and peri-urban agro-forestry systems. In densely populated cities like Sao Paulo, Brazil and Bogota, Colombia, UPA increases infiltration capacity, improves aquifer recharging and reduces runoff, thus preventing landslides and flooding.

UPA makes it possible to re-use solid and liquid urban wastes through the application of technologies that are appropriate to the socio-economic reality of developing countries. In Porto Alegre, Brazil, organic wastes from restaurants are treated and used as safe food for pigs, and in Lima, Peru, treated wastewater is used to irrigate agro-forestry areas.

While UPA is already an accepted and acknowledged reality, it is still

possible to improve the quality and effectiveness of its contributions, for which the following actions are needed:

- Formulate municipal and national policies that improve the efficiency of food security systems, integrating UPA.
- Promote the sustainable intensification of production in urban and peri-urban agricultural systems, through appropriate technologies, incentives and policies that facilitate the rational, intensive and sustainable use of natural resources.
- Build capacities and provide simple technologies to urban farmers that can help to improve the safety, efficiency and sustainability of food production.
- Promote linkages and synergy amount public and private local stakeholders to support urban farmers, through multi-stakeholder and participatory



processes of strategic planning and implementation.

- Recognize urban agriculture as a permanent, legitimate activity, while making its contributions to local economic development and solidarity economy more visible.
- Consider urban agriculture as a source of urban environmental services.

Urban and Peri-Urban Agriculture is a Growing Reality in Cities in the Region

- In Cuba, urban organoponics cover approximately 30,000 hectares, producing 3 million tons of fresh produce per year.
- In El Alto, Bolivia, family micro-gardens benefit more than 500 poor urban families living close to 4,000 meters above sea level, taking advantage of the use of appropriate technologies like solar tents.
- In Colombia, in 90 municipalities in the department of Antioquia, production is underway at 7,500 urban and peri-urban family gardens and farms – more than 18 species of fruits, vegetables, and condiments, through a program that expects to grow to 23,000 gardens in three years. In Bogota, Medellin and Cartagena, governments and international aid agencies have trained more than 50,000 people on establishing gardens in various types of urban spaces, including terraces, rooftops and back

yards. It is estimated that the families involved save US\$1.30 per day by growing their own food.

- In Curitiba, Brazil, some 8,000 urban farmers and 6,000 school gardeners grow food in 1,280 gardens/farms occupying more than 200 hectares of urban soil, where they managed to produce over 4,100 tons of food.
- In Quito, Ecuador, AGRUPAR is promoting horticultural activity and animal-raising, involving over 455 demonstrative farmers (household and in schools) and more than 56 enterprises for producing poultry, rabbits, cuyes and fish.
- In Moreno, Argentina, the municipal urban agriculture program has implemented 4,860 family gardens and 29 community gardens.
- In Lima, Peru, a number of districts have Municipal UA

Programs and forums for multi-stakeholder participation to design and implement UPA policies, as is the case of Villa Maria del Triunfo, which has a UPA Forum involving 21 public and private organizations, and a Network of Urban Farmers with more than 2,800 members.

- Belo Horizonte, Brazil has integrated UPA into its food security policy, and into physical urban and land use planning.



Urban Agriculture in the Policy Agendas of Countries and Cities

There are an increasing number of local and national governments implementing urban agriculture programs or incorporating UA into their urban management policies.

Some countries, like Cuba and Brazil, have policies that promote urban and peri-urban agriculture at the national level. In Cuba, the National Urban Agriculture Program has strengthened the activity at the national, provincial and municipal level. Meanwhile, in Brazil, the Ministry of Social Development and Combating Hunger has approved Guidelines, has a National Urban Agriculture policy and invests over US\$5 million per year in various activities to support urban and peri-urban agriculture. In Brazil, there are Urban and Peri-urban Agriculture Support Centers in metropolitan regions, which promote UPA as a way to enhance Food and Nutritional Security (FNS), like the Direct Commercialization Fairs or the Food Purchasing Program, in addition to forming a metropolitan UPA collective in each region with representatives of the public sector, social movements, FNS councils and urban farmers.

Some cities, like Villa Maria del Triunfo (Lima), Bogota, Colombia

and Belo Horizonte, Brazil have formulated, in a participatory way, strategic plans and agendas to promote UPA at the municipal level, and have been working on integrating it into its physical territorial planning. Each city has a multi-stakeholder forum where the



government, private enterprise, universities, NGOs, grassroots community organizations and social movements – including urban farmers – work together in a coordinated fashion.

In Argentina, the Pro-Huerta Program promotes urban agriculture at the national level, and seeks synergies with UPA programs led by local governments like that of Moreno (Buenos Aires Province) and Rosario (Santa Fe Province).

At the regional level, FAO and IPES, with the support of international organizations (RUAF, IDRC, UN-HABITAT) and local and national governments led the establishment of Regional Declarations which: a) raise the profile of urban and peri-urban agriculture and its contributions to sustainable urban development; b) provide recommendations and guidelines for promoting UPA, aimed at governments and other local and national stakeholders; and c) encourage local governments and stakeholders to promote and support UPA. The Medellin Declaration, signed in 2009, reaffirms and provides continuity to the Declarations of Quito (2000) and La Paz (2007).

WEB RESOURCES

FAO Regional Office for LAC
<http://www.rlc.fao.org/es/agricultura/aup>

Resource Center on Urban Agriculture and Food Security for LAC IPES
<http://www.ipes.org/au>

RUAF Foundation
<http://www.ruaf.org>

Ministério do Desenvolvimento Social e Combate à Fome - MDS
<http://www.mds.gov.br>

FAO, IPES and RUAF are offering a virtual course entitled Urban Agriculture: A Strategy for Food Security and Municipal Territorial Development, aimed at building up regional capacities. To enroll or for more information, visit:
<http://nucleo.rlc.fao.org-au@ipes.org.pe>

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