

#### Four Reasons Why Urban Agriculture Matters

#### Hunger is growing

In less than 30 years, the number of people who go to bed hungry in Latin America has increased by 20%: as many as 65 million people are now affected. Feeding the entire population is a challenge that cities must meet.

#### Natural medicines for all

The poor spend between 40 and 60% of their scarce incomes on food and almost 15% on health care and medicine. The production of medicinal plants and derived products — infusions, extracts, and essences, — facilitates access to health care for the very poor and marginalized.

## Recycling wastes and wastewater can help ensure food security in cities

Only 2% of the waste produced in our cities is treated properly. Thousands of cubic meters of wastewaters are not being used or are treated at a high cost. These can be transformed, however, into excellent sources of natural fertilizer, irrigation water, and nutritional supplements for animals.

## Creating low-cost employment and generating income

Urban agriculture (UA) generates employment at a low cost in relation to the estimated costs of other productive sectors. Creating on job in UA costs less than US \$ 500, an investment that can be recovered through micro-credits.

The benefits in terms of food, health, the environment, and job creation explain why an increasing number of municipalities want to develop and modernize their urban agriculture programs.

This series of guidelines is based on current scientific and technological research and reflects innovative practices in cities in the region. These practices are a source of inspiration: we invite you to share them and, in turn, enrich the experience.

Happy urban harvesting!

## GUIDELINES FOR MUNICIPAL POLICYMAKING ON URBAN AGRICULTURE

# Urban Agriculture: Land Management and Physical Planning

#### **Challenges**

In many urban, periurban, and rural areas of cities, agricultural activities — including animal husbandry, horticulture, aquaculture, fruit production, and food processing and marketing — are practiced in various locations, usually with little regulation. To reconcile the needs posed by urban growth with the need for activities of high economic and social value, urban agriculture (UA) should

value, urban agriculture (UA) should be included in urban development plans and be regulated by municipalities.



The productive or potentially productive areas of the city that have not been paved over are not limited to communal farms and private gardens. Riverbanks and roadsides, parks, lands under high-voltage electrical towers that cannot be used for buildings, and those surrounding refuse dumps make up much of a municipality's territory. Planning the use and exploitation of these spaces requires first assessing their potential through the use of appropriate management tools.

Incentives for producers to invest are compromised by the lack of security concerning land tenure and the fear of eviction. Why erect terraces, improve and fertilize the soil, or build irrigation reservoirs if there are no guarantees by the government that benefits will be reaped from those investments? Taxation rules and legal frameworks are therefore necessary to provide security and incentives for producers.

This document provides guidelines and suggestions to facilitate the inclusion of UA into land use management and physical planning.

"Urban agriculture is mainly an informal activity in Maranguape, introduced to the city by migrant workers. Urban agriculture, however, has to be integrated into the municipal planning as part of the Main Urban Development Plan."

Raimundo Marcelo Carvalho da Silva, Mayor of Maranguape, Brazil.

Four Guiding Principles for Policymaking

# In support of land use management and physical planning

#### Actions needed to define a land use policy

The first step in defining a land use policy is to examine the existing situation, establish a municipal committee, and initiate a process of public consultation.

Examining the existing situation

The study should address such issues as by-laws governing ownership and occupation of land for farming or with the potential for farming, land reserves, and profiles of all those involved. It must also include a study of the type and description of existing and potential spaces (area and costs), as was done in Santo André (Brazil).

#### Creating an intra-municipal committee

A municipal committee should be created within the local government, inviting directorates, secretariats, and decentralized municipal units to participate. To the extent possible, the debate should include relevant national agencies. It is recommended that the municipal structure be changed to include the spatial dimension of UA; and that land policy be integrated into sectoral municipal policies, such as waste management, water, and economic development.

#### Consulting the public

The results of the diagnosis and the work done by the municipal committee could inform the drafting of a policy, which could then be presented for public consultation. This policy should include several components: the regulatory framework, the legal framework, and planning and management tools. Proposals should include suggestions by the farmers, the business community, and civil society. At the end of the consultation process, the policy should be submitted to the Municipal Chamber or Council for approval.

#### 2. The regulatory framework

Urban agriculture should be included in both municipal and sub-municipal or district land use plans:

#### Introducing UA in municipal land use plans

These plans need to be studied to determine if spaces can be allocated for cultivation, aquaculture, animal husbandry, and forestry, among other

activities. Depending on the country, these municipal plans can be part of strategic plans, urban development plans, or land use plans.

As a result of a consultation process in **Quito** (Ecuador), UA was included as "use of urban soil" in the General Plan for Municipal Land Development (2000–2010).

## Including UA in sub-municipal/local land use plans

Land use plans should exist not only at the overall municipal level, but also at lower levels, such as neighbourhood improvement plans, subdivision plans, district development and urban renewal plans. They should include elements of microplanning to delineate spaces that could potentially be used for UA.

#### Municipal land use regulations

A municipal policy should include regulations for developing both municipal and local land use plans. These should be included in the country's legal system and should provide for the following:

*Urban, periurban, and rural—municipal zoning*Urban, periurban, and rural—municipal zoning makes it possible to adapt the general standards to the demands of urban growth.

The Provincial Directorate of Physical Planning in Havana (Cuba) seeks to create territorial and urban land use conditions conducive to achieving the goals of agricultural operations and production. As part of this objective, the Directorate has identified the areas in which cultivation and animal husbandry can take place, as well as the location of agroindustrial complexes.

## Rules and standards for districts and agricultural areas

Like industrial zones, these districts are not usually included in regulatory frameworks. They must be designed so as to facilitate intensive production, with the use of treated wastewaters and integrated spaces for food processing, storing, and marketing. These areas can be managed as public, shared, or private schemes.

#### Standards for parks and public spaces

Municipalities should reserve a percentage of municipal parklands or neighbourhood land for farming purposes and specify the type of activities allowed.



Using spaces beside roads,

# Standards for new lot assignments and urban renewal

A percentage of land should also be reserved for UA, with clear rules concerning use, density, etc. These should take into account mixed use of parcels (e.g., residential and agricultural). In this context, experiences such as those of neighbourhood gardens in Goiânia (Brazil), or with city gardens may be useful.

# 3. Defining a legal framework to facilitate urban agriculture

Municipal Councils or Chambers should approve a series of access laws and regulations together with land use plans.

A key element of a facilitating framework is to allow access to land suitable for UA or to bodies of water (for fish farming) under land tenure arrangements. Studies have shown that the lack of such arrangements is the main obstacle to the development of UA, with negative effects on women in particular. Land tenure does not mean automatic land ownership. At regional and international levels there exist abundant legal solutions for granting permanent or temporary guarantees for those farming the land.

#### Issuing transfer land titles for temporary use

Guarantees of land tenure rights can take the form of "leases" for institutional and public spaces, renewable for 8- to 10-year periods. The issuing of land titles for temporary use has the advantage of allowing producers to invest and modernize (e.g., fruit cultivation). It also provides the government with a clear mandate for changing land use according to urban development and public needs.

Between 1998 and 2001, the Municipality of Teresina (Brazil) conceded 92 ha. of municipal and institutional land for an indefinite period of time to some 2,300 poor families who did not own land or have stable employment.

## Private, group, and cooperative land ownership

Many legal instruments exist in the cities of the region to guarantee private, group, or cooperative rights to land tenure, such as the right of usage, "usucapião" (property title), contracts of loan and restitution, licences, etc. The use of these legal tools for UA, however, is very limited.

#### Defining land taxation and tax exemptions

Fiscal policy should provide clear rules for its application at the municipal level (land taxes) and to poor urban farmers. Tax exemption rules should also be introduced or licenses granted for public land at a nominal price. The value of taxes and exemptions

are important instruments to promote an inclusive urban land policy.

In Brazil, several municipalities apply a partial tax exemption for urban land used for agricultural and forest production. Properties under this regime are being identified and classified.

## Tariffs for the use of wastewater for agricultural purposes

Uses and tariffs for treated wastewaters should also be regulated. If properly used, wastewaters represent a permanent resource, essential for improving agricultural production. (See Guideline 6.)

### 4. Planning and management tools

The following tools allow the aforementioned legal and regulatory frameworks to be implemented.

# Registration of land and spaces under cultivation (including bodies of water)

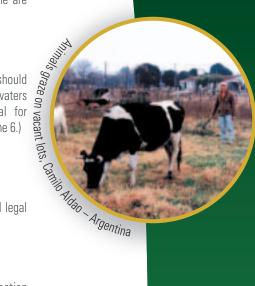
To the extent possible, Geographic Information Systems (GIS) should be used for registration purposes, for improving land use monitoring and evaluation activities, and as a basis for a transparent taxation system. In Mexico City, the GIS was used as a first step in developing land use policy.

## Urban agriculture round-tables or mixed committees

Formed by various social actors, producers, and government representatives, these committees provide a pluralistic space for establishing a link between policy and the requirements of each of the actors involved. They also represent the institutional base needed to monitor the implementation of the policy agreed upon, and to find solutions to potential conflicts of interest

#### Municipal land price registries

Price registries are useful tools for monitoring the economic aspects of the land use plan: they register the fluctuation of urban land prices and the rate of return on agricultural plots. Without this data, it would be difficult to define governmental economic and municipal policies.



"Considering the alarming rate of unemployment in the city of Rosario and the need to promote productive activities, the Municipality is committed to assigning land under contracts for loan and restitution to farmer cooperatives for farming purposes. Lots should have the basic services needed for carrying out the proposed tasks."

Pablo Javkin, Councillor, Bloque Radical, Rosario Municipality, Argentina.

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#### This policy document is part of a series of nine guidelines on different urban agriculture themes:

- 1. Urban agriculture: A tool for sustainable municipal
- Urban agriculture and citizen involvement
- 3. Urban agriculture: Land use management and physical
- 4. Micro-credit and investment for urban agriculture
- Recycling organic wastes in urban agriculture
- Treatment and use of wastewaters in urban agriculture
- Urban agriculture: Fostering equity between men and
- Urban agriculture and food sovereignty
- Processing and marketing urban agriculture products

The series is available on the Web sites of the Urban Management Program (www.pgualc.org) and IDRC **(www.idrc.ca)** 

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