



Ipes

## Formulating Effective Policies on Urban Agriculture

**Urban agriculture is a dynamic concept that comprises a variety of livelihood systems, ranging from subsistence production and processing at household level to fully commercialised agriculture. It takes place in different locations and occurs under varying socio-political conditions and policy regimes. This diversity of urban agriculture is one of its main attributes, as it can be adapted to a wide range of urban situations and to the needs of a diverse range of stakeholders.**

formulating new policies and action programmes on urban agriculture is growing rapidly.

To support these initiatives, this issue of *Urban Agriculture Magazine* seeks to provide conceptual and methodological insights, practical examples of policy formulation and action planning on urban agriculture. This issue of the UA-Magazine contains thirteen articles on cities around the world and three introductory articles that systematise these and other experiences.

### Editorial

**U**rban agriculture can make important contributions to social, economic and ecological objectives of sustainable urban development.

However, many urban farmers around the world operate without formal recognition of their main livelihood activity and lack the structural support of proper municipal policies and legislation. New rules and regulations are required to enhance the potential of agriculture in the cities and mitigate its potential risks. The challenge is for urban agriculture to become part of sustainable urban development and to be valued as a social, economic and environmental benefit rather than a liability.

Attention to urban agriculture is increasing though in cities in the North as well as in the South, and the number of cities revising existing policies or

In the first contribution to this issue, Wilbers and de Zeeuw discuss what an effective policy is, and subsequently use these criteria to review a number of recent policies on urban agriculture. A policy can be described as a course of action adopted by a government to induce certain changes in the decisions and behaviour of actors in that society in order to achieve certain goals. A policy is often understood as a set of laws and regulations only, but a policy is more, and the authors make a plea for careful development of a comprehensive policy that makes use of a combination of various policy instruments, including legal, economic, educational and planning measures as well as proper

René van Veenhuizen  
 Editor

Ivana Christina Lovo



One of the seminars on urban agriculture held in Valadares

implementation and monitoring procedures. Throughout this magazine, the word policy is used for both, the document as well as its development and implementation.

The second contribution to this issue, by de Zeeuw *et al.*, presents important factors to consider when formulating a policy on urban agriculture and provides an overview of possible policy measures related to each of these key issues. It is argued that urban policy makers can substantially contribute to the development of safe and sustainable urban agriculture.

*To manage a city is to attempt to manage something spontaneous. Cities emerge, grow, and evolve as a result of vast numbers of individual decisions about where to live, work, locate a firm, source suppliers, recreate, get educated and so on... It is interconnections that make a city attractive...* (Chris Webster, in Van Dijk, 2006)

Policies are developed in specific settings of a city, which in each case is different. It is a process of lobbying, advocacy, networking, bringing the right people together, research, packaging, etcetera and in its ideal form boils down to an iterative process of problem definition – consultation – design – drafting a proposal – policy approval – implementation and enforcement (Bourque, 2000). The third contribution to this magazine describes the policy formulation process, illustrated by some experiences of the RUAF partners who have been contributing since 2005 to so-called Multi Stakeholder Policy Making and Action Planning (MPAP) processes in 12 cities. Dubbeling and de Zeeuw provide an overview of the methodology

applied and present the lessons learned in these participatory planning processes. Applying a multi-stakeholder planning approach enhances the likelihood of identifying and successfully implementing effective strategies for the development of safe and sustainable urban agriculture. However, local governments should realise that there are costs involved and that certain prerequisites should be taken into account. On the other hand, urban farmers can create innovative solutions to many of the urban needs, for a relatively small investment.

As our readers will have noticed it took us more time to develop this issue of the UA-magazine. This is mostly because it includes three articles based on a systematisation of experiences gained by the partners in the RUAF programme as well as an analysis of recently prepared policy documents on urban agriculture, which took some time to prepare. As a result, this issue was delayed but also contains 20 more pages than usual.

We would appreciate your comments on the articles and welcome reports on your own experiences with participatory policy formulation and action planning on urban agriculture in other cities.

On the back page of this issue you will find the topics that we are planning to deal with, in the UA-Magazine in the coming two years.

We look forward to receiving your contributions to the coming issues.

## IN THIS ISSUE

- 03 A Critical Review of Recent Policy Documents on Urban Agriculture
- 10 Courses of Action for Municipal Policies on Urban Agriculture
- 21 Interactive Policy Formulation for Sustainable Urban Agriculture Development
- 28 Integration of Urban Agriculture in Municipal Agendas: Experiences from Lima
- 32 The Beijing Urban Agriculture Policy Guidelines: a milestone
- 35 From Awareness to Action; Policies on urban agriculture in Accra
- 38 The Policy Framework and Practice of Urban Agriculture in Bulawayo.
- 41 Legislation, Policies and the Practice of Urban Farming in Nakuru, Kenya: Contradictions abound
- 45 Making Laws for Urban Agriculture: the experience of Governador Valadares, Brazil
- 48 Concrete Actions: Cape Town's Urban Agriculture Assistance Programme
- 51 Creating and Implementing Food Policies in Vancouver
- 54 Municipal and Civil Society Food Systems Policy Development in Chicago
- 55 The Importance of Legal and Political Support; the case of PROVE in Brazil
- 58 Urban Land Use Policy in Peddie; a former homeland town in South Africa
- 60 Effecting Policy Change and Implementation in Kampala
- 62 An Enabling Policy Framework for Urban Agriculture in Rosario, Argentina

Following the three introductory articles, this issue of *Urban Agriculture Magazine* presents 12 high-quality case studies from cities around the world. Some of these articles are written by RUAF partners, describing their experiences in the RUAF pilot cities. Together these articles present the latest developments in the formulation of effective policies for urban agriculture.

### References

- Bourque, M. 2000. Policy Options for Urban Agriculture. In: Bakker, N., M. Dubbeling, S.Guendel, U. Sabel Koschella, H. de Zeeuw (eds.). 2000. Growing Cities, Growing Food, Urban Agriculture on the Policy Agenda. DSE, Feldafing Germany, 183–208.
- Webster, C. 2006. Foreword. In: Dijk van, M.P. 2006. Managing Cities in Developing Countries; the theory and practice of urban management.

# A Critical Review of Recent Policy Documents on Urban Agriculture

In a growing number of cities, local governments have recognised the importance of urban agriculture and are designing new policies related to urban agriculture or are reformulating existing ones. In this article the authors discuss some requirements for effective policy and subsequently use these criteria to critically review some of the policies on urban agriculture that have been drawn up recently<sup>(1)</sup>. It is hoped that the reader will derive some lessons that may be of help to develop effective policies on urban agriculture in other cities.

A policy can be described as a **course of action** adopted by government to induce certain **changes** in the decisions and behaviour of actors in that society in order to achieve certain **goals**. Such a definition makes clear from the onset that a policy is not just a white paper or a bye law, but a strategy to realise certain changes in the local society. In this text we will use the word policy to demarcate both the policy strategy and the policy document.

In our view, a well-defined policy<sup>(2)</sup> includes the following:

1. A short description of the **policy formulation process** and the actors involved in that process.
2. A **concise analysis of the existing situation regarding urban agriculture in the city**, e.g. its presence and participation, various types of urban agriculture and their constraints and opportunities, actual and potential positive and negative impacts.
3. A **clear vision regarding the desired development of urban agriculture**. This entails the functions one expects urban agriculture to play in the realisation of the city's strategic development plan and the Millennium Development Goals or the kind of developments in urban agriculture that will be supported or conditioned.
4. Well-defined **objectives** (with

quantified targets for the expected results in a certain time period), **target groups** (whose behaviour and decisions are to be influenced) and **beneficiaries** (who are intended to benefit from this policy).

5. A well-selected **mix of policy measures** and **instruments** to realise these objectives.
6. A well-defined **institutional framework** and **sources of financing** for the operationalisation, implementation and monitoring of the policy.

The policy document(s) should also include a concise explanation of all terms used in the document in order to enhance clarity and prevent multiple interpretations and ambiguity.

Subsequently, such a well-defined policy in its operation should include and lead to:

7. Effective **operational planning and implementation of the policy measures**

8. **Periodic review and adaptation of the policy** based on the experiences gained during implementation of the policy (only in practice does one find out what policy measures work well and what others are less effective).

**Effective policy design is not possible without a clear vision on the longer-term development of urban agriculture**

Elements 1-3 are sometimes referred to as a conceptual and contextual framework, whereas elements 4, 5 and 6 form the policy itself, which might be presented in the same or a separate document.

The operationalisation of the policy (preparation of specific bye laws and ordinances, design of projects, etc) is most often presented in various separate



Petra Jacobi, UVPP

Ward Profile Map Drawing for monitoring activities related to urban agriculture

Joanna Wilbers and Henk de Zeeuw  
ETC-Urban Agriculture  
✉ [j.wilbers@etcnl.nl](mailto:j.wilbers@etcnl.nl)





Simple Hydroponics at a school in Peru

documents. In the remainder of this article we will discuss each of these requirements one by one and use them to review the above-mentioned recently formulated policies on urban agriculture.

#### POLICY FORMULATION: WHO PARTICIPATED?

Providing clarity about how the policy came into being and what actors participated in its formulation is recommendable. Direct involvement of the urban farmers themselves and other intended beneficiaries of this policy in its formulation will greatly enhance its legitimacy and acceptability. Furthermore, direct involvement of



Mayor of Quito signing inter-actor agreement on UA

relevant governmental agencies, civil society organisations, intended beneficiaries and other local stakeholders in policy implementation will enhance the likelihood of its success and prevent inconsistencies from developing between different policy areas and instruments. The article by Dubbeling in this issue discusses important lessons learnt regarding the process of participatory multi-stakeholder policy formulation on urban agriculture.

Some of the policy documents that were reviewed mention how the policy was formulated and who participated in this process (e.g. those of Rosario, Gobernador Valadares, Cuba national guidelines, Kampala). In other documents

this is not mentioned, but from other sources we know that in many of these cases multi-stakeholder meetings were held and/or other methods were implemented to involve the beneficiaries and other actors in the policy formulation process (e.g. the so-called Food Policy Council in Vancouver; see the article by Mendes in this issue).

#### SITUATION ANALYSIS: WHAT ARE THE KEY PROBLEMS AND OPPORTUNITIES?

In the past, cities tended to define urban agriculture as a problem (it was perceived as a nuisance and a source of health and environmental risks), often leading to restrictive policies. Nowadays, and in modern planning, the important potentials of urban agriculture receive policy attention and it is increasingly recognised that prohibiting urban agriculture is not the most effective way to reduce the associated risks. More attention is thus given to the identification of effective ways to facilitate the opportunities and overcome the constraints facing urban agriculture and thus to support development of sustainable and safe urban agriculture.

An effective policy should include a clear analysis of the situation regarding urban agriculture in the city, preferably based on a participatory diagnosis, identifying main constraints and opportunities for the development of sustainable types of urban agriculture and a selection or prioritisation of the issues that will be attended by the urban agriculture policy. The situation analysis should also include a critical analysis of existing policies and regulations regarding urban agriculture and an analysis of the actual and potential contributions of various relevant governmental, private and civil society organisations in the city for the development of sustainable urban agriculture. This is done in those cities in which RUAF-CFF operates (see this issue).

Only some of the reviewed policy documents include a section explaining what problems and opportunities related to urban agriculture the policy seeks to address (Cuba, Botswana, Rosario, Cape Town, Bulawayo and Montreal). Such a 'problems-and-opportunities' statement also facilitates impact monitoring and future revision of a policy.

#### VISION: THE ROLE OF URBAN AGRICULTURE IN SUSTAINABLE CITY DEVELOPMENT

Effective policy design is not possible without a clear vision on the longer-term development of urban agriculture, what kinds of urban agriculture one would like to support and what the ultimate objectives are. Such a vision preferably should be created at the onset of the process and through interaction between all main stakeholders in urban agriculture: local government departments, relevant governmental organisations, farmers' groups, community organisations, etc. (see the article by Dubbeling in this issue).

Cabannes and Dubbeling (2005) describe three main policy dimensions of urban agriculture that may help to focus and differentiate policies regarding urban agriculture (as illustrated by Van Veenhuizen, 2006, and in the article by Dubbeling in this issue). The *social* policy dimension refers mainly (but not exclusively) to *subsistence-oriented* types of urban agriculture that form part of the livelihood strategies of (especially) the urban poor and are mainly focussed on producing food and medicinal plants for home consumption. The families' expenses on food and medicines are reduced and minor cash income is generated from sales of surpluses. These households need additional income sources to survive. Examples include home gardening, community gardening, institutional gardens at schools and hospitals, and open field farming (micro scale and low levels of investment). These systems show little direct profitability but have important social impacts (social inclusion, poverty alleviation, community development, HIV-AIDS mitigation, etc.).



Meeting of the Vancouver Food Policy Council

The *economic* policy dimension is more related to *market-oriented* types of urban agriculture. These activities are undertaken by small-scale family-based

Jacques Schievink



**Farming in the Upper Bieslandse Polder inside Delft**

enterprises or larger-scale entrepreneurial farms run by private investors or producer associations. They may include food production (e.g. irrigated vegetable production, stall-fed dairy production) and/or non-food products (like flowers and ornamental plants). These commercial farms are embedded in a chain of small-scale and larger enterprises involved in input delivery (e.g. compost, fodder), processing and marketing. These types of urban agriculture have more economic impact and higher profitability, but their externalities for the city and urban population (especially in the case of intensive and larger-scale enterprises) tend to be higher (e.g. the risk of contamination of soils and water due to intensive use of agro-chemicals, health risks due to the use of contaminated water for irrigation, and the risk of zoonosis).

The *ecological* policy dimension refers to types of urban agriculture that have a *multi-functional* character: besides providing food and generating income, they play a role in environmental management and provide other services that are in demand by urban citizens: decentralised composting and reuse of organic wastes and wastewater (including nutrients), urban greening and improvement of the urban (micro-) climate (shade, O<sub>2</sub>, dust reduction, etc.), landscape management (parks, buffer zones, zones that are flood or earthquake prone or ecologically valuable and that should be kept free from construction, etc.), provision of opportunities for leisure and recreational activities, water storage, etc.. In order to allow such combinations, multi-functional agriculture will have to adopt agro-ecological production methods and link up with eco-sanitation and decentralised sustainable waste management, as well

as with parks, nature and recreation planning and management.

The policy may be oriented toward one of these dimensions or seek to develop a specific combination or succession of them (with different target groups or zones of the city in mind). Local governments may wish to apply one focus for certain target groups or parts of the city and another for other target groups or parts of the city. A local government concerned about growing food insecurity or the exclusion of certain groups of citizens will probably focus on the social dimension of urban agriculture. Cities that are emphasising local economic development will focus on the economic dimension of urban agriculture or seek to stimulate subsistence farmers to move into the market sector. Local authorities concerned about the poor urban living climate, growing waste management problems or the negative environmental or health effects of market-oriented urban agriculture may concentrate on the environmental dimension of urban agriculture, or seek to promote a (policy) shift from high-input commercial agricultural production to sustainable and multi-functional agriculture.

Only few of the reviewed policy documents (e.g. London, Vancouver) include a section in which the municipality's vision on the desired development of urban agriculture (or the urban food system) is explained. London's Food Strategy explains very clearly its vision on the desirable urban food system, acknowledging the importance of the food system for the city's sustainable development and seeking integration of food issues in various sectoral policies and programmes (education, health, waste management, etc.). However, in most policy documents one can detect an implicit vision that shows what the city had in mind when formulating this policy. Kampala's ordinances on urban agriculture, livestock keeping and fisheries were developed with a strong focus on preventing associated health risks through a system of permits and regulations. In Governador Valadares, urban agriculture is seen mainly as a strategy for stimulating social inclusion through enhanced access to vacant land and it has accordingly become part of the

city's land use plan. In Cape Town, the role of urban agriculture in local economic development and poverty alleviation gets extra attention; implementation of the urban agriculture policy will therefore be located in the Department of Economic Development.

#### **OBJECTIVES: LINKING REALITY AND VISION**

Objectives should be formulated in such a way that they inform the actions of all actors involved in the implementation and define clearly what kind of results are expected and who is expected to benefit from the policies. It is very important that the objectives be realistic, linked to other existing policies and attainable with the policy instruments available and within the city's actual institutional and financial capacity.

#### **Article 6 of the Rosario Municipal Community Garden Decree**

"The community gardens to be established will be assigned with preference to:

- unemployed and underemployed
- nuclear family units
- senior citizens
- secondary and university students
- recovering drug addicts
- service entities (cooperatives, clubs, neighbourhood groups, educational institutions, etc.)."

Many of the policy documents reviewed state only vaguely the objectives of the policy. Quantification of intended results and time horizons are rarely mentioned. In some policy documents it is not even clear how urban agriculture is defined, what types of agriculture it pertains to nor in which parts of the municipal territory it can be applied. This creates ambiguity.

The target groups and beneficiaries of the policies are also often insufficiently specified. Various policy documents state that the policy seeks to benefit the low-income groups in society (e.g. Cape Town, Governador Valadares, Montreal). The policy formulated in Rosario provides a more precise description of the characteristics of the intended beneficiaries of their municipal urban agriculture policy (see Box).

If objectives and intended beneficiaries are only vaguely indicated, it will be very difficult to monitor and evaluate such a policy. As a consequence, it will be difficult to improve such a policy over time.

Gender gets very little attention. Only the municipality of Kampala acknowledges that a policy may have differential impacts on women and men, and it includes measures specifically designed to ensure that women practicing urban agriculture will benefit from the urban agriculture policy. None of the other policy documents take this issue into consideration, nor do the policies themselves reflect any awareness of the differential effects they may have on different sections of the target population.

#### **POLICY INSTRUMENTS: THROUGH WHAT MEASURES WILL THE OBJECTIVES BE REALISED?**

A well-defined policy will indicate what strategies and instruments will be applied to realise the set objectives. The choice of a particular strategy or instrument will preferably be based on an analysis of the effectiveness of the available alternative options.

Contrary to what many people seem to believe, legislation is just one of the available policy instruments. Local governments have four main policy instruments available to them (each of which is based on a specific hypothesis regarding how behaviour of actors in society can be influenced). These are legal, economic, communicative / educative and urban design instruments.

#### **Legal instruments**

The logic underlying legal instruments are that the actors can be forced to adopt the desired behaviour through legal norms and regulations (municipal bye laws, ordinances, etc.) and that it is possible to control whether these actors adhere to these rules and norms. Actors



Raul Terrile

**Participatory design workshop La Lagunita, Rosario**

who do not adhere to the rules will be sanctioned. This policy instrument is especially useful in cases when: 1) the desired behaviour cannot be realised in another way; and 2) the rules can easily be controlled. In addition, the other instruments (economic, educational and design) also require an adequate legal basis. As such, the urban agriculture programme in Governador Valadares, for example, was formalised by law (see the article by Lovo and Pereira Costa in this issue).

The most common problems with the application of this instrument are the following:

\* The *increasing number of laws, bye laws, regulations, etc.* leads to contradictions (what is allowed or promoted in one law or regulation may be prohibited or restricted in another). This situation regularly occurs regarding urban agriculture due to its multi-sectoral character (e.g. a recent urban agricultural policy of a city supports urban agriculture while its environmental or health regulations still forbid or severely restrict it; see for example the article by Foeken on Nakuru in this issue).

\* The *mechanisms to enforce the law are often weak* due to the related costs and/or lack of political will, leading to a low level of control and sanctioning of undesired behaviour and/or to unequal treatment of the various actors (some are sanctioned while others are not; the latter are often the more powerful or influential people). Such a situation (prohibited in law, but tolerated in practice until further notice) is quite common as far as urban agriculture is concerned especially in cities in Sub-Saharan Africa.

An alternative to issuing general bye laws, norms and regulations, is the **contract or covenant**. The government and certain actors sign an agreement in which the social actors (e.g. urban farmers' organisations) agree to adhere voluntarily to certain norms and regulations, often in exchange for certain support by local government or other organisation (e.g. access to municipal land, obtaining a license for a farmers' market, technical support, etc.). A good example is the agreement that is being prepared between the municipality of Governador Valadares (Office of Environment, Agriculture and Food Supply), the Autonomous Water and Sewer Service Authority and the

Association of Urban Agriculture and Community Farming on the reduction of water tariffs for urban agricultural producers, which clearly establishes the obligations for each of the three parties. Whereas a municipal bye law or ordinance generally contains do's and don'ts that are enforced for all citizens (in principle equally), the covenant is an agreement voluntarily made between local government and specific actors in a city, and that applies to (and by) only those groups. This makes it possible to establish more specific norms and regulations for specific situations.

#### **Economic instruments**

The logic behind the application of economic instruments is the assumption that social actors will adopt the desired behaviour if this gives them some economic gains (or losses if they continue the undesired behaviour). Local governments may grant tax incentives or subsidies if actors adopt the desired behaviour or levy special taxes for undesired behaviour (like a levy on cigarettes or alcohol). Such economic instruments also need a legal basis, but the essential element here is not the law but the economic incentive/loss.

For example, the municipality of Rosario grants tax exemptions to land owners who allow poor urban farmers use of vacant private land. The municipality of Governador Valadares reduced the tariffs for irrigation water and provides incentives for composting and reuse of household wastes. The City of Cape Town provides incentives in the form of the supply of irrigation water, tools and compost to poor urban farmers.

This policy instrument is especially useful in cases when:

- \* the economic incentive is easily recognisable and substantial enough to have an effect
- \* the economic incentive is directly related to the desired/undesired behaviour.

The most common problems with the application of this instrument are the following:

- \* The costs of the policy measure cannot be controlled and may become unfeasible when many actors make use of it.
- \* Levies and subsidies often enhance social inequality.

### **Communicative / educative instruments**

The assumption behind the use of these types of instruments is that people will adopt the desired behaviour if they are well informed about the positive effects of the desired behaviour and the negative effects of the undesired behaviour. Accordingly, information, education and persuasion tools (extension visits, training courses, leaflets, websites, etc.) will be applied to make people understand the importance of the desired change and to assist them in the change process. These instruments are often used complementary to the other policy instruments mentioned. The lack of an adequate communication and education strategy may strongly reduce the effectiveness of the other policy instruments used.

For example, the municipality of Governador Valadares provides technical training to urban farmers and the municipality of London provides education on healthy food, food growing and food preparation to school kids. Thornton (in this issue) underlines the importance of designing and implementing a strategy to communicate municipal policies and policy instruments to their target group.

### **Urban design instruments**

The logic behind urban design instruments is that actors will adopt the desired behaviour if their physical environment has been designed in such a way that the actors are more or less “automatically” prompted to; if public dustbins are widely available, people will throw less waste on the street. Examples related to urban agriculture are zoning, combining or separating certain land uses depending on the degree of conflict/synergy, inclusion of space for home or community gardening in social housing projects, etc. Montreal included land designated for urban agriculture in its urban land use plan and Cape Town includes land for home or community gardening in slum upgrading projects.

The policy documents reveal that many cities emphasise legal instruments, which often have a reactive character (action is taken only in the form of sanctions if legal rules and regulations are not followed properly by the social actors). In such cities urban agriculture is often

restricted or at best tolerated if the capacity of the city to enforce the existing regulations is too limited. Many examples of the other policy instruments can also be found in the documents (see the examples given above), often in cities that apply a more proactive and development-oriented approach to urban agriculture.

As noted above, the economic, educative and design instruments have to be combined with supporting legal instruments in an effective “package” of policy measures in order to arrive at a development-oriented policy on urban agriculture.

### **The lack of an adequate communication and education strategy may strongly reduce the effectiveness of the other policy instruments**

In Kampala, the new policy supports urban agriculture in the sense that it is accepted as a legal form of land use under certain conditions and forms part of the city’s poverty alleviation and social development strategy. However, the policy relies mainly on legal instruments (the Kampala City Ordinances on urban agriculture, fish, livestock and meat), which restrict unwanted behaviour by establishing a system of licenses, regulations, control and sanctions. It is not yet clear how the ordinances are combined with other more development-oriented measures to support and stimulate this sector (training, marketing support, access to land, etc.) – though separate projects in these fields do take place in the city – and it may thus be questioned how and when the original focus on poverty alleviation will in fact be achieved. For example, the new ordinances restrict urban agricultural use of certain areas to urban farmers in order to protect wetlands, greenbelts, road reserves and drainage channels. Farmers also need permission from the council to cultivate old industrial sites or any other land believed to be contaminated. While these restrictions make sense from a health and environmental point of view, they also point to the need for the further development of a policy and guidelines on land use that include urban agriculture, especially if farming is to

benefit the urban poor. These observations may feed the discussion in Kampala, since policy and programme development processes are still ongoing, illustrating the fact that policy change is normally incremental (step by step).

Another approach is taken by the city of Rosario, where the emphasis is mainly on the economic and communicative and educative instruments: that city has chosen an approach that focuses on stimulating good behaviour by means of positive incentives (tax reduction for landowners, farmer education and technical assistance – specifically in the field of organic farming, subsidies for composting, support to marketing – all financed and supported by the municipal urban agriculture programme). The Rosario approach is more programme-oriented, focussing on enabling approaches, while the Kampala approach is – as yet – more regulatory and focussed on punitive approaches (see the articles in this issue).

Since good examples are scarce and Kampala’s experiences are widely known, the Kampala ordinances are now being copied by various other cities in Sub-Saharan Africa (as illustrated by the article by Foeken on Nakuru in this issue). However, those cities should not just copy the Kampala ordinances but first develop their own policy regarding urban agriculture, in response to the specific local situation. Moreover, in our view it is better to first develop a clear comprehensive policy (vision, objectives, selection of strategies/instruments including the legal instruments as well as other strategies, defining the institutional framework) before developing detailed legal instruments. Permits and regulations may be needed in order to protect public health and will probably help build support for urban agriculture amongst richer citizens and policy makers. However, creating positive incentives and a support structure will have more positive impacts on the situation of the poor and the development of urban agriculture. Many of the reviewed policy documents hardly differentiate between policy measures for various types of urban agriculture existing in a city, with the exception of the national guidelines on urban agriculture for Cuba that includes 27 sub-programmes (one for each main



type of urban agriculture). Kampala developed separate ordinances for horticulture, livestock keeping and fisheries. In Bulawayo, specific policy proposals have been sent to the city council on maize cultivation. Differentiation of the policy measures for the different types of agriculture (according to main product, level of technology and scale) is important since each type of urban agriculture has specific characteristics in terms of its relevance for certain policy goals and the level and type of externalities (e.g. health and environmental impacts) that they cause. But this is hardly practiced so far. Urban livestock tends to be restricted much more than vegetable growing. It is often limited to the periurban areas or to minimal numbers of small stock, due to perceived health and environmental risks (e.g. the draft policy for Cape Town and the situation in Nakuru, see Foeken in this issue). The norms used in bye laws, ordinances and zoning regulations to establish the limits between permitted and prohibited numbers of animals are often arbitrarily drawn (e.g. 2 cows, 6 sheep, 20 hens, etc.). Such norms are often not linked to the local conditions in which urban livestock is taking place (e.g. proximity to sources of drinking water, population density, presence of sources of air/soil/water pollution), even though these conditions highly influence the health or environmental effects that urban agriculture may have. The application of instruments like GIS makes it relatively easy nowadays to make such linkages.

#### **INSTITUTIONAL AND OPERATIONAL FRAMEWORK: HOW AND BY WHOM WILL THESE STRATEGIES BE COORDINATED, IMPLEMENTED AND MONITORED?**

For a policy to be effective, practical and efficient institutional arrangements are needed for its implementation. The policy should thus clearly indicate: The role of the various actors involved in its implementation (and maybe certain changes in their institutional mandate or functioning, if needed). The mechanisms that will be applied for periodic operational planning (to translate the policy into concrete actions) and for the coordination of the implementation (maybe some new department or secretariat has to be established). The policy document also



Wendy Mendes

**Farmer Market in Vancouver**

should mention how monitoring and evaluation will be organised (instruments to be used, responsible organisations). The sources and mechanisms of financing for the various policy measures (which municipal budget lines, public-private cooperation, national funds, payments by the beneficiaries, etc.) and who will be responsible for the management thereof. The mechanisms that will be applied to communicate the policy's contents to all stakeholders: how will target groups and beneficiaries be informed of the policy and the rights and obligations stemming from it? This issue poses an extra challenge in developing countries where poor urban farmers often lack access to information due to illiteracy, inadequate infrastructure, etc. Without such arrangements and mechanisms, the policy document will remain a dead letter and might even make things worse for the urban farmers rather than better.

The reviewed policy documents in general give surprisingly little attention to outlining the institutional and operational framework needed for the implementation and monitoring of the urban agriculture policy. Since urban agriculture is a multi-sectoral phenomenon that often lacks an "institutional home", extra attention to the definition of an appropriate institutional framework is required.

Positive examples are the Montreal Food Policy document, which includes a clear task definition for each of the municipal bodies involved in the implementation of the policy, and Cuba national policy. The Cuban resolution that established the National Group on Urban Agriculture includes a list of institutions to be represented in the group as well as its major tasks (*Resolution no.208/98*). Another Cuban policy document, containing guidelines for the 28 urban agriculture sub-programmes, pays a lot of attention to the way in which each of the sub-programmes will be monitored. Per sub-programme success indicators are mentioned as well as the criteria for evaluation. To further stimulate municipalities' adherence to the urban agriculture policies, a reward scheme is applied. In most other cases the operational framework only indicates the main coordinating and implementing units. In the case of Kampala, policy documents give the city council responsibility for coordinating implementation and monitoring of the policy and indicate which department will be in charge. In the case of Rosario, responsibility for coordinating the urban agriculture programme is placed with the Secretariat of Social Promotion.. Cape Town's draft urban agriculture policy is coordinated by the Economic Development Department of the Municipality and indicates the links with existing municipal programmes and funding



schemes into which urban agriculture projects will be integrated. In various cases, such as Rosario, the policy document establishes a new municipal office and programme that will carry out certain specific activities (e.g. to stimulate the use of organic production methods or, as in Montreal, to stimulate community gardening).

Since the local government in most situations will rely on the active participation of national government organisations as well as the private sector and civil society organisations, the policy should create a conducive framework for wider participation. In this respect Montreal's policy document is a good example since it explicitly seeks better harmonisation of the roles and responsibilities of all parties (governmental and non-governmental) involved in urban agriculture and it establishes a special multi-stakeholder platform or forum with a secretariat and working groups.

Sources and mechanisms of funding of the policy measures are rarely mentioned in the reviewed policy documents, which may severely hamper their implementation. If certain activities are made part of the mandate of specific organisations and included in their regular budgets, implementation of the urban agriculture policy will become much more continuous. If such arrangements are missing, for each activity specific approval and funding may have to be obtained which will slow down implementation tremendously. The Vancouver policy report mentioned above provides a detailed estimate of the resources involved in the actions proposed. The Amsterdam Note on Urban Gardens outlines the city's main goals with regards to the policy on urban community gardens. Although the document mainly has a strategic character and detailed action plans will be formulated jointly with the garden associations, it already includes a list of foreseen actions with respective budgeted costs and sources of funding.

### CONCLUDING REMARKS

The recently formulated city policies on urban agriculture that were reviewed in this article are very diverse in their design and content, partly reflecting the differences in local views on urban

agriculture, the role it is expected to play and the differences in how local policy systems operate, but also indicating the relatively underdeveloped status of policy making on urban agriculture and the shortage of good examples of well-defined policies and policy instruments. There is a need to go beyond the reformulation of bye laws and ordinances and to design a comprehensive policy that makes use of various types of policy instruments. Also, much more attention is needed for the design of an adequate institutional and operational framework for the implementation and monitoring of the policy, since that defines to a large extent whether the policy will be effective or not.

Local governments and other actors involved in policy design and implementation are kindly invited to actively exchange examples of policies and the experiences gained with the implementation of these policies in order to improve the quality and impacts of local policies on urban agriculture.

#### Notes

- 1) This article can be seen as an interim report of a project in progress. The collection of policies on urban agriculture is still far from exhaustive and the RUAF partners will continue this process of collection and analysis. The policy documents that were reviewed include those from Governador Valadares (Brazil), Rosario (Argentina), Kampala (Uganda), Montreal (Canada), Cape Town (South Africa), Cuba (Cienfuegos and national level policies), Botswana at national level, Bulawayo (Zimbabwe), Vancouver (Canada) and London (UK). Some of these policy documents are still in the drafting stage (e.g. Cape Town, Botswana). Some of the policies discussed here (Vancouver, London) have a focus on urban food systems rather than urban agriculture as such. Some others (like Cape Town) have not yet been formally adopted as a municipal policy.
- 2) In preparing this section we used Birkland's book *An introduction to the Policy Process* as a reference guide, but the synthesis and formulation is fully our own.
- 3) Although this system allows the functioning of the sub-programmes to be evaluated, no provisions are made to assess the impacts of the programme on the population (e.g. improved nutrition or increased income), environment, health, etc.

#### References

Birkland, Thomas A. 2005. *An introduction to the policy process; Theories, concepts and models of public policymaking*. 2<sup>nd</sup> edition, M. E. Sharpe, Inc. New York.

Cabannes, Yves. 2006. Financing and investment for urban agriculture. Chapter 4 in: R. van Veenhuizen. 2006. *Cities farming for the future: Urban agriculture for green and productive cities*, RUAF Foundation/IDRC/IRR. <http://www.ruaf.org/node/969>

### LIST OF REVIEWED URBAN AGRICULTURE RELATED POLICY DOCUMENTS

Kampala, Uganda The Kampala City Urban Agriculture Ordinance: A Guideline, KUFALCC and Urban Harvest, Kampala and Nairobi, 2005. The Kampala City Fish Ordinance: A Guideline, KUFALCC and Urban Harvest, Kampala and Nairobi, 2005. The Kampala City Livestock and Companion Animal Ordinance: A Guideline, KUFALCC and Urban Harvest, Kampala and Nairobi, 2005. Rosario, Argentina Ordinance 4713 related to the operations of the Municipal Community Garden Programme (1999), Municipality of Rosario, Argentina (original text in Spanish). Ordinance 7341 related to the development of the Municipal Programme for Organic Agriculture (2002), Municipality of Rosario, Argentina (original text in Spanish). Ordinance related to the establishment and management of a Municipal Land Bank for UA (2003), Municipality of Rosario, Argentina (original text in Spanish). Decree No. 1072 related to the establishment of the Garden Parks Programme, Rosario, 17 May 2004. Governador Valadares, Brazil Reduction of water, sewage and sanitation tariffs for urban agriculture (including proposed agreement), Municipality of Governador Valadares, Brazil, October 2003 (original text in Portuguese)\*. Law No. 5.265 of 29 December 2003, 'Creating the Urban Agriculture Programme of the Municipality of Governador Valadares', Municipal Council of Governador Valadares, Brazil, 29 December 2003. Use of progressive and regressive taxing policies to encourage the productive use of private spaces. Municipal Secretary of Environment, Agriculture and Food Supply (SEMA), Municipal Secretary of Planning (SEPLAN) and Municipal Housing Secretary (SMF), Governador Valadares, Brazil, 2004 (original text in Portuguese). Inclusion of urban agriculture in the City's Master Plan based on the City Statute, Municipality of Governador Valadares, Brazil, 19 October 2003 (original text in Portuguese). Cienfuegos, Cuba Lineamientos para el 2005 al 2007 y sistema evaluativo. Grupo Nacional de Agricultura Urbana, Ministerio de Agricultura, La Habana, Cuba, Noviembre 2004. Resolución No. -208 / 98 on Creation of National Group on Urban Agriculture, Ministry of Agriculture, Cuba, 15 April 1998. Montreal, Canada Montreal Community Gardening Programme, Cahier de Gestion 2004 Cape Town, South Africa Cape Town Urban Agriculture Policy (draft, 2005) Botswana Keboneilwe D. et al (2006) Urban and Peri-urban Agriculture (PUA) Working Paper (approved by the Policy Advisory Committee on March 21st, 2006) London, UK Healthy and Sustainable Food for London: The Mayor's Food Strategy Summary, May 2005. London Development Agency. Vancouver, Canada Policy report on Action Plan for Creating a Just and Sustainable Food System for the City of Vancouver, prepared by the Food Policy Task Force for presentation to the Vancouver City Council on November 20, 2003. Amsterdam, the Netherlands Nota Volkstuinen in Amsterdam, Dienst Ruimtelijke Ordening Amsterdam, November 2005. Bulawayo, Zimbabwe Urban Agriculture in Bulawayo – Issues and an Inception of Policy Guidelines (a summary)

# Courses of Action for Municipal Policies on Urban Agriculture

Once municipal authorities understand that urban agriculture can contribute to some of their policy goals, they often seek to facilitate the development of urban agriculture by means of pro-active policies and intervention strategies that enhance the socio-economic and nutritional benefits of urban agriculture, while reducing the associated health and environmental risks. In this way, municipal policy makers and support institutions can substantially contribute to the development of safe and sustainable urban agriculture.



IPES

Schoolgardens in Lima

This paper presents a series of important issues to be considered in formulating policies related to urban agriculture and possible courses of action for each of these issues. The suggested courses of action have been identified and applied in the past decade by policy makers and practitioners in the field of urban agriculture and presented during various international and regional conferences and issue-based workshops <sup>(1)</sup>.

These issues and related policy measures can be categorised under the following four headings:

- Creating a conducive policy environment for urban agriculture and its formal acceptance as an urban land use
- Enhancing access to vacant urban land and land tenure security
- Delivering adequate support services to enhance the productivity and economic viability of urban agriculture
- Taking measures to reduce the health and environmental risks associated with urban agriculture.

**Henk de Zeeuw, Marielle Dubbeling, Joanna Wilbers and René van Veenhuizen**  
ETC-Urban Agriculture  
✉ [h.dezeeuw@etcnl.nl](mailto:h.dezeeuw@etcnl.nl)

Each of these categories will be discussed in more detail below.

## CREATION OF A CONDUCTIVE POLICY ENVIRONMENT

**Revision of existing policies and regulations** Formal acceptance of urban agriculture as a legitimate urban land use is a crucial first step towards effective regulation and facilitation of the development of urban agriculture. Existing policies and by-laws regarding urban agriculture (as well as sector policies that include norms and regulations on issues related to health, the environment, etc.) will need to be reviewed in order to identify and subsequently remove (unsubstantiated) legal restrictions that may exist.

Another essential step is to include urban agriculture as a separate land use category in land use plans and change existing zoning categories to include urban agriculture.

*"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.*

Kampala (Uganda), Dar es Salaam (Tanzania), Havana (Cuba) and Harare (Zimbabwe) all recently revised or are revising their bye laws and regulations in order to replace colonial bye laws and

international sanitation standards that were seen as excessive, unenforceable or inappropriate to local conditions.

*"Our bye laws were outdated," admits Winnie Makumbi, Kampala City Minister of Social Improvement, Community Development and Antiquities. "They failed to recognise that many residents derive their livelihoods from urban farming. We realised it was up to us as political leaders to initiate the policy changes that would support urban farming practices."*

## Adequate institutional arrangements

A second important step is the creation of an institutional home for urban agriculture. Conventionally, sector policies have been defined under the assumption that agriculture refers to the rural sphere and will be attended to by institutions other than the urban ones, whilst most agricultural organisations do not operate in the urban sphere (Tacoli, 2001). As a consequence, urban agriculture still receives little policy and planning attention and development support or it suffers from conflicting jurisdictions. At the same time, urban farmers are often uncertain as to which department, organisation or programme is responsible for them.

Municipal authorities can play a key role in filling this gap by:

- Selecting a leading department or institute in the field of urban agriculture; often a change in the institutional mandate of that organisation will be needed and often a

special urban agriculture department, unit or office will have to be created within the leading institute. Several cities, like Nairobi and Accra, have created a municipal agricultural department. In Villa María del Triunfo, Lima, Peru, an urban agriculture sub-department was created under the Department of Economic Development (with a yearly budget of US\$ 50,000), while at the same time urban agriculture was included as a priority area in the Concerted Economic Development Plan (2001-2010). The city of Rosario made in 2001 its Secretariat of Social Promotion responsible for the coordination of the new Urban Agriculture Programme and the staff involved grew from one to several full-time workers in the last five years.

- Establishing an interdepartmental committee on urban food production and consumption to enhance coordination and institutional commitment. In Cape Town, South Africa, an inter-departmental working group was established in 2002 to coordinate the urban agriculture activities of various municipal and provincial departments and facilitate integrated policy development. In Bulawayo, Zimbabwe, an Interdepartmental Committee on Urban Agriculture was created to coordinate the activities of the various municipal departments active in this field (town planning, health, finance, etc.).

#### ***Mechanism for participation and dialogue***

Participation of a wide variety of stakeholders improves the quality of the policy and programme design and enhances commitment for implementation. Therefore, it is also important to stimulate the direct participation of the (various types of) urban farmers in the policy design and action planning as well as to stimulate dialogue and cooperation between public and civil society organisations.

#### **Formal acceptance of urban agriculture as a legitimate urban land use is crucial**

This can be done, amongst other ways, by setting up a multi-actor platform and working group on urban agriculture that



Ivana Cristina Lovo

#### **Discussion groups during meeting of the Municipal Forum**

organises the joint analysis of the presence, role, problems and development perspectives of urban agriculture in the city and coordinates the process of interactive formulation of policies and the planning and implementation of action programmes by the various actors as is done in the cities under the RUAF-CFF programme (see the article by Dubbeling and also the pilot cities sections on the RUAF website: [www.ruaf.org](http://www.ruaf.org)) and many other cities. In Governador Valadares, Brazil, a Municipal Forum on Urban Agriculture and Food Security was formed. The Forum consists of over 100 representatives (men and women) selected by the community. Neighbourhood associations, public schools, university and faculty members, church representatives and governmental secretariats (environment and agriculture, planning, city council representatives) also participate. A first Forum event basically served to present the results of a situational analysis on urban agriculture and identify key issues and objectives for further development of urban agriculture. In subsequent meetings a city action plan and policy on urban agriculture were developed and strategies for implementation and roles and contributions of the various actors were defined. The Forum continues to play a role in monitoring the action plan and its further development (see also the article in this issue).

In Toronto, Canada, the Toronto Food Policy Council was set up in 1991 to involve business and community groups

in the development of policies and programmes that promote urban food security and the creation of an equitable urban food system. Mendes describes in this issue the functioning of a similar council in Vancouver.

#### **MEASURES TO ENHANCE ACCESS TO VACANT URBAN LAND AND LAND TENURE SECURITY**

Land is a very important resource for urban agriculture<sup>(2)</sup> and its availability, accessibility and suitability for agriculture should be of particular concern to those who want to promote urban farming as a strategy for social inclusion, enhanced food security, poverty reduction and local economic development. City governments can facilitate access of urban farmers to available urban open spaces in the following ways (see also the proceedings of the RUAF-UN Habitat E-conference "Optimising Agricultural Land Use in the City", 2003, at [www.ruaf.org](http://www.ruaf.org)).

**Mapping of vacant land** Contrary to common belief, even in highly urbanised areas a surprisingly high number of vacant spaces can be found that could be used for agriculture on a temporary or permanent basis. In the city of Chicago, for example, researchers identified 70,000 vacant lots (Kaufmann and Bailkey, 2000). Various cities, like Cienfuegos (Cuba), Piura (Peru), Dar es Salaam (Tanzania) and Cagayan de Oro (Philippines), have made an inventory of the available vacant open land in the city (using methods like community mapping and/or GIS) and analysed its suitability





**Container roof garden in Manila, Philippines**

for agricultural use, which creates a good starting point for enhancing access of urban farmers to land.

**Temporary leasing of vacant municipal land** Various cities, like Havana (Cuba), Cagayan de Oro (the Philippines), Lima (Peru), Bulawayo (Zimbabwe) and Governador Valadares (Brazil) have formulated a city ordinance that regulates the (temporary) use of vacant municipal land by organised groups of urban farmers.

*“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 with farmer groups for farming purposes. Lots should have the minimal services for carrying out the proposed tasks.” Pablo Javkin, Councillor Rosario Municipality, Argentina.*

The vacant municipal land might be land earmarked for other uses (residential areas, industrial areas, hospital or school) but not yet in use as such, or it could be zones that are not fit for construction (flood zones, land under power lines, etc.) as well as buffer zones and land reserved for future use, which may be given in short or medium term lease to (groups of) urban poor for gardening purposes (specific leaseholds).

In the city of Cape Town, South Africa, underutilised land around public facilities, road verges, etc., are leased out to groups of urban poor households. NeighborSpace in Chicago, an organisation which is independent from but close to the City Council, liaises between the city (as land owner) and community gardeners who want to use the land. However, often those in need of land are not aware of such opportunities and information campaigns are an important accompanying measure.

If preparation of formal individual land lease contracts is too time and labour consuming, land might be leased out to farmers' associations rather than to

individuals (the association will then rent out plots on an annual renewable basis to its members) or written multi-annual occupation licenses or permits could be provided rather than formal leases. This is done for example in Amsterdam, the Netherlands, where the local Association of Gardeners (7200 members) rents over 250 ha of municipal land from the city. The Association rents this land out as garden-plots to individual members who pay a quota of around 300 euro per year per plot. This income allows the association to maintain fences and other infrastructure and to provide certain services to its members (e.g. training events, garbage disposal, etc.).

Often the contract with the farmers includes conditions related to the required land, crop and waste management practices to be used and in some cases also restrictions. Some municipalities provide training on these practices to farmers of municipal land. Some municipalities (e.g. Cape Town) not only provide the land but also assist in improving the quality of the land by ploughing, delivery of compost and manure, fencing, etc.

Some municipalities provide economic incentives and technical support to neighbourhood and youth groups that take action to clean up derelict and deteriorated open public spaces (“no-man’s land”) and turn these areas into gardens for the production of food, flowers, ornamentals, herbs, etc. In New York community groups and volunteers, with the help of the Department of Sanitation, cleaned out derelict open spaces in their neighbourhoods and set up community-supported gardens there (e.g. the Clinton Community Garden). A recent study revealed that the opening of a community garden leads to an increase of the prices of residential properties within 1000 feet of the garden, and that the impact increases over time, with the greatest impact being in the most disadvantaged neighbourhoods (Kami Pothukuchi, 2006).

#### **Promoting use of vacant private lands**

In order to enhance access of urban farmers to privately owned (vacant) land the Municipality of Rosario (Argentina) created a Municipal Agricultural Land Bank (a cadastral-based land registry) and brings those in need of agricultural

land in contact with the owners of vacant land. It also hires vacant land from private landowners to lease it out to community groups interested in using this land productively.

Another effective instrument used in Rosario to encourage private or institutional landowners to make vacant land available to poor urban groups

### **Even in highly urbanised areas a high number of vacant spaces can be found that could be used for agriculture**

interested in farming is the increase of municipal taxes on idle urban land and reduction of taxes for landowners who make idle land available for (temporary) farming.

Other examples of tenure agreements between urban producers and owners of private or semi-public estates with idle areas can be found in Lima and Accra (hospital grounds), Harare (golf club), Santiago de Chile (school yards), Dar es Salaam (university campus), and Port-au-Prince (church grounds). The Copperbelt Urban Livelihoods programme (CARE-CULP) is playing a mediating role to create acceptable win-win situations for both landowners of vacant land and those interested in farming on this land (proceedings RUAH-Habitat E-conference, 2003).

The city of Cagayan d'Oro, the Philippines, assists associations of the urban poor in establishing (allotment) gardens on privately owned land, which has proved to be a successful strategy. The organisers have learned that it is necessary to define clear land management conditions (e.g. type of crops that can be grown, no building of structures on the land, methods of waste management) and to help the allotment gardeners learn about the required practices and how to apply them. In Amsterdam such conditions are included in the regulations of each garden park. All urban gardeners that rent a plot in the garden park have to adhere to these regulations.

Municipalities or NGO's mediating between landowners and poor urban farmers should promote the provision of

longer-term leases, which allow producers to invest in the soil and farm infrastructure. Such leases should be for at least five years, but preferably longer. Landowners might be more willing to agree to a longer-term lease with an association of farmers that leases the plots to their members on the basis of annually renewable contracts, than to individual farmers out of fear that the latter might start seeing the land as property and become difficult to remove when the lease contract ends.

**Demarcation of zones for urban agriculture** Dar es Salaam and Dodoma (Tanzania), Dakar (Senegal), Maputo (Mozambique), Bissau (Guinee Bissau), Pretoria (South Africa), Kathmandu (Nepal), Accra (Ghana) and Harare (Zimbabwe) are examples of the many cities that have demarcated zones for urban agriculture as a form of permanent land use. These zones are intended to



Friends of Troy Gardens

**Children proudly display the vegetables grown in the Kid's Garden program at Troy Gardens**

support agriculture and/or to protect open green areas from being built upon, to create buffer zones between conflicting land uses (e.g. between residential and industrial areas) or to reserve inner city space for future uses. In Beijing, specific urban agricultural activities are promoted in the different periurban zones of the city (see the article in this issue). In Ho Chi Minh City and to a lesser extent in Hanoi (Vietnam), areas in and on the periphery of the city are also set aside for aquaculture.

Such agricultural zones are more sustainable if located in areas that are not well suited for construction or where construction is not desirable, as on flood plains, under power lines, in parks or in nature conservation areas. The City Master Plan of Setif, Algeria, includes the creation of a green strip west of the city

on the flood-prone fields of the Boussellam wadi valley (Boudjenouia et al., 2006).

Periurban greenbelts surrounding cities tend to come under pressure to be built upon. After remaining essentially unchanged for almost 30 years due to the policies of military regimes, in recent years Seoul's green belt came under strong pressure caused by major and rapid economic development and city expansion. A proposal has been made to release 112.5 km<sup>2</sup> of Seoul's green belt for city development (Bengston and Youn, 2006).

The "green fingers" model of urban expansion (i.e. along certain axes with green zones in between, as has been applied in several European cities, such as Copenhagen, Denmark) and the "city network" model (a metropolis consisting of interlinked smaller urban centres interlocking green multi-functional open spaces, as can be found in the "Randstad" of the Netherlands) seem to be more sustainable than the "green belt" model.

Zoning in itself is not sufficient to maintain these green open spaces: maintenance of these zones strongly depends on the *political will of the local authorities* and the *practical, technical and financial support provided* to the urban farmers and the development of sustainable and multi-functional agriculture in these green belts. An interesting comparison can be made between the experience of Hubli-Dharwad, India, where the Green Zone is being pushed outwards since the municipality needs the income from sales of public land for construction, and the experience in Beijing, China, where the green belt close to the inner city is strictly protected in recognition of the importance of recreation and urban greening as well as the production of fresh food (RUAf-Habitat E-conference proceedings, 2003).

**Promotion of multifunctional land use** Under certain conditions urban farming can be combined with other compatible land uses. Farmers may provide recreational services to urban citizens, receive youth groups to provide ecological education, act as co-managers of parks, and their land may also be used as water storage areas, nature reserves,

fire break zones, flood zones etc.

Aquaculture in urban or periurban lakes or ponds may be combined with other (water and fish related) recreational activities like angling, boating, a fish restaurant, etcetera, which proved a successful model in Bangkok (Thailand). Agriculture and aquaculture may be linked to wastewater treatment and reuse e.g. in constructed wetlands like is practiced in Calcutta at a massive scale and what could become an integral part of (peri-)urban green open spaces. By doing so the management costs of such areas may be reduced, and protection against unofficial uses and informal rezoning may be enhanced.

The Municipality of Beijing is promoting the development of periurban agrotourism both in the form of larger agrotourism parks as well as family-based agrotourism: farmers diversifying their activities by offering services to urban tourists (food, accommodation, sales of fresh and processed products, functioning as tourist guide, horse riding, etc.). The local government made agrotourism part of municipal and district level planning; established an agrotourism association and information dissemination service; assists interested farmers with business planning, tax exemptions and funding of infrastructure development, and provides subsidised water and electricity (Fang et al., 2005).

Some municipalities (e.g. Pretoria, South Africa; Vancouver, Canada) entered into a partnership with producers to manage municipal open spaces that combine community gardening with other functions (park or recreational area). Last March, the first garden park (*Parque Huerta*) was officially installed in Rosario, Argentina. The park, located on the fringe of the city, will be used for production, education as well as recreation. The initiative is supported by different municipal departments and other urban actors.

**Relocation of urban farmers** Farmers who are poorly located and whose activities may therefore cause serious health and/or environmental impacts may have to be relocated. In the case of planned conversion of agricultural areas for other land uses, the urban farmers could be supplied with alternative land and be assisted with basic infrastructure

Ivana Cristina Lovo



Private vacant land identified in Valadares

development (water, fence) in the new locations. In Jakarta, Indonesia, 275 dairy cattle farmers with over 5,500 cows have been relocated from the inner city (where the cows caused disease and waste problems) to a periurban area. In Amsterdam, the Netherlands, a community garden was relocated after the municipality decided to start constructing houses in the area (Wilbers, 2005). During the period 1986-1989 Montreal relocated 12 gardens (Bhatt & Kongshaug, 2005).

#### **Integration in social housing projects**

Cities like Vancouver (Canada, see article in this issue), Colombo (Sri Lanka), Kampala (Uganda), Rosario (Argentina) and Dar es Salaam (Tanzania) are experimenting with the inclusion of space for home and/or community gardening in new public housing projects and slum-upgrading schemes. Some cities also promote the recycling of grey household wastewater for use in home gardens and educate farmers regarding prevention of health risks.

#### **MEASURES TO ENHANCE THE PRODUCTIVITY AND ECONOMIC VIABILITY OF URBAN AGRICULTURE**

Urban agriculture tends to be highly dynamic and innovative, in part because of its proximity to the urban consumers and the special urban conditions the

farmers operate in, but its development is often constrained by urban farmers' limited access to training, extension services, credit, etc. Agricultural research and extension services and other support organisations have - until recently - given relatively little attention to agriculture in the urban environment, or only to the larger-scale commercial agro-enterprises.

Hence there is ample scope for enhancing productivity and profitability in urban agriculture. Municipalities can play an important role, especially by stimulating and coordinating production, developing joint programmes with relevant sector organisations, co-funding, providing licenses, supplying compost and basic infrastructure, etc. as will be shown below.

*"Municipalities should give more attention to the link between food supply and local agricultural production. Several municipal initiatives can be used to provide incentives for programmes such as farmers' markets, home delivery of fresh products, training courses for family farming, assignment of vacant lots to food production, and the use of differential taxes for land under production." Project "Fome Zero" (Zero Hunger), a proposal for a food security policy for Brazil. Administration of Luiz Inácio Lula da Silva.*

**Farmer training** Governmental organisations and the private sector should be stimulated to provide training, technical advice and extension services to urban farmers, with a strong emphasis on ecological farming practices, proper

management of health risks, farm development (e.g. intensification and diversification), enterprise management and marketing. Cost-sharing systems (farmers, municipality, governmental organisations, private enterprises) will be needed to ensure sustainability of the extension system. Education and extension institutions should be encouraged to include urban agriculture in their curricula and programmes.

Recently initiated urban agriculture programmes include training and education activities. The Urban Agriculture Programme of Rosario, Argentina, provides technical assistance and training to the productive groups. In Governador Valadares, Brazil, one of the strategic activities is to: "Carry out technical training and citizen education courses for the families and groups involved in the municipal urban agriculture programme". The Cape Town policy on urban agriculture (South Africa) calls upon the services of the research, training and support organisations in and around the city to provide the urban farmers with training on business administration, technical skills, marketing, etc. The Botswana policy paper assigns a critical role to farmer education through the production of books, brochures, posters, and community-level demonstration projects by governmental organisations, municipal departments, NGOs and CBOs and advocates for the integration of urban agriculture into the formal training and education system (e.g. agricultural colleges, technical schools). In Chicago both the municipality and NGOs like Heifer and Growing Power provide capacity building and training activities for community gardeners. They jointly seek to find political support in initiatives like Chicago Organic and The Chicago Food Policy Council (see this issue).

#### **Strengthening farmers' organisations**

Most urban farmers are poorly organised and usually in an informal way. They therefore lack sufficient channels and power to voice their needs. This limits the representation of their interests in urban policy making and planning at the various levels and hampers their participation in development programmes. Well-functioning farmers' organisations can negotiate access to land, adequate tenure arrangements and



access to credit. Such organisations may also take up roles in farmer training and extension, infrastructure development, processing and marketing, and control / certification of the quality of the products marketed. In Bangkok (Thailand) for example, associations of aquaculture farmers were instrumental in negotiating fair prices for producers or negotiating contracts directly with wholesalers and retailers.

More efforts are needed to identify existing farmers' organisations and informal networks of (various types of) urban farmers, to analyse their problems and needs, and find effective ways to help

### Urban farming can be combined with other compatible land uses

them develop further. Municipalities may stimulate their departments as well as universities, NGOs and CBOs present in the city to actively support the capacity development of farmers' organisations and to strengthen the linkages between farmers' organisations and private enterprises, consumer organisations and support organisations.

Small urban producers participating in the PROVE programme of Brasilia FD were stimulated to establish a farmers' association (Homem de Carvalho, 2005) and their capacities were enhanced to gradually replace the PROVE government officers in their supporting role. In Rosario, Argentina, development of the Network of Urban Producers (*Red de huerteros y huerteros*) has been stimulated by the municipal Urban Agriculture Programme for the same reason. According to Lattuca et al. (2005), the municipality also assisted in the establishment of agreements with other strategic governmental and private actors and other strategic social actors. The municipality of Montevideo is working together with the Uruguayan Organic Producers Association (APODU) to address commercialisation issues (e.g. establishment of the market in Montevideo) and funding (Blum et al., 2005).

In Hyderabad, India, the Green Fodder Grass Farmers Association markets about 250 tons of fodder a day making use of a

piece of land temporarily rented from a mosque. At present access to a public area of land is being negotiated with the Hyderabad government for more permanent use. The Association is also pressing for official recognition of its members' trade, in cooperation with inner city dairy producers and milk consumers.

#### *Development of appropriate technologies*

Urban agriculture is performed under specific conditions that require technologies different to those used in the rural context. Such specific conditions include limited availability of space and the high price of urban land, proximity to large numbers of people (and thus a need for safe production methods), use of urban resources (organic waste and wastewater), and possibilities for direct producer-consumer contacts. Most available agricultural technologies have to be adapted for use under these conditions whilst new technologies have to be developed to respond to specific urban needs (e.g. non-soil production technologies for use on roofs and in cellars; development of safe and economic practices for reuse of wastewater).

Municipalities and other local stakeholders could provide budgets and expertise to boost participatory problem analysis, develop research proposals and voice the research and technology development needs of their urban farmers to research institutes and national governments. Also, better coordination between research institutes, agricultural extension organisations, NGOs and groups of urban farmers could be promoted.

Special attention has to be given to the introduction of ecological farming practices (like integrated pest and disease management, ecological soil fertility management, soil and water conservation, etc.), space intensive and water saving technologies, health risk reducing practices and the creation of farmer study clubs and field schools that actively engage in the technology development and assessment process.

The Botswana policy paper urges research and extension institutions to develop and disseminate technologies

with and to small-scale urban farmers. The following technologies are mentioned: (a) adaptable cultivars (e.g. cabbage, tomato, onion, etc.), (b) water saving techniques (e.g. drip irrigation system or micro-irrigation system), and (c) appropriate production practices (e.g. hydroponics, concrete benches, protected agriculture). In Havana, Cuba, ample research is being conducted on adequate urban production methods e.g. development of fruit trees suitable for urban areas (non-damaging root systems) (E-conference proceedings, 2003). A considerable number of (local) governmental institutes pay attention to agro-ecological practices in their urban agriculture programmes, such as the following:

- In Montreal, Canada, the municipal community gardening programme has a clear focus on ecological gardening methods, which is exemplified by the fact that only environmentally friendly methods to control bugs, plant diseases and weed infestation are allowed in the city's community garden parks (Reid, 2005).
- The national urban agriculture programme in Cuba prohibits the use of agrochemicals in the city and has two sub-programmes specifically geared to the development and stimulation of organic composting and agro-ecological integration to ensure that newly developed techniques do not harm the environment.
- One of the objectives of the Municipal Programme for the Development of Organic Agriculture in Rosario, Argentina, is to train the participating beneficiaries in the production and commercialisation of organic vegetables and associated enterprises. The programme further stimulates the establishment of micro-enterprises for the production of organic bio-fertilisers and compost that can supply the urban farmers.
- The city of Governador Valadares, Brazil, stimulates the use of ecological techniques in urban agriculture production, processing and marketing by organising training courses and providing technical assistance to urban farmers' groups.

**Enhancing access to water, inputs and basic infrastructure** Municipalities can play an important role in enhancing access of urban farmers to water and

production inputs. Access to a year-round supply of low-cost water is of crucial importance as well as access to (composted or fresh) organic materials and other sources of nutrients (like wastewater).

The city of Bulawayo (Zimbabwe), provides treated wastewater to poor urban farmers in community gardens (see also article by Mubvami in this issue), while the city of Tacna (Peru) agreed to provide urban farmers its treated wastewater in return for their assistance in maintaining public green areas (Moscoso, 1997, personal communication).

The city of Gaza (Palestinian Authority) promotes the collection and reuse of grey household water in home and community gardens. Mexico City (Mexico) promotes systems for rainwater collection and storage, construction of wells and the establishment of localised water-efficient irrigation systems (e.g. drip irrigation) in urban agriculture to stimulate production and to reduce the demand for potable water. The municipality of Cape Town supplies community gardener groups with a basic infrastructure (a fence, a tool shed, a tank and hoses for irrigation), composted organic wastes and up to a certain amount of free water daily. In addition, it provides community groups that wish to start gardening activities with a "start-up kit for survivalist gardeners", consisting of a pickaxe, spade, rake, watering can, seeds and compost. The start-up kit is further supplemented by skills training and extension services.

Some cities, such as Havana in Cuba, assist by supporting the establishment of decentralised low-cost facilities for compost production and installation of composting toilets. Substantial progress has been made there in recycling urban organic waste (Cofie et al., 2006). Havana also facilitates the supply of quality seeds, natural fertilisers and bio-pesticides in small quantities to urban farmers through a network of local stores. The municipality of Marilao, located on the fringe of Manila, the Philippines, is establishing a composting facility, while the NGO community is addressing the necessary change in behaviour of the urban households in the municipality (Duran et al, 2006).

**Enhancing access of urban farmers to credit and finance** Improved access of urban farmers to credit and finance (with an emphasis on women-producers and the resource-poor farmers) is very much needed. Municipalities may stimulate existing credit institutions to establish special credit schemes for urban farmers (e.g. by creating a guarantee fund) or to allow their participation in existing credit schemes for the informal sector (this often also requires revision of the loan conditions).

The Botswana policy paper recommends the Ministry of Agriculture to encourage existing savings and credit cooperatives to provide credit also to urban farmers for their farming businesses. The PROVE programme in Brasilia FD (Brazil) created a fund with a non-monetary guarantee in the form of "Mobile Agroindustries" (metal frames that can be transported on a truck). Since these frames are mobile and durable, they can be used as collateral for a commercial loan.

### **Municipalities and other local stakeholders could provide budgets and expertise to boost participatory problem analysis**

The inclusion of urban agriculture in the municipal budget is also an essential component in the promotion of urban agriculture activities. In many cities, such as those noted above, the city council allocates resources to support its policy and programme on urban agriculture (infrastructure development, training, marketing support, start-up kits, etc.

*"Local governments should show a clear commitment to the development of urban agriculture, mobilising existing local resources, integrating urban agriculture in the municipal structure, expanding it nationwide, and allotting funds from the municipal budgets for carrying out urban agriculture activities." Quito Declaration, signed by 40 cities. Quito, Ecuador. April 2000.*

**Facilitating direct marketing by urban farmers** Due to the low status of urban agriculture and the usual exclusive focus on food imported from rural areas and the exterior, the creation of an infrastructure for direct local marketing of fresh urban-produced food and local small processing of locally produced food has received little attention in most cities. However, some municipalities do

facilitate the marketing of surpluses by poor urban farmers by providing them access to existing city markets, assisting them in the creation of farmers' markets (infrastructure development, licenses, control of product quality), authorising food box schemes and/or supporting the establishment of "green labels" for ecologically grown and safe urban food. An example is Brasilia FD, which is furthering the integration of small food production with local food processing and marketing (Homem de Carvalho, 2001). The Budapest municipality assisted Biokultura, the local organisation of urban and periurban farmers create a weekly organic farmers' market. Biokultura has its own organic certifying institute. Many cities in the USA provide space for farmers' markets to organised local farmers. An example is the work of the Rainbow Coalition in Milwaukee and Chicago, which organises the cooperative sale of organic farm produce through farmers' markets and food box schemes.

The municipality of Governador Valadares has prioritised the marketing of urban agricultural products in different ways: (a) by providing incentives for the formation of cooperatives for the production and commercialisation of products, (b) by creating sales and distribution centres as well as farmers' markets in the city and (c) by buying agricultural products from the urban farmers' groups to supply to schools, community kitchens, hospitals and other service organisations.

### **Supporting micro-enterprise development**

Some municipalities promote the development of small-scale enterprises, such as suppliers of ecological farm inputs (compost, earthworms, open pollinated seeds and plant materials, bio-pesticides) and processing enterprises (food preservation, packaging, street vending, transport) by:

- providing start-up licenses and subsidies or tax reductions to micro and small entrepreneurs
- providing technical and management assistance to micro- and small enterprises
- providing subsidies and technical assistance for local infrastructure and equipment for small-scale food preservation and storage facilities.



**Many tasks outside the farm are performed by the women**

In Ghana, the municipality of Accra-Tema cooperates with the Ministry of Food and Agriculture in the establishment of a milk collection system in order to encourage dairy farming in the periurban areas of the municipality (NRI, 1995). In Brasilia FD, the PROVE programme supports the development of small agro-processing and/or packaging units managed by urban farmers' groups and assists them in setting up quality labels and other marketing strategies. The PROVE products began to be sold in supermarkets as a result of an agreement between the local government, supermarkets and producers (Homem de Carvalho, this issue). Based on this example, agro-industries were also established in Rosario, the products of which are sold at weekly urban markets, in municipal offices, etc.

The small scale of production and rapid turnover of capital of small urban producers often impedes them from buying even small amounts of good-quality inputs at affordable prices. Therefore, some municipal programmes develop mechanisms for collective purchasing and sales in small units to urban farmers. In Havana (Cuba), farmers' stores (*Tiendas del Agricultor*) have been installed in the various neighbourhoods. In these stores, urban farmers can buy equipment, seeds, natural fertilisers, and bio-formulas in small quantities and at low prices. In addition, these stores offer technical assistance.

#### **MEASURES TO REDUCE THE HEALTH AND ENVIRONMENTAL RISKS ASSOCIATED WITH URBAN AGRICULTURE**

Rather than restricting urban agriculture out of fear of - often unspecified - health and environmental risks, which has often

turned out to be an ineffective strategy, cities are choosing more and more to design a series of accompanying measures to reduce these risks.

#### **Improved coordination between health, agriculture and environmental departments**

The most important measure is to create mechanisms of close cooperation between agriculture, health and environment/waste management departments to assess actual health and environmental risks associated with urban agriculture and to design effective preventive/mitigating strategies for which the participation of all these sectors is required. In Kampala, for example, health and agricultural and town planning specialists closely cooperated in the development of the new ordinances on urban agriculture livestock and fisheries. In Phnom Penh (Cambodia) steps are being taken to improve the coordination between municipal departments, universities and private organisations for controlling and monitoring the microbiological and chemical quality of wastewater-fed fish and plants in order to reduce a number of health problems (especially skin infections) related to wastewater-fed aquaculture (Papussa Policy Brief No 4). In Kumasi, Ghana, small kits have been made available to various local organisations to periodically test the quality of the irrigation water.

#### **Health considerations when setting aside zones for urban agriculture**

Many cities identify zones where certain types of urban agriculture are allowed (often defining certain management conditions) and other types are excluded (due to expected negative effects in the given local circumstances) in order to reduce health and environmental risks. When preparing such zoning and related regulations, factors like population density, the ecological sensitivity of the area concerned, proximity to polluting industries and proximity to sources of drinking water should be taken into account as well as the potential risks related to certain types of urban agriculture. Furthermore, the available means to enforce the zonification and related regulations should be taken into account.

A city may want to avoid having free-roaming cattle and major concentrations

of stall-fed dairy cattle or pigs in central districts (due to traffic, bad smells, flies and waste management problems). For example, the city of Cape Town is planning to relocate larger-scale dairy farmers from the inner city to public land in the periurban area. Also, it may be prudent to keep intensive horticulture and poultry keeping out of areas that are sources of drinking water (due to the risk of water contamination) or to prevent mono-cropping in river stream beds (due to erosion problems or siltation of dams). Proper location of arable crops in relation to sources of contamination is also important to reduce the effects of air pollution. Leafy vegetables, for example, should not be kept within 50-75 metres of a main road. Production of food crops close to industries that emit certain toxic chemicals should also be discouraged.

#### **Farmer education on the management of health and environmental risks**

Health risks associated with urban farming can be reduced substantially if farmers are made well aware of these risks and know how to prevent them. Examples of preventive measures that can be implemented by farmers themselves are the following:

- Promotion of ecological farming methods to reduce risks related to intensive use of agrochemicals.
- Health risks related to raising animals in close proximity to homes and workplaces can be diminished through adequate animal housing on the site, adoption of hygienic measures in relation to animal feed, adequate animal waste management, regular cleaning and disinfection of the stables, etc.
- Health risks related to the use of wastewater can be reduced by using adequate irrigation practices and by choosing the right crops. Untreated wastewater should preferably not be used for food crops (especially not fresh leafy vegetables), but may be used for growing trees or shrubs, crops for industrial use and other non-edible plants (ornamentals, flowers). In Xochimilco, Mexico, urban producers shifted from vegetable growing to a lucrative floriculture when untreated canal water became unfit for growing food (Canabal, 1997). In Hyderabad, India, farmers shifted from production of paddy to fodder grass when river water, which is used for irrigation,





Azage Tegegne

#### Milk marketing in Ethiopia

gradually became more polluted (Buechler et al., 2006)

- Food fish farmers facing increasing pollution and food safety problems can be stimulated to switch to ornamental fish production, as was done in Bangkok (Thailand) and Ho Chi Minh City (Vietnam). Vegetable producers in Ho Chi Minh City have begun cultivating ornamental plants for the growing urban middle class. In this way, the already available skills and expertise in aquatic production systems are optimally used, whilst a market and export industry that brings in cash is strengthened. Ho Chi Minh City applies a combination of crop restrictions and tax incentives for certain production systems in order to support the needed change from less safe to more safe production systems based on wastewater use.
- In areas contaminated with heavy metals (due to heavy traffic close by or industry), crops with a high uptake of heavy metals and nitrates like celery, parsley, leek, lettuce, spinach, carrots, beets and radishes should be discouraged, in favour of crops that present less risk like gourds, onions, garlic and fruit trees and shrubs. In severely polluted areas, farmers should consider growing non-edible plants rather than food crops, or production should be limited to containers, raised beds or other systems using special growing media.

#### Education of food vendors and consumers

Crops can become contaminated not only during production but also during the marketing and food preparation stages. Access to clean water and sanitation facilities in markets should be provided. A food-hygiene course should also be provided to small food

### Rather than restricting urban agriculture cities are now developing measures to reduce these risks

processors and vendors (e.g. licenses could be provided/renewed only after an applicant followed such a course with success). Consumers need to be educated regarding washing or scraping of crops, heating of milk and meat products and securing hygienic conditions during food handling. They also need education regarding the importance of fresh nutritious foods and medicinal herbs and their preparation (also in relation to HIV-AIDS). A FAO project on making street foods safer, among other places in Dakar, Senegal, is training food vendors, food inspectors and consumers in food hygiene issues (<http://www.fao.org/News/2001/010803-e.htm>). In Accra, Ghana, a multi-partner project resulted in the training of more than 3,000 street food vendors on improved hygiene practices as well as increased consumer awareness

(<http://www.nri.org/streetfoods/project2-moreinfo.pdf>).

#### Prevention of industrial pollution of soils and water by industry

Contamination of soils, rivers and streams by industry is a growing obstacle to safe urban food production.

Separation of city waste (residential and office areas) and industrial waste streams and treatment of industrial wastes at the source should be promoted. In areas where contamination might occur (e.g. downwind and downstream of industrial areas) periodic testing of soils and water quality in agricultural plots might be needed.

Increasing pollution and contamination of cities' domestic wastewater with industrial wastewater effluents is a major constraint to the continued viability of irrigated urban agriculture as well as to aquaculture. In many South-East Asian cities, the continuity of the existing potential for growing aquatic vegetables and fish using urban wastewater will depend on the city planners' ability to coordinate and develop strategies for effective separation of toxic industrial waste from domestic sewage. There are already encouraging examples in Hanoi and Ho Chi Minh City (Vietnam) of relocation of urban industries to industrial parks which allow for more effective treatment and monitoring of effluents. In the medium term, enforcing existing pollution control legislation to control contaminants at their source and monitoring and regulation of industrial wastewater discharge into public water sources can be effective in reducing health risks. When serious soil pollution is detected, farmers could be trained to rehabilitate the polluted soils with bio-remedial methods and/or farmers could be relocated.

#### Notes

1) Havana 1999 (DSE/CTA/GTZ/ETC-UA), Stellenbosch 2001 (FAO), Quito 2001 (IPES/UIMP-LAC/IDRC/FAO) Nairobi 2002 (FAO/IDRC/Habitat/ETC-RUAF/SIUPA), Ouagadougou 2002 (CREPA/ETC-RUAF), Nairobi 2003 (NRI/MI/ETC-RUAF), E-conference 2000 (FAO/ETC-RUAF), E-conference 2001 (CGIAR-UH/ETC-RUAF), E-conference 2002 (IWMI/ETC-RUAF), E-conference 2003 (HABITAT/ETC-RUAF), Johannesburg/Cape Town 2005 (Abalimi/CTA/ETC-UA).

2) Although not all urban agriculture is soil bound: some examples that do not involve open land are mushrooms in sheds, guinea pigs in the kitchen, hydroponics, container agriculture, roof-top farming, etc.

## References

- Bengston, D.N. & Y.C. Youn. 2006. Urban containment policies and the protection of natural areas: the case of Seoul's green belt. In: *Ecology and Society* 11(1):3. <http://www.ecologyandsociety.org/vol11/iss1/ar13/>
- Bhatt, V. & R. Kongshaug. 2005. EL1: Making the Edible Landscape – A study of urban agriculture in Montreal. Montreal: Minimum Cost Housing Group, School of Architecture, McGill University. <http://www.mcgill.ca/mchg/projects/el/>
- Blum, A., M. Álvarez, V. Berhau, H. Bértola, I. Álvarez, S. O'Neill and F. Barindelli. 2005. Uruguayan Organic Producers Association (APO-DU) Case study for the IDRC/IPES/ETC project on 'Social organisations of urban and peri-urban producers: Management models and innovative alliances for policy influencing', (unpublished). [http://www.ipes.org/au/osaup/english\\_version/organizaciones/apodu/Pdf/Estudio%20APODU%20ingles.pdf](http://www.ipes.org/au/osaup/english_version/organizaciones/apodu/Pdf/Estudio%20APODU%20ingles.pdf)
- Botswana UPA Working Paper (to be presented to the Policy Advisory Committee [PAC] on March 21st, 2006)
- Boudjenouia, A., A. Fleury & A. Tacherift. 2006. Multi-functionality of peri-urban open spaces in Setif, Alegria. In: *Urban Agriculture Magazine*, no. 15, December 2005. <http://www.ruaf.org/node/789>
- Cape Town Urban Agriculture Policy. City of Vancouver. 2000. Southeast False Creek Policy Statement: Toward a sustainable neighbourhood and a major park in Southeast False Creek (adopted by Vancouver City Council, October 1999) <http://www.city.vancouver.bc.ca/commsvcs/southeast/polycystatement/sefcpolicy1999.htm>
- Cofie, O., A. Adam-Bradford & P. Drechsel. 2006. Recycling of urban organic waste for urban agriculture. In: R. van Veenhuizen. 2006. *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*, RUAF Foundation/IDRC/IIRR. <http://www.ruaf.org/node/973>
- Cottely, J. & D. Öze. 2005. Biokultúra Central Hungarian Association, Case study for the IDRC/IPES/ETC project on 'Social organisations of urban and peri-urban producers: Management models and innovative alliances for policy influencing', (unpublished). [http://www.ipes.org/au/osaup/english\\_version/organizaciones/bcha/Pdf/Estudio\\_BCHA\\_ingles.pdf](http://www.ipes.org/au/osaup/english_version/organizaciones/bcha/Pdf/Estudio_BCHA_ingles.pdf)
- Cuba Resolución No. -208 / 98 DRO (Municipality of Amsterdam, Urban Planning Department). 2006. *Stadsvorm Amsterdam, Dienst Ruimtelijke Ordening (DRO)*. <http://www.dro.amsterdam.nl/Docs/pdf/PLAN%201%202006.pdf>
- Duran, L., J. Batac & P. Drechsel. 2006. Planning in a changing environment: the case of Marilao in the Philippines. Case study for Chapter 8 in: R. van Veenhuizen. 2006. *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*, RUAF Foundation/IDRC/IIRR. <http://www.ruaf.org/node/973>
- Fang, J., Y. Hong, L. Shenghe & C. Jianming. 2005. Multifunctional agro-tourism in Beijing. In: *Urban Agriculture Magazine*, no. 15, December 2005. <http://www.ruaf.org/node/781>
- FAO (n.d.) Pollution from industrialized livestock production, Livestock Policy brief 02, published by Livestock Information, Sector Analysis and Policy Branch, Animal Production and Health Division, Food and Agriculture Organisation. <http://www.lead.virtualcentre.org/en/frame.htm>
- Governador Valadares Proposals for the inclusion of UA in the City's Master Plan based on the City Statute, Governador Valadares, Brazil, October 2003 (original text in Portuguese, translation by Marielle Dubbeling and Richard Huber, IPES-UMPLAC/UN-HABITAT).
- Governador Valadares Proposals for the use of progressive and regressive taxing policies to encourage the productive use of private spaces, Governador Valadares, Brazil, 2004 (original text in Portuguese, translation by Marielle Dubbeling and Richard Huber, IPES-UMPLAC/UN-HABITAT).
- Homem de Carvalho, J.L. 2001. PROVE – Small Agricultural Production Verticalisation Programme. In: *Urban Agriculture Magazine*, no. 5, December 2001. <http://www.ruaf.org/node/212>
- Homem de Carvalho, J.L. 2005. ASPROVE, Association of the PROVE producers, Case study for the IDRC/IPES/ETC project on 'Social organisations of urban and peri-urban producers: Management models and innovative alliances for policy influencing', (unpublished). [http://www.ipes.org/au/osaup/english\\_version/organizaciones/asprove/Pdf/Estudio%20ASPROVE%20-%20ingles.pdf](http://www.ipes.org/au/osaup/english_version/organizaciones/asprove/Pdf/Estudio%20ASPROVE%20-%20ingles.pdf)
- La Capital. 2006. El primer parque huerta integrará la agricultura con el paisaje urbano, article in Rosario newspaper La Capital, March 20th, 2006. [http://www.lacapital.com.ar/2006/03/20/ciudad/noticia\\_278845.shtml](http://www.lacapital.com.ar/2006/03/20/ciudad/noticia_278845.shtml)
- Lattuca, A., C. Lemos, A. Mazzuca, M. Orué, M. Ponce, T. Ramos & R. Terrile. 2005. Consolidation of an urban agriculture producers network in the city of Rosario, Case study for the IDRC/IPES/ETC project on 'Social organisations of urban and peri-urban producers: Management models and innovative alliances for policy influencing', (unpublished). [http://www.ipes.org/au/osaup/english\\_version/organizaciones/rosario/Pdf/Estudio%20de%20caso\\_red.pdf](http://www.ipes.org/au/osaup/english_version/organizaciones/rosario/Pdf/Estudio%20de%20caso_red.pdf)
- Lee-Smith, D. & G. Prain. 2006. Understanding the links between agriculture and health: Urban Agriculture and Health. Focus 13, Brief 13 for IFPRI 2020 Vision for Food, Agriculture and the Environment. Washington: International Food Policy Research Institute. [http://www.ifpri.org/2020/focus/focus13/focus13\\_13.pdf](http://www.ifpri.org/2020/focus/focus13/focus13_13.pdf)
- London Development Agency. 2006. *Healthy and Sustainable Food for London: The Mayor's Food Strategy Summary*, May 2006.
- Ministerio de la Agricultura y Grupo Nacional de Agricultura Urbana de Cuba. 2004. *Lineamientos para los sub-programas de la agricultura urbana para el 2005 al 2007 y sistema evaluativo*. Grupo Nacional de Agricultura Urbana (National Group for Urban Agriculture) of the Ministry of Agriculture, Havana, Cuba, November 2004.
- Montreal Cahier de Gestion. 2004. *Montreal Community Gardening Programme*.
- Reid, D. 2005 and 2006. *Montreal's Community Gardening Programme: A model partnership between a municipality and its citizens*. Montreal City.
- Mulyono, S. 1998. Intensive livestock production and the problem of its waste product in the Special Province of Jakarta, paper prepared for the Regional Workshop on Area-Wide Integration of Crop-Livestock Activities, 18-20 June, 1998, FAO Regional Office, Bangkok, Thailand. <http://www.fao.org/WAIRDOCS/LEAD/X6105E/x6105e06.htm>
- Municipality of Rosario, Argentina 2002. Ordinance 7341 related to the development of the Municipal Programme for Organic Agriculture (original text in Spanish, translation by Marielle Dubbeling and Richard Huber, IPES-UMPLAC/UN-HABITAT).
- Municipality of Rosario, Argentina. 2003. Ordinance related to the establishment and management of a Municipal Land Bank for UA (original text in Spanish, translation by Marielle Dubbeling and Richard Huber, IPES-UMPLAC/UN-HABITAT).
- Muong, S. 2004. Summary of EEPSEA Research Report 2004-RR5, Avoiding adverse health impacts from contaminated vegetables: options for three wetlands in Phnom Penh, Cambodia. Ministry of the Environment of Cambodia. [http://www.idrc.ca/en/ev-65165-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-65165-201-1-DO_TOPIC.html)
- Pothukuchi, Kami. 2006. Pothukuchi, Kameshwari. 2006. Contribution to the Comfood Listserv April 10, 2006
- Pouw, M. & J. Wilbers. 2005. Urban Agriculture in the Netherlands: multi-functionality as an organisational strategy. In: *Urban Agriculture Magazine*, no. 15, December 2005. <http://www.ruaf.org/node/791>
- UMP-LAC & RUAF. 2003. Proceedings of the E-conference on 'Optimising agricultural land use in the city area: Access to land and water, adequate norms and regulations, integration in land use planning', organised by UMP-LAC and RUAF, 3-22 November 2003 (unpublished). <http://www.ruaf.org/node/238>
- UMP-LAC. 2002. *Policy Briefs on Urban Agriculture*.
- Vancouver Food Policy Task Force. 2003. *Policy report on Action Plan for Creating a Just and Sustainable Food System for the City of Vancouver*, prepared for presentation to the Vancouver City Council on November 20, 2003. <http://www.vancouver.ca/cityclerk/ccclerk/20031209/rr1.htm>
- Wilbers, J. 2005. Bond van Volkstuinders, BVV (Association of Gardeners), Case study for the IDRC/IPES/ETC project on 'Social organisations of urban and peri-urban producers: Management models and innovative alliances for policy influencing', (unpublished). [http://www.ipes.org/au/osaup/english\\_version/organizaciones/bvv/Pdf/Estudio%20-%20BVV%20Amsterdam%20-%20ingles.pdf](http://www.ipes.org/au/osaup/english_version/organizaciones/bvv/Pdf/Estudio%20-%20BVV%20Amsterdam%20-%20ingles.pdf)

## Websites

- City of Toronto, Public Health Food Policy Council [http://www.toronto.ca/health/tpfc\\_index.htm](http://www.toronto.ca/health/tpfc_index.htm)
- Clinton Community Garden <http://www.clintoncommunitygarden.org>
- FAO News <http://www.fao.org/News/2001/010803-e.htm>
- Green Thumb <http://www.greenthumbnyc.org>
- NRI Street Foods Project <http://www.nri.org/streetfoods/project2-more-info.pdf>

# Interactive Policy Formulation for Sustainable Urban Agriculture Development

In the foregoing two articles in this issue, criteria for an effective policy on urban agriculture were discussed and various policy measures and instruments for a municipal policy on urban agriculture were presented. But how should a participatory policy formulation process be organised? How can it be initiated? Who should participate and when? What steps should be followed, and what recommendations should be taken into account? This article describes the importance of interactive or participatory processes of policy formulation, details the different steps to be taken and highlights lessons learned thus far by RUAF partners and various other organisations.



Noemi Soto IPES

Urban producers network in Lima

**W**hen a government involves – from as early a stage as possible – citizens, farmers, civil organisations, private sector companies and other governmental entities in the preparation, implementation and evaluation of a policy, we can speak of interactive and multi-stakeholder policy formulation.

## WHAT IS INTERACTIVE AND MULTI-STAKEHOLDER POLICY FORMULATION?

“Our municipal administration assumed from the start the challenge to fight against poverty and create new policies and programmes based on consultative, participatory and democratic processes of policy formulation. The policies and programmes developed respond to the needs expressed by the population such as hunger, environmental degradation, illiteracy and urban violence. One of the programmes created constitutes the Hunger Zero programme. A sub-department of urban agriculture was also created with the objective to promote urban agriculture in the municipality. I would like to reaffirm our commitment to keep working together with our citizens, community based organisations, public and private institutes to continue working towards further development and modernisation of urban agriculture to improve our municipality and most importantly the quality of life and well-being of its population” (Dr. Washington Ipenza Pacheco, Mayor of Villa Maria del Triunfo, Lima-Peru).

Marielle Dubbeling and Henk de Zeeuw  
✉ [m.dubbeling@etcnl.nl](mailto:m.dubbeling@etcnl.nl)

If an interactive approach is chosen, a policy is thus formulated in collaboration with and in open interaction between local government and all other relevant stakeholders. This goes beyond processes of mere consultation, where stakeholders are asked for their feedback on an already defined line of action. Instead, in interactive policy formulation, stakeholders are given the opportunity and are stimulated to participate in the definition of problems/ potential opportunities and related policy issues and are invited to propose possible solutions or lines of action as well as define their potential roles in implementation.

Interactive policy formulation is characterised by:

- the participation of a variety of non-governmental actors in policy making, who are given an equal chance to contribute to the preparation, implementation and evaluation of a policy
- in an open and transparent process, in which the final decisions taken honour – to the greatest extent possible – the contributions from the various actors involved.

For sustainable urban agriculture development, such multi-stakeholder participation is particularly important, since it involves a large diversity of systems and related actors (e.g. input providers, vegetable producers, fish or livestock farmers, micro-entrepreneurs, middlemen and vendors), and touches on a large number of urban management

## In sustainable urban agriculture development multi-stakeholder participation is particularly important

areas (e.g. land use planning, environmental and waste management, economic development, public health, social and community development, housing programmes and management of parks and green structures).

## WHY INTERACTIVE AND MULTI-STAKEHOLDER POLICY FORMULATION?

It is clear that choosing to pursue more interactive policy formulation processes will present a challenge to many cities, and it has several advantages as well as disadvantages compared to more traditional forms of policy formulation.



An interactive and multi-stakeholder approach to policy formulation on urban agriculture has – in principle and compared to other approaches – the following benefits:

- It contributes to more participatory governance, public-private partnerships and helps bridge the gap/overcome distrust between citizen groups and the government.
- It allows for better situation analysis and quality decision making (through a better understanding of priority issues and the needs of different stakeholders involved and a better linking of different sources of knowledge, information and expertise).
- It improves the likelihood of success and sustainability of implementation (through enhanced acceptance and ownership of the policy formulated, improved mechanisms and processes for coordination, and mobilising and pooling of scarce human, technical and financial resources) (Hemmati, 2002).
- It supports improvement of the problem-solving capacities of the participating institutions (Partners and Propper, 2004).

On the other hand, public participation in decision making:

- requires skilled human resources and additional financial means;
- may require more time than other approaches to allow for required changes in institutional cultures;
- may lead to an undue increase in the influence of some stakeholders (especially when there is a lack of transparency throughout the process).
- Different experiences and evaluations point out that the appreciation for and the results of interactive processes of policy formulation can be disappointing if not properly managed. The main causes often mentioned are insufficient preparation and planning of the interactive process, insufficient embedding of the process in participating institutions and lack of transparency and communication throughout the process.

Despite increasing attention for interactive and multi-stakeholder processes of policy formulation, few municipal authorities and other local stakeholders have experience with these processes (especially in regard to urban agriculture). They therefore require well-

designed methods and tools, technical assistance and staff training. Lessons learned from the RUAF partners and others will be presented, and recommendations on how to effectively organise interactive processes of policy making will be given and illustrated below.

#### LESSONS LEARNED REGARDING INTERACTIVE POLICY FORMULATION

**Room for alternative views?** Before starting an interactive policy formulation process, one should reflect first on the question whether there is sufficient room for new ideas, plans and actions that deviate from the current dominant views and style of operation of the local government. In other words: is there really room for public participation in policy making? If not, further awareness should be raised on the benefits (and costs) of interactive processes of policy formulation. Spaces for participation should be created and formalised. Special consideration needs to be given to facilitate participation of the non-organised and often excluded segments of the population (women, immigrants and youth, for example).

**Preparing for active participation** The stakeholders involved may need training in how to work together with people they have never worked with before. For example, urban producers may need to learn to negotiate with different levels of government and other external agencies to achieve their goals. Urban farmers are often not at all or only loosely organised and rarely participate in representative bodies. Hence, in order to get the urban farmers, and especially poorer and female farmers, involved in participatory policy formation and action planning processes, special efforts are needed to get them actively involved. Informal farmer leaders have to be identified. Existing farmer groups have to be brought into contact with each other, special “focus group meetings” have to be organised to analyse the farmers’ situation and interests / perspectives (see also below as part of Phase 2: “Situation analysis”) and to prepare their proposals for the policy formulation process. In the RUAF experience it is not enough to involve farmer representatives in the same training as the staff of municipal departments, NGOs etc., and complementary sessions may be needed to attend to their specific

profile and learning needs. Moreover, continued leadership training focused on strengthening the existing farmer groups and their strategic development planning is required. (Special attention will be given to strengthening urban producers’ organisations in the upcoming Magazine no. 17).

**Importance of organisation** The process should be well organised with a clear time-schedule, division of labour, and agreements on how and when participation in policy formulation will take place (for example in quarterly forum meetings), and how monitoring of progress and results will take place. It is important to work with a committed and capable facilitating/coordinating team that has skills in conflict mediation, resolution and facilitation. Some funding is required for organising meetings and information sharing. Minutes on discussions held, agreements made and results obtained should for example be shared among all stakeholders to continuously build trust, cooperation and commitment.

**Building openness and mutual respect** Open and transparent communication and decision-making procedures are important, while all participants should have an “open eye and ear” for differences in the interests and “cultures” of the different stakeholders. Mutual understanding and respect should be seen as a basis for dialogue and negotiation.

**Well-selected stakeholders** It is important to identify which stakeholders should be involved in the policy formulation process (see also the section below on “stakeholder identification and analysis”). To be effective, the policy should include all institutions, organisations and groups that have a “stake” in the issues that will be attended by this policy: categories of the population affected by this policy, organisations with a regulatory mandate or with relevant technical knowledge, etc. In the Netherlands, for example, the development of a municipal plan seeking to combine agricultural production in the periurban area with water storage, recreation, a natural park or other functions would require the involvement of the periurban farmers, the water board, the municipality, the province, local nature conservation organisations, community organisations and others (Deelstra et al., 2006).

Theophilus Otchere-Larbi



Action Planning by the team in Accra

**Need for clarity on decision-making procedures** There should be clarity, from the very beginning of the process, regarding what will be done with the results of the interactive policy formulation process and how and by whom the formal decisions will be taken. In Bulawayo (Zimbabwe), for example, a multi-stakeholder forum on urban agriculture (supported by RUAf's partner MDP, see further article by Mubvami on Bulawayo) developed a city action plan on urban agriculture. The forum recommendations were presented to one of the Municipal Council Committees that will review the proposal (and adapt it where necessary to the legal/institutional framework in place) and subsequently present the plan to the full Municipal Council, which will take the final decisions, formalise the plan, make a budget available, etc.

**Early implementation** Implementation of some initial actions at local level in an early stage of the process that produce concrete outputs with good visibility within a short period of time will help to reinforce the commitment and

participation of those involved, especially the farmers and other intended beneficiaries, and create a positive environment for more complex and long-term processes.

**Shared budgeting; building on available resources** To be able to implement the policies and plans that will result from the policy formulation process, an early start has to be made in generating the required financial and human resources. The experiences to date indicate that it is crucial to first build on the means available in the organisations and institutions participating in the process through joint budgeting and inclusion of priority actions in the institutional programmes and annual operational plans and budgets of these organisations and institutions. For example, the early inclusion of urban agriculture in the municipal budget of Rosario (Argentina) was an essential factor in the implementation of the priority actions identified in the multi-stakeholder process (training, marketing support, etc.) and the success of the municipal urban agriculture programme (see also the article by Terrile and Lattuca in this issue).

**THE PROCESS OF INTERACTIVE POLICY FORMULATION: STEP BY STEP**

To illustrate how such an interactive and multi-stakeholder process of policy formulation could look like, the different phases or steps as applied by the RUAf partners will be presented. The RUAf partners are currently assisting 12 cities around the world –in the coming years this will be extended to 18- in Multi-stakeholder Policy formulation and Action Planning (MPAP) on Urban

Agriculture.

The MPAP interactive process of policy formulation on urban agriculture is built around the following phases:

**Defining a work plan and procedures:** coming to a basic agreement between participating institutions and actors, definition of communication strategies and working procedures, setting up of a facilitating team and preparation of a work plan.

**Situation analysis:** an exploratory study on urban agriculture in various parts of the city, stakeholder inventory, land use mapping and policy review.

**Agenda setting and strengthening the institutional framework:** in this phase a strategic agenda on urban agriculture is formulated and an adequate institutional framework for the multi-actor policy formulation and action planning is put in place.

**Operationalisation:** this phase includes participatory design and budgeting and implementation of pilot projects, (re)-formulation of policies and regulations on urban agriculture and integration in institutional programmes and budgets.

**Implementation, monitoring, adaptation/innovation:** monitoring of the process and results, feedback and adaptation/innovation.

**PHASE 1: GETTING STARTED**

**Establishment of facilitating team; work plan and procedures** In most cities the first step in the interactive policy formulation process is to set up a “core group” that will promote and guide the interactive policy formulation process. This team (which is called the “MPAP enabling team” in Hyderabad, India, and “Technical Support Committee” in Dakar, Senegal) will be responsible for coordinating the situation analysis and

Phase	Defining work-plan and procedures	Situation analysis	Agenda setting and strengthening the institutional framework	Operationalisation	Implementation, monitoring and innovation
Results/ outputs	(1) Facilitating team formed (2) Work-plan elaborated (3) Communication participation, and monitoring strategies defined (4) Key actors trained (5) Basic agreement by local government and other key actors to embark on a policy formulation process	(1) A stakeholder inventory (2) A policy review (3) A land use map (4) A rapid appraisal on main urban farming systems and their actors (5) Policy narrative (6) Summary report or Policy narrative	(1) Multi-stakeholder Forum on urban agriculture set up (2) City Strategic Agenda on UA formulated	(1) Operational action plans elaborated for: - (pilot) projects - (re)formulation of policies - integration of urban agriculture into institutional programmes and budgets	(1) Projects implemented (2) Policies (re)formulated (3) Results, outcomes and impacts monitored and lessons learned (4) Existing strategies adapted and new ones put in place

facilitating the dialogue between the various stakeholders involved in the policy formulation and action planning process. It is helpful if such facilitating teams integrate competent staff of the most relevant municipal departments, representatives of urban producer groups, NGOs or university staff. For example, the Technical Support Committee in Pikine is made up of 12 members, including a representative from a farmers' organisation, technical experts from various organisations, some municipal councillors and the mayor.

The team will clarify and agree on the objectives, the process to be followed and the working and communication procedures to be applied and develop a work plan for the implementation of the policy formulation process. The team also ensures that the required financial and human resources are made available for its implementation. Institutional commitments and contributions to the process should be clarified and – whenever possible – formalised.

**Training** The team members as well as representatives of the different key stakeholders who will take part in the policy formulation and action planning process, will organise and participate in the training activities, to strengthen their capacities to undertake participatory situation diagnosis, design of effective development strategies, conflict mediation and negotiation, joint implementation of actions, and participatory and learning-oriented monitoring.

**Awareness raising** An important prerequisite for any policy formulation process related to urban agriculture is recognition of the value, benefits and resulting needs of urban agriculture by political leaders and heads of administrative bodies. Therefore it is necessary to raise their awareness on the issue, and to provide them with adequate information on the role of urban agriculture in sustainable city development by providing them with research data on the actual and potential positive and negative impacts of urban agriculture (fact sheets) and its contributions to existing policy goals (policy briefs), as well as examples of urban agriculture policies and programmes implemented by other

cities. Taking such persons to the field to meet with urban farmers and the organisation of city to city exchanges or study visits on urban agriculture have also turned out to be very effective instruments. Publications on urban agriculture in the local media (article in newspaper, video on TV, radio programme) also form an effective strategy.

**Formalising commitments** The main decision makers should preferably make a formal statement that lays out their policy intentions regarding urban agriculture and their support for the formulation of (new or improved) urban agriculture policies and action programmes on urban agriculture. (See the box on Hyderabad.)

## PHASE 2: SITUATION ANALYSIS: EXPLORATORY STUDY, POLICY REVIEW AND STAKEHOLDER INVENTORY

An analysis will be made of the existing situation, the existing policy and institutional framework as well as of the stakeholders (and their interests!). This will result in identification of key problems and opportunities for the development of sustainable types of urban agriculture and a selection or prioritisation of the issues that will be attended by the municipal urban agriculture policy to be formulated.

In the RUAF programme the situation analysis involves the following complementary components:

- a review of available secondary data on urban agriculture in that city
- mapping of actual agricultural land use and of open spaces that might be used for urban agriculture in future (using community-based mapping as well as GIS methods)
- a review of actual policies and regulations of relevance for urban agriculture
- a participatory and gender-differentiated rapid appraisal of the main urban farming systems (in selected areas)
- an inventory of stakeholders in urban agriculture.

The review of available secondary data will provide data on the presence of urban agriculture in/around the city,

### Declaration for the promotion of urban and periurban agriculture in Serilingampally, Hyderabad

Our vision is to contribute to the reduction of urban poverty and food insecurity through sustainable urban and periurban agriculture (UPA) and to stimulate participatory and gender-inclusive governance for the municipality of Serilingampally, Hyderabad.

#### We acknowledge that:

- UPA is a widely practised activity in and around towns and cities within the region on parcels of land with alternative competing uses;
- UPA has generally been practised informally without appropriate policy, legislative and institutional frameworks;
- UPA will continue to play a significant role in addressing food security, employment creation and income generation, health and nutrition and improving the economies of urban areas;
- some governments in the region have made significant progress in incorporating UPA in their urban development plans, and others are now beginning to rise to the challenge;

#### Recognizing,

the existence and increasing practice of UPA and also noting the many challenges that it faces, including:

- the absence of, inadequacy of and / or inconsistency between the policies, legislation and institutional arrangements for regulating UPA
- the limited availability of and access to resources
- the lack of sufficient research, documentation and information-sharing, both nationally and regionally
- the need for environmental sustainability

#### Accepting,

that the foregoing challenges require immediate and prudent reform of policies, legislative and institutional arrangements in order to effectively integrate UPA into planning activities in the municipality of Serilingampally, Hyderabad.

#### We therefore,

call for the promotion of a shared vision of UPA that takes into account the specific needs and conditions in the municipality of Serilingampally, Hyderabad, and accordingly commit ourselves to developing policies and appropriate instruments that will create a gender-sensitive enabling environment for integrating UPA into our urban planning processes.

#### Signed by:

Mr. S.A. Kadhar Saheb, Municipal Reform Officer (SWM) Hyderabad  
Mrs. Gayatri Ramachandran, DG EPTRI  
Ms. Anna Matthew, Principal Ruda Mistry College  
J. Venkatesh, HOD, Centre for Spatial Information and Technology JNTU

Source: International Water Management Institute, South Asia Regional Office, Hyderabad, India 2006

main types of urban farming, and an overview of the existing knowledge (and gaps in that knowledge) regarding the actual and potential impacts of urban agriculture and other issues that need attention in the planning process. The land use mapping will provide



information on the location of the various types of urban agriculture and the suitability of the available open spaces for agricultural use by the urban poor, which provides a basis for the inclusion of urban agriculture in municipal physical and land use planning and the design of strategies to increase access of the urban poor to available and suitable spaces for food production.

The review of actual policies and regulations is helpful in order to:

- identify outdated or unnecessary restrictive norms and regulations regarding urban agriculture (municipal bye-laws, ordinances, zoning regulations, etc) that should be removed or adapted (see also the article by Azuba in this issue),
- identify inconsistencies between different sector policies (e.g. public health, environmental management, economic development) and different policy levels (local versus national – as the article by Lovo and Pereira Costa demonstrates) in their treatment of urban agriculture (see also the article by Foeken in this issue), as well as of opportunities to integrate urban agriculture better into these sector policies,
- identify which existing policy measures did or did not work well (effectiveness, enforcement costs, etc.). Recent innovative projects and experiences gained in other cities are valuable sources to identify effective policy strategies and instruments.

The rapid appraisal of the main urban farming systems in some selected areas will provide a better understanding of the main characteristics of the existing urban farming types (horticulture, forestry, livestock, aquaculture, mixed systems) and activities (inputs/recycling, production, processing, marketing), their main problems and development potentials as well as the perspectives of the urban farmers (men and women) on their main constraints and support needs.

The inventory of stakeholders in urban agriculture is useful: to identify which stakeholders are actually involved in urban agriculture – or are important to involve – and to assess their mandates, opinions, interests, available resources and potential contributions to the MPAP process. Key

questions to identify stakeholders may include: Who/where are the actual urban farmers? What other categories of the population have a strong interest in urban agriculture? Who else might be



ETC RUAF

#### The RUAF training officers exchange experiences

affected (positively or negatively) by the policy on urban agriculture? Who is representing the interests of these people? Which organisations and institutions are playing – or have to play – a role in the development of urban agriculture (due to their mandate, knowledge and experience, resources, representation, etc.). Who is likely to mobilise for or against the new urban agriculture policy?

to analyse the relations between the various stakeholders, including

#### Situation analysis in Accra (Ghana)

An exploratory study on urban agriculture in the Accra metropolis (conducted June-September 2005) contained: four components: (1) inventory on urban agriculture (2) land use mapping and GIS (3) review and analysis of the policy and legislative framework on urban agriculture, and (4) stakeholders' inventory and analysis. Two documents were produced from this study, including a more extensive study report for discussion with the identified stakeholders and a policy narrative prepared in consultation with policy makers. The exploratory study revealed the phenomenon of urban agriculture in the Accra metropolis and highlighted constraints for its development, especially in relation to urban growth and increasing land use values. It has provided a basis for planning and identifying the policy directions that need to be pursued. There are currently no specific policies for urban agriculture, however, the bye-laws and regulations of the Accra Metropolitan Area set limitations to livestock production (obviously due to health and environmental concerns). Strategies for implementing an urban agriculture programme in Accra will have to be approached from a perspective of awareness creation, lobbying, negotiation and capacity building, as well as reviewing existing (livestock) policies and developing new policies and pursuing livestock integration in land use planning.

Source: Larbi, T., O. Cofie and T. Schutz, 2005. RUAF Progress Report July- September, 2005. International Water Management Institute, Regional office for Africa, Accra-Ghana. (See also the article on Ghana in this issue.)

cooperation and conflicts; to provide a basis for the design of effective strategies to facilitate the participation of relevant stakeholders and improve the communication and mutual understanding between the various participants in the MPAP process, thereby making it easier for stakeholders to learn from each other.

#### Development of a policy narrative

Based on the results of the situation analysis, a summary report (or policy narrative) is elaborated.

The policy narrative includes:

- presentation of the key data regarding urban agriculture in the city (presence, types and locations),
- important constraints encountered by (various types of) urban farmers and other actors,
- identified potential of (various types of) urban agriculture for existing municipal policy goals,
- the expected negative consequences of non-intervention / continuation of the present policies, and
- a draft outline of a city's strategic agenda on urban agriculture.

#### PHASE 3: SETTING THE AGENDA AND BUILDING THE INSTITUTIONAL FRAMEWORK

The findings of the exploratory study (summarised in the policy narrative) are shared with all identified stakeholders in order:

- to inform them on the present situation (presence, types, problems and potentials) of urban agriculture in the city,
- to enhance their involvement in the MPAP process and their commitment to actively contribute to the policy formulation and action planning process,
- to create a good basis to start the formulation of a municipal policy on urban agriculture.

The inventory of key problems and opportunities for the sustainable development of urban agriculture that was identified during Phase 2 will serve as the main input for the discussion and selection of the key issues that need to be attended in the policy on urban agriculture and the identification of possible courses of action (policy measures/instruments) regarding each issue.

### Lessons learned with regards to organisation of a multi-stakeholder forum in Lima, Peru

In Villa María del Triunfo, Lima, a city forum on urban agriculture was formed in May 2006. The city forum is made up of 20 organisations and institutions (including universities, NGOs, CBOs and urban producer groups, national governmental institutions, international organisations, such as FAO, and private enterprises). A facilitating and local team acts as secretariat of the forum. The forum meets regularly to develop the city's strategic agenda on urban agriculture, to be finalised by October 2006. IPES, a Peruvian NGO and RUAF partner, supports the forum and identified the following lessons related to its success:

=> The stakeholders that make up the forum are very motivated to further develop urban agriculture, as a result of previous awareness raising and sensitisation activities developed by the facilitating team during the situation analysis stage. For example, an NGO working on urban design and planning is interested in integrating urban agriculture into the (re)design of neighbourhoods.

=> As a result, the stakeholders incorporated elaboration of the strategic agenda into their institutional activities.

=> The day and hour of the meetings are set by the forum members and meetings are well-planned and moderated. The programme always includes use of energisers and presentation of audiovisual material on urban agriculture experiences in other cities of Latin America.

=> The forum also plans other activities such as exchange visits.

=> The facilitating team sends friendly, motivating and warm reminder emails to the Forum members or calls them personally to motivate them to attend all meetings. It is very important to create a friendly and trusting relationship with each member.

=> The discussions and agreements made at the meetings are documented and sent to all the members after each meeting.

*Personal communication: Gunther Merzthal, IPES-Promotion for Sustainable Development, September 2006. See further the article by Merzthal, Soto, Barriga and Ruiz in this issue.*

A longer-term vision on the desired development of urban agriculture in the city is formulated, key issues for policy intervention are prioritised and objectives and main strategies for the municipal policy on urban agriculture are defined (see also the article by De Zeeuw and Wilbers in this issue).

This could be developed by:

(1) **Organising meetings/workshops or focused consultations** with the different stakeholders are organised in order to:

- discuss in-depth the most important problems/issues identified in the exploratory study and to explore alternative solutions and intervention strategies,
- discuss their possible roles and identify available human and financial resources



Ivana Lovo

### Filling in a questionnaire in Gobernador Valadares

to support development of an urban agricultural programme, and to check/strengthen their initial commitments,

- discuss the desired organisational set up of the intended urban agriculture programme.

### (2) The constitution of a **multi-stakeholder forum on urban agriculture**:

The objectives and tasks of such a multi-stakeholder forum are to:

- bridge the communication gap between the various stakeholders involved in urban agriculture and function as a more permanent platform for information exchange and dialogue,
- coordinate the planning, implementation and monitoring of a concerted city agenda on urban agriculture,
- stimulate the institutionalisation of such activities.

The forum should preferably operate with a formal status and institutional commitment (participation should be included in the members' institutional agendas). The importance of local ownership and member contributions to the functioning of the multi-stakeholder forum and implementation of activities should be stressed. In addition, external resources may be mobilised by involving donor agencies in the forum.

One of the first activities of the forum would be to agree on the **city's strategic**

**agenda on urban agriculture**. The agenda should include:

- the formal decision to design and adopt a municipal policy and programme on urban agriculture,
- the city's vision: why do we want to support urban agriculture (what are our policy objectives?),
- the key issues: what are the main issues for policy intervention we will work on?

identification of the main strategies or instruments to be applied and an assessment of their likely impacts, together with an examination of their institutional and managerial implications. In most cases the strategies or instruments proposed are not alternatives, but overlap and complement each other (including legal, economic, educational, communicative or design instruments – for a description and examples of these instruments see the article by De Zeeuw and Wilbers in this issue).

### PHASE 4: OPERATIONALISATION

The next step will be to operationalise the city's strategic agenda into a full fledged and integrated municipal policy, with concrete action plans and projects on urban agriculture, adequate norms and regulations, zoning plans, etc. On the basis of the city's strategic agenda, the forum will define specific assignments to multi-actor working groups that will develop the various parts of the strategic agenda into operational action plans and concrete projects, adequate norms and regulations regarding urban agriculture, revised zoning plans, etc. Assignments should be clearly formulated and may concern the operationalisation of the identified strategies, the mapping of available and potential financial and other resources needed for their implementation or the design of effective mechanisms for coordinating and monitoring implementation. Results of the working groups will be presented in the forum for debate and to arrive at joint agreements (to be presented to and formalised by the legal political structures of the city).

Municipal policies on urban agriculture developed by various cities involve:

- setting up and supporting community gardens
- establishing farmer markets
- strengthening and training of urban producer organisations
- integrating urban agriculture into the

city development plan

- revising zoning and land use plans and development of regulations for ceding public and private land areas for urban agriculture
- providing economic incentives (reduction of property tax and water tariffs) for urban agriculture, etc.

(See further the articles by De Zeeuw, Dubbeling, Van Veenhuizen and Wilbers in this issue, as well as the articles by Lovo and Perreira Costa on Governador Valadares, and Terrile and Lattuca on Rosario).

Specific attention should be given to ensure the sustainability and consolidation of the urban agriculture policy and programme beyond the period of a given political administration (see also the articles by Lovo and Pereira and Homem de Carvalho in this issue) and to plan for future upscaling of the urban agriculture programme: from working with a small group of beneficiaries, to working with a larger number of people; from working in one or a few districts of the city, to working in various districts.

#### Action planning in Pikine, Senegal

A multi-stakeholder forum in Pikine was hosted by the municipality of Pikine and involved municipal councillors, urban producers, the Technical Support Committee members, environmental, planning and agricultural authorities, NGOs and CBOs. Discussing the situation analysis, the forum participants identified the main constraints for urban agriculture development related to (1) access to water, other inputs and equipments; (2) access to land (3) norms and regulations. It was decided to further study and discuss these issues in three working groups that had to come up with an action plan on how to tackle identified constraints and make optimum use of existing potentials in each area.

A forum session was also dedicated to the functioning of the working groups and agreements were made on the required profile of the working group members, their role and responsibilities, the activities to be implemented by the working groups and the profile and tasks of the working group coordinator.

After the forum meeting and following the setting up of the working groups, the African Institute for Urban Management (IAGU) organised an action planning training session for the working group members. IAGU furthermore supported four (4) meetings held with each group, applying Local Agenda 21 tools for action planning. Each working group developed an action plan related to their main theme and a second forum meeting was organised in June 2006, to share the results of the working groups with all the stakeholders and to prioritise the actions to be implemented.

Source: Sy Moussa and F. Gueye, 2006. *RUAF Progress Report January-May, 2006*. IAGU, Dakar, Senegal.

One way to enhance the continuity of the urban agriculture programme is by creating an institutional home for urban agriculture within the municipal structure and including it in the city's strategic development plan.

Another important point is to give sufficient attention on the integration of urban agriculture in the institutional programmes of the various institutional stakeholders participating in the multi-stakeholder forum (including the municipality) and assigning a special budget to it. The participating university can, for example, take on the development of training curricula on urban agriculture; a credit cooperative may be willing to open a credit line for urban agriculture; while an NGO can provide technical training to urban producers.

Planning actions and projects that give concrete short-term results is important to motivate and ensure the continued interest of the involved stakeholders. It also provides the space for learning by doing, and thereby provides valuable information for further policy formulation and design of longer-term activities.

#### PHASE 5: IMPLEMENTATION, MONITORING, ADAPTATION AND INNOVATION

Implementation of projects and policy formulation may be coordinated by a special working group (made up of representatives of the forum and various municipal departments). Progress and results are regularly communicated back to the forum (for example in quarterly or yearly forum meetings –see also the article by Lovo and Perreira Costa in this issue) and result in the revision of action plans or definition of new projects and policies.

Designing participatory monitoring and evaluation procedures is an integral part of any interactive policy formulation process and their application should start at an early moment in the process. Practical methods for process and outcome monitoring have to be defined; time and funds have to be set aside for this purpose; and arrangements have to be made for monitoring and evaluation of

the activities of the various actors undertaken in the context of the municipal urban agriculture policy and

#### Planning, implementation and monitoring of policy guidelines in Beijing, China

In order to implement and monitor the urban agriculture policy guidelines formulated in Beijing, China, the following measures are taken:

Acceleration of the planning process on urban agriculture is currently the main task for the governmental agencies involved. In order to achieve this aim, close collaboration and coordination between various departments and officials is necessary, as well as direct involvement of urban farmers, enterprises and the agro-tourism association amongst others.

Local governments will strengthen monitoring and management of the implementation of these activities and an impact evaluation system will be established. Participatory and self-evaluation is a necessary part of this system.

See further article by Jianming C., L. Shenghe, Y. Zhenshan, Y. Hong and J.Fang in this issue.

programme.

Monitoring and evaluation activities allow for the review and improvement (adaptation and innovation) of the strategies/methodologies used to achieve the desired outcomes of the interventions by documenting and sharing lessons learned concerning both successes and failures. They also allow the stakeholders to keep track of the impacts of the actions implemented, evaluate the degree to which these correspond with the objectives of the newly defined policy (for example contributions to poverty alleviation and food security), communicate successful efforts to a wider public, and create opportunities for further change. Monitoring and evaluation can benefit from including both internal and external viewpoints and should be developed with a gender perspective.

Various cities are developing easy-to-measure and realistic indicators to monitor the *impacts* of urban agriculture projects and other policy measures on food security and nutrition, income and employment generation, social inclusion of marginal groups, their organisation and improved access to productive resources, enhanced recycling of urban wastes and urban greening, etc. and are seeking to apply them more consistently.

Continued on page 31



# Integration of Urban Agriculture in Municipal Agendas: Experiences from Lima, Peru

**In Peru urbanisation is intense, especially in metropolitan Lima. Massive migration resulted in urbanisation of poverty, which in the case of Lima is concentrated in the expanding outer zones of the city. In this context of an impoverished urban-rural interface, urban agriculture is a promising alternative that can make an important contribution to the fulfilment of the Millennium Development Goals for fighting poverty and ensuring food security. This article describes experiences in two districts <sup>(1)</sup> of metropolitan Lima: Villa Maria del Triunfo and Lurigancho-Chosica.**



IPES

Policy making and action planning

In 1999, the municipality of Villa Maria del Triunfo became involved with the issue of urban agriculture and identified the need to develop a municipal policy to promote urban agriculture as a strategic activity. The process was supported by regional and international organisations that promote urban agriculture, such as the Cities Feeding People Program of the International Development Research Centre (IDRC/CFP Canada), the Urban Management Program (UMP-LAC) of UNDP and UN-HABITAT, IPES – Promotion of Sustainable Development and the Resource Centres on Urban Agriculture and Food Security (RUIAF Foundation).

Since 2003, the Urban Harvest programme located in the International Potato Center in Lima (a CGIAR<sup>(2)</sup>)

*This article is a combination of two articles that were submitted on Lima:*

- 1) "Villa Maria del Triunfo: Developing an Urban Agriculture Municipal Policy", by Gunther Merzthal and Noemi Soto (of IPES/RUIAF Foundation), and Raquel Barriga, and Paula Ruiz (of the Municipality of Villa Maria del Triunfo)
- 2) "Toward the Integration of Urban Agriculture in Municipal Agendas: an experience in the district of Lurigancho-Chosica", by Blanca Arce and Gordon Prain (of the Urban Harvest Program - International Potato Center) and Miguel Salvo (of Urban Harvest Program and the Universidad Politecnica de Madrid)

**Contact author:**

✉ [g.merzthal@ipes.org](mailto:g.merzthal@ipes.org)

initiative) has been implementing a project in the municipality of Lurigancho-Chosica and the municipality of Santa Maria de Huachipa with the objective of promoting urban agriculture as a positive, productive and essential component of sustainable cities and its integration into municipal urban management. The purpose of the programme model is to raise awareness, facilitate support, build capacity and offer tools to municipal governments to implement urban agriculture programmes and policies.

## VILLA MARIA DEL TRIUNFO

The district of Villa Maria del Triunfo is located 17 km south of Lima (Peru) and has a current population of 367,845 (52 percent women). The urban area occupies a third of the municipal territory, while the rest consists of steep hills. As high as 57.3 percent of the population lives in poverty (FONCODES 2000), while 22 percent suffers extreme poverty. The malnutrition rate is nearly 15 percent and at least 23 percent of children under eight suffer from chronic malnutrition. 77 percent of the economically active population of the city engages in formal and informal commerce, 18 percent in service activities, and only 5 percent in productive activities, such as industry and manufacturing (VMT *et al.* 2005). Villa Maria del Triunfo has a tradition of community organisation and high level of

participation of both men and women in public policy making, based on mutual aid, solidarity and community work. In this context, the municipality created a strategy in order to improve food security of the poorest citizens, by complementing and diversifying the quantity and quality of food consumption and facilitating the generation of supplementary family income.

In 1999, the Mayor of Villa Maria del Triunfo <sup>(3)</sup> and some council members initiated a learning process about the contributions of urban agriculture to the fight against poverty and other problems caused by urbanisation, and to reflect on its potential and risks. They shared lessons learned and participated in regional events and forums for reflection/discussion with various Latin American cities that had already been implementing municipal urban agriculture programmes and projects <sup>(4)</sup>.

## URBAN AGRICULTURE IN CITY DEVELOPMENT

The increased knowledge about the impacts of urban agriculture on urban management and the exposure to experiences of other local governments in Latin America encouraged the authorities of Villa Maria to incorporate urban agriculture into the strategic component called "Healthy District" of the city's Integrated Development Plan for 2001-2010.

The municipality, faithful to its tradition of community organisation, promoted a consensus-based process for the elaboration of this plan with the active participation of organisations, leaders, and representatives of all of civil society. As a result, the Municipal Urban Agriculture Promotion and Environmental Protection Program (PAU) was created in July 2000 under the Human Development Department of the municipality, in order to facilitate the incorporation of the issue into the agenda of the municipal administration.

### This process mobilised a broader group of stakeholders around urban agriculture

In 2004, during a process of internal restructuring, the municipal council and the mayor of Villa Maria del Triunfo decided to give greater emphasis to the promotion of urban agriculture and converted the PAU into a separate unit (Sub-Gerencia, third level administrative unit) of the Local Economic Development Department (see figure 1). In that year, the municipality allocated about US\$ 35,000 of its budget as co-financing funds for various UA activities (provision of inputs, agricultural production, processing and commercialisation). This amount does not include the human and logistical resources of the UA unit, which are valued at about US\$ 20,000. This contribution represents 2 percent of the municipal budget. In addition, the municipality, in alliance with local organisations, has been channelling resources from local cooperation institutions for the development of urban agriculture projects.

The urban agriculture unit has three lines of work:

**Capacity building.** This includes activities for promotion, training and orientation of urban producers, documentation of activities, systematisation and elaboration of baseline studies and research projects, and liaison and exchanges with other local, national and international parties.

**Productive development.** Includes activities tied to technical assistance, implementation of demonstration projects, identification and granting of vacant land, and commercialisation support.

### Enhancing the institutional environment.

This component deals with the local, national and international alliances which encourage the promotion of urban agriculture-friendly policies and legislation, as well as the activities and financial management involved in priority projects. Also included are the activities of consensus-building and participation in district development plans and the platforms derived from them.

The target constituency of the urban agriculture unit is the urban producers from the most vulnerable sectors of the population, including women heads of households, teenage mothers, working children and the disabled. Unfortunately, this initial process was based solely on political support and lacked quantitative and qualitative data on the situation of urban agriculture producers themselves. This lack of information limited the results and impacts of the activities since they were not conceived in a strategic way, nor did they always respond to the real needs and priority issues of the different groups of urban producers. On the other hand, financial and human resources were also scarce and thus also limited the efforts to fulfil the needs and demands of urban farmers.

### INCLUDING URBAN AGRICULTURE IN SECTORAL AND THEMATIC PLANS

In 2004, the municipality of Villa Maria del Triunfo brought together several institutions to elaborate its participatory Economic Development Plan.

Participants worked on four areas: commerce, services, production and urban agriculture. The inclusion of urban agriculture as an independent area was very much debated. The final decision was based on the following considerations:

- the political will to promote urban agriculture
- the availability of vacant land
- the existence of urban agriculture practices in all zones as a traditional cultural expression of the population
- urban agriculture as a strategy for generating income with low investment
- urban agriculture as an anti-poverty strategy

The methodology used to elaborate the plan included an initial working session to present the development proposal and an initial SWOT analysis. The presence of urban producers from all areas of the district verified that the decision to highlight UA was the correct one. The producers, principally represented by women, participated actively during the entire plan formulation process and in further dissemination at various other venues. This assisted very much in assuring that all the local stakeholders learned about the problems and alternative solutions proposed. Given that the problems in the various zones were similar, the process also helped strengthen group cohesion and develop a sense of identity among the producers, as they were not (nor had they ever been) formally organised.

The plan focused on commercialisation of produce but did not touch on productive and transformation activities. Moreover, since there was no data on the real situation of urban agriculture in the district, the plan was mainly based on the perceptions of those who took part in its formulation.

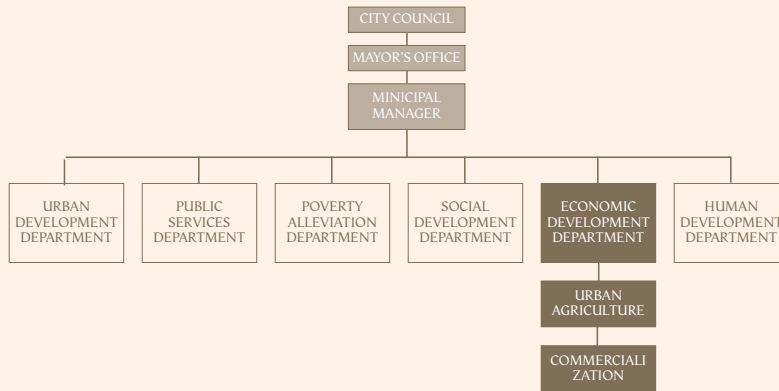
Having made some headway on the issue but always aware of the limitations of the process, the municipality of Villa Maria del Triunfo – with the support of IPES/RUIAF (through its Cities Farming for the Future Programme)– started revising its urban agriculture policy and began formulating a Strategic Plan for Urban Agriculture as a tool to make that policy operational. This process included the active participation of urban producers and other local stakeholders.

The Strategic Plan is based on an analysis of quantitative and qualitative



The Mayor of villa Maria del Triunfo harvesting with a local producer

**Figure 1:**  
Organisational flow chart for the municipality of Villa Maria del Triunfo in 2004



information on urban agriculture and the assessment of the needs, perceptions and current practices of the urban producers that were conducted during a participatory diagnosis. The process allowed for the definition of key issues and intervention strategies to overcome identified problems and promote the potentials of the current situation of urban agriculture in Villa Maria. The plan looks primarily at how to strengthen and consolidate the existing activities.

It should be pointed out that this process encouraged the formation of the urban farmers' network, strengthened the capacities (technical, methodological, participatory and gender-sensitive approach, etc.) of the urban agriculture unit staff and mobilised a broader group of stakeholders around urban agriculture. All these stakeholders actively participated in the formulation of the Strategic Plan and will contribute to its management and implementation through the City Forum on Urban Agriculture that was created on June 2006. The City Forum already has a functioning structure and is formed by 20 organisations and institutions (such as universities, NGOs, CBOs, national government institutions, international organisations, such as the FAO, and private businesses). The Strategic Plan will allow for a strategic and consented intervention, optimising human and financial resources in favour of urban agriculture. The final version of the plan is due on September 2006 and its implementation phase (pilot projects, training activities, etc.) is expected to start in October 2006.

**THE LURIGANCHO-CHOSICA DISTRICT**

The Lurigancho-Chosica district is located in the basin of the Rimac River, some 13 km east of the centre of Lima. It has a total population of 125,000. Approximately 10 percent of the adult population (aged over 15) work full-time or part-time in crop production, while 65 percent work in the service sector. 32 percent of the children under 6 are affected by chronic malnutrition (INEI, 1993). It is one of the most extensive and least urbanised districts of Lima Province. Most of the agricultural land is located on the valley floor (nearly 45 percent of the district area) and supports a wide variety of urban and periurban agriculture, mainly as a way of life in the struggle against urban poverty. The district supplies about 25 percent of metropolitan Lima's vegetables and includes many farms with animals including birds, guinea pigs, rabbits, pigs, cattle and goats (Arce and Prain, 2005). In

this context, the municipality of the Lurigancho-Chosica district, with the support of Urban Harvest, began a process at the end of 2003 of enacting urban agriculture legislation. The aim was to promote urban agriculture as a means of generating income and increasing food security while contributing to a productive, healthy, green urban environment, all of which are essential components of sustainable cities.

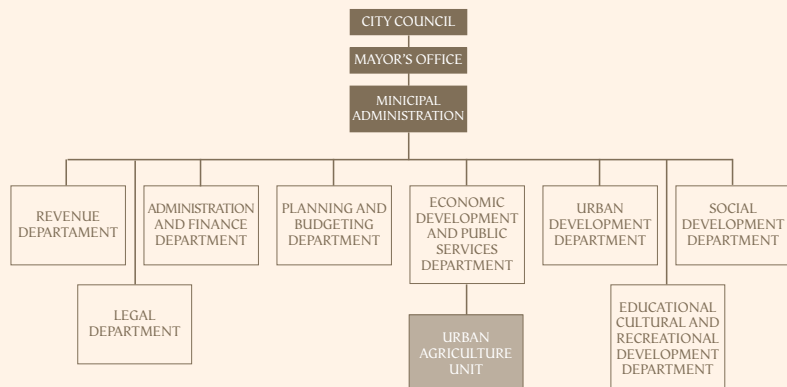
**LEARNING ABOUT URBAN AGRICULTURE**

The process began with the strategy of building awareness among municipal authorities and local institutions about the reality of the families that depend on agriculture for their livelihood. Two international workshops for mayors have been held since 2003, in which different Latin American cities exchanged experiences about the development of urban agriculture for confronting poverty and other problems caused by urbanisation. The mayors participating in these workshops signed agreements committing themselves to promoting urban agriculture in their cities and districts (these workshops were co-organised with IPES-Promotion of Sustainable Development).

The municipality of Lurigancho-Chosica identified the promotion of urban agriculture as a strategic municipal activity. Urban Harvest assisted in:

- creating a programme to identify the key stakeholders and to locate them within the municipality
- formulating an awareness-raising plan, organising workshops to raise awareness, coordinating information-

**Figure 2: Organisational flow chart for the municipality of Lurigancho-Chosica in 2004**





sharing, workshops within the municipality

- facilitating round-table discussions, organising significant public events (inauguration of the UA sub-section, inauguration of agricultural production activities, fairs, etc.) and visits to model farms, where ecological urban agriculture is practiced.

In this process, the authorities increasingly became convinced of the important role urban agriculture can play in the sustainable development of their cities. The lessons learned also extended to other stakeholders in the municipality. Meetings were also held with the Irrigation Users' Board, including the provision of training in agricultural production techniques and the organisation of farmer field schools, with 26 farmers involved as promoters.

#### CREATION OF THE URBAN AGRICULTURE UNIT

Before these activities were implemented, the municipality was not aware of the realities of the urban farmers, hence the farmers' demands remained unheard. However, through sensitisation, advocacy, action research and other learning processes, the local administration recognised the importance of local agricultural production and decided to support it through the creation – in late 2004 – of an urban agriculture unit (*Sub-Gerencia de Agricultura Urbana*) within the municipal organisational structure (see figure 2).

This unit is a service centre for agricultural producers and the local population by promoting the link between production and consumption. By using the production chain approach, it offers information to the producers about opportunities for training and programmes that support production and sales efforts in the municipality. The municipality managed to put together a budget of US\$ 100,000, with co-financing from Urban Harvest, for various activities. The specific objectives of the urban agriculture unit are to:

- intervene in urban planning with new constructive initiatives and legislation for the productive use of vacant lots
- support producers/farmers in building a sustainable, economically viable agro-ecosystem that is less dependent on chemicals
- contribute to producing higher income

through improved practices and diversification.

The action plan of the Lurigancho-Chosica urban agriculture unit is similar to that of the urban agriculture section in Villa Maria del Triunfo, and it involves:

- building the capacities of urban farmers and municipal stakeholders
- ensuring productive development, and
- fostering strategic alliances aimed at the integration of urban agriculture in municipal physical and land-use planning and encouraging social integration with attention to gender concerns.

The unit managers were trained with the support of IPES. This helped to complement their practical experience in municipal administration with specific knowledge on urban agriculture and highlighted the need to elaborate a strategy for urban agriculture development. The effort was part of a mutual learning process of unit personnel and staff from Urban Harvest.

### Awareness raising process is crucial in the formulation of urban agriculture policy at city level

#### INTEGRATION INTO THE MUNICIPAL AGENDA

After training, and with the support of the Urban Harvest programme, the municipal urban agriculture office began to develop a participatory process for strengthening local agriculture. This process integrates all municipal actors, including farmers, consumers, public managers and NGOs, among others.

This participatory and dynamic working process allows the municipality to adapt its structure according to the needs of the population. It has led to the creation of a number of ordinances in support of urban agriculture. To date, three ordinances have been promulgated: 1) creation of the Urban Agriculture Municipal Unit for the Lurigancho-Chosica district and the town of Santa Maria de Huachipa, which has already been approved; 2) establishment of a "no services no urban taxation" agreement, so that producers who do not receive the

urban services of sanitation, drainage and waste collection continue to pay rural taxation rates (approved); and 3) regularisation of the management of restaurant waste for the feeding of pigs (currently under revision).

#### *Dialogue and identification of needs*

A first step of the municipal management plan was to create forums for constant communication between the sub-unit managers, farmers and local institutions in order to optimally use the managers' capacities and potential and also to ensure continuous training, generate bonds of trust and encourage transparency. This will allow the creation of a solid programme to benefit the farmers.

A participatory identification of the needs of the producers was carried out with the Irrigation Users Board of the Rimac River, representatives of the producers themselves and municipal authorities. These meetings produced mutual learning among the different stakeholders and resulted in:

- identification of the current problems and the real needs of the farmers of the region
- a SWOT analysis of urban agriculture in the district
- a typology of the urban farmers
- creation of a strategic plan that will feed into a longer term action plan
- implementation of the existing urban agriculture programme.

The information generated was processed using Geographic Information Systems (GIS) in order to display a spatial analysis of the urban ecosystem and natural resource management. This has led to new proposals for territorial-physical planning.

#### *A development strategy*

Based on the results of the diagnostic study and the process of social learning, the urban agriculture unit has created a local team made up of representatives of the local population (farmers with land, farmers without land and food pantries), technical staff from Urban Harvest and a representative from an NGO active in the area, who together with municipal technicians started formulating an action plan for the unit for the next few years. The idea is to develop further urban agriculture in the municipality, by incorporating the proposals of the

affected groups into municipal policy. These proposals cover issues such as access to land, land tenure, access to and quality of water, investments (micro-credits), strengthening commercialisation and processing channels, environmental conservation, organic waste treatment and the quality of agricultural products. The initial strategy has been presented to the city council for debate.

The next steps will include the organisation of a series of participatory workshops in which the strategy will be shared with various sectors of the local population for modification and improvement. With this process of consensus-building, it is hoped that the activities of the unit will correspond to the real needs of the population.

## CONCLUSIONS

Raising awareness among decision makers and other stakeholders of the potential of urban agriculture to alleviate hunger and poverty is a key activity in promoting urban-agriculture-friendly policies. This can be accomplished through local seminars that present urban agriculture experiences (from other cities in the country or abroad), exchange visits, technical interchanges, etc.

It is also important to raise awareness among decision makers of the situation of urban agriculture and urban producers. Dialogue with and participation of producers in the aforementioned activities is needed to expose gaps and jointly seek solutions.

Although the awareness raising process is costly and requires much time and effort on the part of promoters, this activity is crucial in the formulation of urban agriculture policy at city level.

It is therefore essential to institutionalise urban agriculture, through its incorporation into the normative frameworks of cities (such as in their development plans), through the development of specific policies and legal frameworks (municipal ordinances, laws, regulations) for urban agriculture that facilitate and regulate its practice, and/or through the creation of municipal structures (units, departments, etc.) in order to operationalise the development of concrete activities for urban agriculture promotion.

Equally important is the strengthening of organisational, managerial, technical and networking capacities of urban farmers. A consolidated and strong organisation is better equipped to cope with the withdrawal of political support from the municipality.

While nothing ensures the success of urban agriculture activities, these reflections are presented in the hopes of contributing to the sustainability of urban agriculture beyond any particular municipal administration.

## Notes

- 1) Metropolitan Lima has 42 districts. Each district is a municipality on its own represented by a mayor and a municipal council.
- 2) The CGIAR is a unique global partnership of governments, multilateral organisations and private foundations that works to promote food security, poverty eradication and the sound management of natural resources throughout the developing world.
- 3) The mayor referred to is Dr. Washington Ipenza Pacheco, democratically elected by the residents of Villa María del Triunfo for the periods 1996-1998, 1999-2002, and 2003-2006.
- 4) These events had been organised by IPES in partnership with UN HABITAT's Urban Management Programme

## References

- Arce, B. and Prain G. 2005. La agricultura urbana como un componente económico familiar y su inserción en la gestión municipal: la experiencia del proyecto: "Agricultores en la Ciudad", Lima, Peru. Paper presented during the IV general assembly of the Latin American Network of Research into Urban Agricultura (la Red Latinoamericana de Investigaciones en Agricultura Urbana, Red AGUILA) in the seminar: Building Sustainable Cities with Urban Agricultura (Construyendo ciudades sustentables con Agricultura Urbana y Peri-urbana), from 28 to 30 April, 2005, México.
- FONCODES. 2000. Poverty Map of the National Social Welfare and Development Fund of Peru. Peru.
- INEI. 1993. Instituto Nacional de Estadística e Informática. National Census, 1993.
- Merzthal, G. and Barriga R. 2006. Combate a la pobreza e inclusión social a través agricultura urbana en Villa María del Triunfo: la importancia del diseño, planificación e implementación participativa y multi-actoral. Document prepared for the Third World Urban Forum, Vancouver 2006.
- Municipality of Villa María del Triunfo, DESCO, FOVIDA, IPES, SEDES. 2005. Participatory Economic Development Plan.

From page 26

But more attention is needed for participatory monitoring of the *process* of policy formulation and implementation. This is why the local partners involved in the RUAF programme also apply instruments, from the start of the MPAP interactive policy formulation process, to periodically review the communication and cooperation between the stakeholders, and progress made in the realisation of the various commitments of the partners involved. They also analyse changes that have come about in the various participating organisations, the degree of participation of the intended beneficiaries and gender considerations. To do this they apply methods such as "participatory change monitoring" and "outcome mapping" (Earl *et al.*, 2001).

The development and institutionalisation of an interactive process of policy formulation thus go hand in hand with the development and institutionalisation of urban agriculture. This article has described the principles, phases and challenges of an MPAP interactive policy formulation process developed for urban agriculture. The following articles will describe in more detail experiences gained by RUAF partners in various cities and provide more insights into how to

## References

- Deelstra, T. D. Boyd and M. van den Biggelaar. 2006. Multifunctional Land Use, Promoting Urban Agriculture in Europe. In: R. van Veenhuizen. 2006. Cities Farming for the Future: Urban Agriculture for Green and Productive Cities, RUAF Foundation/IDRC/IIRR.
- Hemmati, M. (with contributions from F. Dodds, J. Enayati and J. McHarry), 2002. Multi-Stakeholder Processes for Governance and Sustainability: Beyond Deadlock and Conflict. Earthscan. London, UK.
- Partners and Propper, 2004. Verslag Afronding "initiatieffase" opstelling regeling burgerparticipatie gemeente Westervoort.
- Earl, S., F. Carden & T. Smutylo. 2001. Outcome Mapping: Building Learning and Reflection into Development Programs. Ottawa: International Development and Research Centre (IDRC).

# The Beijing Urban Agriculture Policy Guidelines: A milestone

This paper presents the main points of the draft policy guidelines for development of urban agriculture in Beijing. These guidelines are currently awaiting final approval by the Beijing People's Congress and will be an important milestone in the development of urban and periurban agriculture in the city of Beijing in the coming decades.

**C**overing an area of 16,808 sq. km, the municipality of Beijing is divided into 16 districts and 2 counties. In 2004, the registered population numbered over 14.5 million, of which 3.2 million were living in the periurban areas. Millions of people have migrated to Beijing in search of jobs and economic security. At present there are more than 4 million migrants in the city (who lack the status of a registered citizen of Beijing).

New and expanding businesses and residential areas have pushed the urban boundaries far into the areas surrounding the city, leading to a large loss of farmland in the periurban areas (about 40,600 hectares in the period 1986-1995 alone).

## CHANGING VIEWS ON THE FUNCTIONS OF (PERI)URBAN AGRICULTURE IN BEIJING

Until recently, the Beijing policy on agricultural land use was focused entirely on the production of grains (especially rice). In the late eighties and early nineties various measures were adopted to slow down the loss of farmland (especially prime agricultural land) in the Beijing municipal area, including the "Regulations on the protection of Basic Farmland" issued in 1994 and the establishment of the Bureau of Land Management in 1995. Tree growing (e.g. along highways) and the creation of urban and periurban zones with an

CAI Jianming, LIU Shenghe, YANG Zhenshan,  
YUAN Hong, JIANG Fang  
✉ [caijm@igsnr.ac.cn](mailto:caijm@igsnr.ac.cn)



Awards handed out at the "village for folklore" tours in Beijing

ecological function also received more attention.

The Beijing municipal government adopted sustainable development as its main strategy after 1995. It also unofficially included (multi-functional) urban agriculture in its land use policy, since all land in Beijing was zoned and given a specific function, such as grain production, agro-tourism, ecological protection, food processing, and so on. The 1995 Land Use Policy is based on the conviction that agricultural land in and

## Other functions of the periurban areas of Beijing have also become important

around the city cannot be effectively protected by the local government, unless its economic return is comparable and competitive to other types of urban land use. The enhancement of the value of agricultural land use in urban and periurban Beijing, therefore, became a key objective of the municipal and district governments of Beijing, both by stimulating changes in the agricultural production structure as well as by promoting other functions of periurban

agriculture like agro-tourism and ecological management.

A key element in the city's efforts to develop periurban agriculture is the "2-2-1 Action Programme on Urban Agriculture", a comprehensive programme initiated by the Beijing municipal government in April 2004 that:

- analyses market demand
- strengthens development and management of agricultural resources
- mobilises investment in agriculture and credit provision to farmers
- strengthens cooperation among farmers
- stimulates agricultural technology development and maintains an information centre as a platform for sharing agro-technologies and experiences
- supports key agro-enterprises and builds up agro-product brands, marketing and certification
- supports greenhouse agriculture and introduces new seeds.

As a result, the productivity of agricultural land in periurban Beijing has increased and traditional farming (mainly grains) has gradually given way to more intensive production systems often linked with agro-enterprises that

undertake the processing and marketing (herbs, vegetables, animal products, flowers, tree seedlings, pot plants, etc.).

Other functions of the periurban areas of Beijing have also become more important. For instance, agro-tourism in periurban Beijing has made great progress in the last decade and generates new income opportunities for the farmers. Agriculture also increasingly plays a role in environmental improvement (urban greening, dust and heat reduction by tree growing, water management, recycling of organic wastes, etc.). More recently, the role of periurban agriculture in enhancing social security and income /employment generation, especially for the poor migrants, has also received increasing attention.

The RUAF programme, through its regional partner IGSNRR, supported the design and implementation of the *2-2-1 programme*, through training, a situation analysis, multi-stakeholder action planning and monitoring activities. A number of lessons have been learned through this programme in the past two years:

- Urban agriculture needs to be fully integrated into city planning.
- Public participation is important and needs to be enhanced. Many decisions require public involvement, because so far the farmers' interests alone are not considered enough.
- There is a lack of investment in urban agriculture. This is the most common complaint from the urban agricultural stakeholders.
- More research is needed on the impacts of urban agriculture and its development needs to be more closely monitored.

There is too much duplication of projects, e.g. redundancy of agro-tourism facilities in the same area.

Collaboration between agro-based enterprises and farmers (including migrants) needs to be stimulated.

#### THE (DRAFT) BEIJING URBAN AGRICULTURE POLICY GUIDELINES (2006)

Based on the experiences gained in the *2-2-1 programme*, the Beijing Agricultural Bureau, assisted by the international RUAF-programme through its regional partner IGSNRR and the Beijing Agro-

Tourism Association, drafted the Beijing Urban Agriculture Policy Guidelines, which were recently submitted for approval as a Municipal Bye law. These guidelines contain the views of the

### Urban agriculture has proven to be a powerful development force in Beijing

Beijing municipal government on the comprehensive development of agriculture in the periurban areas of Beijing, addressing its multi-functional character. Through the development of urban agriculture, the policy seeks to enhance the urban and periurban economy, improve urban farmers' income, generate employment, enhance social security and improve the environment. All of these factors will contribute to the goal of creating a sustainable city.

The municipal government is proposing a two-step plan. The first step is to modernise local agriculture in the coming 3-5 years, by diversifying different types of specialised production, modernising facilities, improving production processes, and modernising management (and labelling of products). The second step, in the subsequent 5-10 years, is to strive for an urban agriculture system that is integrated in the city's sustainable development.

#### BASIC PRINCIPLES

The principles of the new urban agriculture development policy can be summarised as follows:

- **Linking local conditions to the Beijing master plan.** The development of urban agriculture in each district or county of Beijing should comply with the requirements of the Beijing master plan as well as take the specific characteristics of the local situation into consideration.
- **Market orientation.** Agricultural production and management and agro-industry production will more strongly follow market demand for agricultural products and other services (regional, national and international markets).
- **Efficient use of resources.** Introduction and use of new agricultural technologies will be oriented towards a more efficient use of available resources, particularly land and water.

- **Integration of agricultural production with ecological and social services.** The social and ecological benefits of urban agriculture are just as valuable as the economic gains of urban agriculture for sustainable city development. The development of the agricultural production function has to be combined with the development of the ecological and social functions of urban agriculture for Beijing city development.

- **Cooperation and diversity at different levels.** Cooperation is needed and will be facilitated at district, city and regional level, and differences in agricultural assets and social economic conditions between the various locations will be taken into account.

Implementation of the policy guidelines on urban agriculture will mainly focus on three aspects: spatial allocation, implementation of support programmes and financing for urban agriculture.



Lu Mingwei

Cherry picking in Sijiqing gardens, Haidian district, Beijing

#### SPATIAL ALLOCATION

The spatial structure of Beijing has a concentric configuration. Various belts (i.e. the *inner city belt*, the *inner suburban belt*, the *outer suburban belt*, the *mountainous area*, and surrounding rural areas) have different agricultural assets, such as land and water, which has led to the development of different types of agriculture and other activities. The Beijing Urban Agricultural Policy identifies a specific strategy for the development of urban agriculture in each zone.

#### IMPLEMENTATION PROGRAMMES

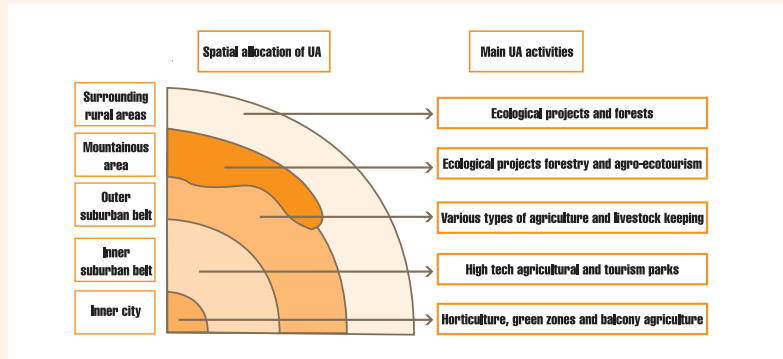
Furthermore, a number of programmes will be undertaken in each belt (see table) that link the development of urban agriculture with the various objectives of integrated city development.



The modernisation of the agricultural sector will be stimulated by improving the basic infrastructure, building agricultural facilities, and human capacity building, including building greenhouses, irrigation systems and promoting new types of energy, such as wind and bio-energy. The presence of the city's infrastructure and markets are important and the urban agricultural enterprises in Beijing will be stimulated to fully exploit the existing and future markets, establish agro-logistic systems, and add output value by using new agricultural technologies.

Key sectors will be given priority, like seed production and distribution, the production of local specialised products, agro-processing and agro-ecotourism.

The multiple functions of urban agriculture will be fully exploited. Activities to enhance the ecological functions include tree planting in the inner city, construction of green zones in the inner suburban areas, recovery of



Spatial allocation of urban agriculture activities in Beijing

**FINANCING**

Beijing will adopt the following policies for financing the development of urban agriculture:

- Various sources of possible investment will be explored and stimulated, like fiscal budgets of municipal and local governments, enterprise investments, various types of bank loans, and foreign investment.
- Local governments will facilitate the

created for further development of urban agriculture, involving farmers and consumers in the planning process by applying a multi-stakeholder approach to project planning and implementation.

- Local governments will strengthen monitoring and management of the implementation of these activities and an impact evaluation system will be established. Participatory and self-evaluation is a necessary part of this system.

Objective level	Programmes
Agricultural growth	Adjusting the agricultural industrial structure
	Construction of agricultural facilities
	Improvement of food security
	Improvement of industrial management and operation of agriculture
Rural construction	Broadening the agricultural market
	Establishing an agro-technology service system and improving public services in periurban areas
City development	Improving the ICT infrastructure in periurban areas
	Enhancing the social functions of urban agriculture
	Strengthening the ecological function of urban agriculture

Table 1 Implementation programmes and related policy objectives

degraded and waste lands, reduction of agricultural contamination, and preservation of vegetation in the mountainous areas. The development of regulations for environmental protection of vulnerable areas should protect areas that are of special ecological importance.

Social functions will be stimulated by providing training and mutual learning in periurban communities and participation of citizens in decision making. Agricultural associations are seen as an important means to enhance the inclusion of migrants and small farmers in this process and to link them with agro-enterprises, NGOs and local governments.

availability and implementation of critical and advanced agricultural technologies.

- Governments should guarantee basic infrastructure and agro-facilities, such as water, electricity and transport.

**PLANNING AND MONITORING**

In order to implement and monitor these policy guidelines the following measures will be taken:

- Acceleration of the planning process on urban agriculture will be the main task for governmental agencies. In order to achieve this aim, close collaboration and coordination between various departments and officials will be necessary.
- A facilitative environment will be

**CONCLUSIONS**

Urban agriculture has proven to be a powerful development force in Beijing. It has improved the living standards of its inhabitants by generating employment and income for resident and migrant urban farmers. It promotes social cohesion by engaging citizens in the urban-planning process. It maintains urban green spaces and limits urban sprawl. It encourages proper management and recycling of urban water resources.

The new policy guidelines will foster the further development of urban and periurban agriculture in Beijing as an integral part of its sustainable city development strategy. Approval of these guidelines will be an important milestone in the development of urban agriculture in Beijing.

**References**  
 Beijing Bureau of Land and Housing Management, 1997, Land resources in Beijing  
 Beijing Municipal Bureau of Statistics, 2004, Beijing Statistical Yearbook 2004, China Statistics Press  
 Beijing Urban Agriculture Development Policy Guidelines (Draft), 2006  
 Yang Zhenshan, 2005, Enterprise-based urban agriculture development in Peri-urban Beijing (master's thesis), Institute of Geographical Sciences and Natural Resources Research  
 Research Team, 2005, Study on Land use Strategy in Beijing, Institute of Geographical Sciences and Natural Resources Research

# From Awareness to Action; policies on urban agriculture in Accra



Theophilus Otchere-Larbi

Discussion on urban agriculture programme at Accra Metropolitan Assembly

More than 40 percent of Ghana's 20 million people lived in urban areas in 2000, and the country's urban population was growing at an estimated 4 percent per annum (GSS, 2000, Cofie *et al.* 2003), with some cities growing at an annual rate of up to 4.4 percent. This increase is taking place at a time when the rural population is aging and agricultural productivity in the rural areas is declining. As a result, an increasing number of city dwellers have resorted to urban agriculture, using urban runoff/wastewater and vacant open spaces for food production. These activities contribute to the food supply, employment creation and livelihood support in Accra.

Many households in Accra have small backyard gardens where they cultivate food (particularly vegetables) or raise small animals for household food consumption. Up to 80 percent of the perishable vegetables (especially lettuce and spring onions) consumed by the city's residents are produced within the city itself, and research has shown that about 200,000 urban dwellers benefit from it every day (Cofie *et al.*, 2005). In addition, this form of agriculture supports the livelihood of farmers and market women whose incomes have been found to be above the poverty line as set by the Millennium Development Goals (MDGs).

However, urban agriculture has many challenges including being a neglected sector in spite of its crucial role for the cities. Urban agriculture requires land and water. These two factors are scarce commodities in the city. Higher economic returns gained through other land-use

options have shrunk the land parcels available for urban agriculture or pushed urban agriculture activities from many plots.

To promote urban agriculture, the Accra Metropolitan Assembly (AMA) needs to pass supportive legislation, rather than advancing only prohibitive bye-laws. It is within this context that the role of policies for urban agriculture has been assessed. The RUAF-CFF programme, coordinated by IWMI-Ghana, started in 2004 to collaborate with a number of stakeholders in Accra on the issue of urban agriculture.

A sequence of activities was undertaken under the Multi-stakeholder Processes for Action Planning and Policy Formulation (MPAP) by RUAF-IWMI and the Accra Working Group. A pilot project, entitled "Promoting Public Education and Policy Support for Urban and Peri-urban Agriculture in Accra", has been commissioned for implementation, which seeks to facilitate the review and modification of the city bye-laws on urban agriculture. It also seeks to create more awareness of the benefits of urban agriculture, how to minimise the risks and ways to ensure food safety in the city.

As part of this project, a study visit to Kampala was organised for two key members of the Accra Metropolitan Assembly: Mrs Evelyn Doku, the Metropolitan Director of Food and Agriculture and Mr Ben Nii Annan, the Presiding Member of the Metropolitan Assembly. The objective of the study visit was to learn from the experiences of Kampala in reviewing the city's ordinances on urban agriculture and the development of a new city ordinance.

All these activities were aimed at deepening the knowledge and understanding of key stakeholders on the importance of urban agriculture in urban economic development, as well as targeting key policy makers at the Accra Metropolitan Assembly and its sister District Assemblies to incorporate it into their strategic action plans. For instance, during a multi-stakeholder forum and a policy seminar organised by RUAF-IWMI, key officials from the Accra Metropolitan Assembly, Ga West District Assembly, Ga East District Assembly, and Tema Municipal Authority, as well as representatives from the Ministry of Food and Agriculture (MoFA), the Food and Agriculture Organization (FAO), and some relevant donor agencies and NGOs,

Nelson Obirih-Opareh, CSIR-STEPRI

✉ [nobirih\\_opareh@yahoo.com](mailto:nobirih_opareh@yahoo.com)

Theophilus Otchere Larbi, IWMI-RUAF

✉ [t.larbi@cgiar.org](mailto:t.larbi@cgiar.org)

were invited to share ideas on how to make urban agriculture an essential component of the cities' development agenda. Mrs Winnie Makumbi, of the Kampala City Council, was invited as a special guest to share the experiences of Kampala with the participants at the policy seminar.

At both events there was a general consensus reached on the need to promote urban agricultural development in the city. Some of the ideas and implementation strategies are incorporated in the recommendations below. The effect of this collaboration with key officials and policy makers at the AMA and other municipal authorities is yielding positive results. The AMA has started reviewing its bye-laws to make them urban agriculture friendly. Indications are that its sister District Assemblies will follow soon. The general public's awareness on urban agriculture



Theophilus Otchere-Larbi

#### Action Planning by the team in Accra

is also being enhanced. This paper is based on the exploratory study which was carried out in the initial stage of the RUAF-CFF programme in 2005 and 2006, in which the authors were involved. As part of this study, AMA's bye-laws and other official documents were reviewed. The results and the current state of affairs, a.o. activities undertaken to promote urban agriculture are described here.

#### METROPOLITAN BYE-LAWS RELATED TO AGRICULTURE

- Hawkers Permit Bye-laws 1995; 9
- Control of Swine, Cattle, Sheep and Goats Bye-laws 1995; 1 (2)
- Control of Poultry in Dwelling Houses Bye-Laws 1995
- Growing and sale of crops Bye-laws 1995

- Control of Dogs Bye-laws 1995, as well as sections of the
- Public Markets Bye-laws 1995

A review of the relevant sections of the Accra Metropolitan Assembly's 1995 bye-laws shows clearly that the AMA recognises the existence of urban agriculture within its area of jurisdiction. However, the bye-laws are restrictive. For

### Policies on urban agriculture should recognise and address gender

example, the bye-laws on the keeping of swine, cattle, sheep and goats state that "no person may keep any swine, cattle, sheep or goats within the area of administration of AMA without a permit issued by the AMA for that purpose, which shall be determined in accordance with the fee-fixing resolution. The number of goats and sheep to be kept in any dwelling house may not exceed 10. No person may keep swine and cattle on any premises except at designated places based on an application approved by the AMA". Similarly, the bye-laws on poultry in dwelling houses, also states, "the number of poultry that may be kept in a dwelling house within AMA's administration area is restricted to 200 birds". According to the bye-laws on the growing and sale of crops, "residents may not grow crops anywhere except on their own premises, unless they first register with the medical officer of health by furnishing their name and address and the description of the site where the crop is to be grown. No crop may be watered or irrigated with effluent from a drain from any premises or any surface water from a drain, which is fed by water from a street drainage. Also no crops may be sold, offered or displayed for sale at any other place than in a market, stall, store, or kiosk".

The AMA's bye-laws thus require an urban agriculture practitioner to register with the metropolitan assembly, and to observe certain restrictions regarding the permissible size of a farm, the type of crops that can be grown, the type of water to use, the number of birds, goats, sheep that can be reared in a dwelling place and where cattle and swine can be reared. In practice, however, almost none of these activities are ever registered, nor

do they meet the municipal regulations concerning them. The main thrust of almost all the bye-laws of the AMA with regards to urban agriculture is to forestall public health and food safety concerns as well as to engender appropriate sanitary conditions in the urban environment. The dominant perception was that UPA practices compromise public health and food safety, and that prohibitive and restrictive laws against urban agriculture in the city is the best option. This school of thought regarded certain activities of urban agriculture as misplaced rural enterprises that should not be conducted in the city. City authorities in Ghana concentrate more on revenue collection and provision of sanitation, albeit unsuccessfully, to the exclusion of urban agriculture.

The fact that the AMA has a District Agricultural Development Unit (DADU) with budgetary allocations means that the city authority does recognise the importance of agricultural activities in the urban area. However, this awareness is not fully translated into concrete legislative support for urban agricultural development in the city. However, the current action plan seeks to form a task force to review the bye-laws and develop a position paper for consideration by the Assembly.

Urban agriculture did not feature prominently in any of the reviewed short-, medium- and long-term projects and programmes of the AMA. There is, however, some degree of shift to integrate it in the plan currently being developed. There are also no clearly defined (zoned) areas set aside for urban agriculture. Most of the plots of land on which agriculture is practised belong to institutions (notably the Council for Scientific and Industrial Research, Burma camp, and the University of Ghana, Legon). This puts the sustainability of urban agriculture in those places in doubt since these institutions may develop their land sooner or later for some purpose other than urban agriculture. The high value of land for other uses has aggravated this situation. At a higher policy level, a Land Administration Project (LAP) has been launched to develop policies on the creation of land banks for agricultural development and investments.

## KEY POLICY RECOMMENDATIONS

Urban agriculture contributes immensely to the socio-economic development of the city, particularly in terms of gainful employment, wealth creation, poverty reduction, and food security. To enable urban agriculture to play a more significant role, policies that are inimical to its sustainable development are being revised to stimulate farming practices that guarantee public health and food safety. The AMA, MOFA, RUAF-CFF through IWMI-Ghana and its collaborating partner institutions (CSIR and Metro Public Health Department and the University of Ghana) and other key stakeholders including NGOs and donor agencies are currently facilitating research and collaboration to promote the safe use of wastewater for irrigation, create more awareness and continuously educate the public on safe handling of produce. In all these areas, more public education and policy support are required.

The following are some actions being implemented by the Accra Working Group on Urban and Periurban Agriculture, to integrate urban agriculture into the development agenda of the AMA:

### AMA has started reviewing its bye-laws to make them urban agriculture friendly

1. Relevant stakeholders have been invited to participate in a working group to develop a comprehensive policy paper on urban agriculture in Accra, and to develop strategies to enhance farmers' production, income, livelihoods and contribution to the national agriculture. RUAF-IWMI with its key partner institutions through the MPAP seeks to achieve this in its Action Plan.
2. The Working Group on urban agriculture in Accra has planned a series of awareness creation programmes to educate the general public on the importance of agriculture in the city. It hopes to continuously raise public awareness on food safety, including how to treat produce from urban agriculture before using it. The media has been identified as an effective tool and has been engaged to design and implement these awareness programmes to help promote urban agriculture in the city.



Theophilus Otchere-Larbi

### Action Planning by the team in Accra

3. Urban agriculture is not fully integrated into the general micro-economic level development policies including the Ghana Growth and Poverty Reduction Strategy II (GPRS) programmes. Its integration at the AMA level presents an appropriate entry point for poverty reduction at the city level.
4. The government through the District Assemblies and the Ministry of Food and Agriculture should allocate more funds to promote and improve urban agricultural production.
5. Access to land and water is very crucial for the success of urban agriculture. Land-use policy thus has a large impact on urban agriculture. The demand for land far outstrips its supply. Allocation of land in the urban space should not be based solely on economic determinants of land use. The Accra Metropolitan Assembly should provide land for urban agriculture, rather than making desperate farmers resort to the use of greenbelts, which are not meant for farming. The RUAF-IWMI has undertaken a land use mapping of AMA (2005) and plans to provide periodic updates of maps in order to support participatory decision making in this regard.
6. Policies on urban agriculture should recognise and address gender differences and inequality and gender differentiation of labour (Who does what in urban agriculture? Who has access to what resources? Who controls what?).
7. Participatory monitoring and evaluation of the activities of urban farmers needs to be implemented, to assess their compliance to city bye-laws and best practices as well as to identify their problems and challenges.
8. Farmers are being provided with extension information on good agricultural practices and with assistance to help prevent conflict with other residents whilst enhancing their productivity and production. This should help remove some of the negative perceptions the public has about urban agriculture. This is particularly so with

respect to concerns on the use of polluted wastewater and its effect on food safety and public health. Livestock farmers are being introduced to space-confined practices that do not allow their animals (including goats, sheep, pigs, and cattle) to roam the streets. This support also includes information on improved post-harvest handling systems such as storage facilities and better marketing strategies to reduce contamination and post-harvest losses, and information on environmental sanitation and personal hygiene to mitigate potential health risk. Wherever possible, farmers are encouraged to consider micro-processing and other ways to add value to their produce to earn more money.

9. Extension services by MoFA need to be strengthened and packages specific for urban agriculture developed. The RUAF-IWMI has developed a database on its research findings and those of other research institutions and provides regular updates to stakeholders. It also hopes to develop extension materials (posters, flyers) on some of these technologies for distribution to farmers. Field demonstrations and study visits are also planned to facilitate extension to farmers or practitioners.

#### References

- Local Government Bulletin, (1995), Number 19; Accra Metropolitan Assembly Bye-laws.
- Cofie O O, Kranjac-Berisavljevic G. and Dreschel P, (2005), The Use of Human Waste for Peri-urban Agriculture in northern Ghana. *Renewable Agriculture and Food Systems*: 20(2) 73-80.
- Cofie O O, Dreschel P, Obuobie E, Danso G, Keraita B, (2003), Environmental Sanitation and Urban Agriculture in Ghana. In Harvey P (ed.) *Towards the Millennium Development Goals: Action for Water and Environmental Sanitation: Proceedings of the 29<sup>th</sup> WEDC Conference*, Abuja, Nigeria, 9-12.
- Ghana Statistical Service (2000), 2000 Population & Housing Census, Provisional Results, Accra.
- Obirih-Opareh N, Addotey A, (2005), Review and Analysis of Policies on Urban Agriculture in Accra. A Report on Exploratory Study on Urban Agriculture in Accra. As Part of Collaborative Research Under the RUAF CFF Programme. September 2005, IWMI, Accra, Ghana.

#### Acknowledgement

The exploratory study on urban agriculture in the Accra Metropolitan Area was conducted by four teams, which conducted (respectively): (i) an urban agricultural inventory; (ii) a stakeholder analysis; (iii) land use mapping; and (iv) a policy review and analysis.



# The Policy Framework and Practice of Urban Agriculture in Bulawayo

**Bulawayo is Zimbabwe's second largest city. Once Zimbabwe's industrial hub, the city has lost most of its major industries, through outright closure or relocation to the capital city, Harare. The city is thus home to a relatively poor urban population, compared to the population of Harare. A policy framework on urban agriculture is under development since 1996, and is supported by RUAF.**

**B**ulawayo is located in the southwest of the country and is home to an estimated two million people. The city is the hub of the Matabeleland region, which comprises all of western Zimbabwe from the South African border in the south to Victoria Falls in the north. The region receives relatively little rainfall. The bulk of the water consumed in the city is extracted from an aquifer called the Nyamandhlovu.

The city of Bulawayo has been developing a policy framework for urban agriculture since 1996, when the city council recognised the emerging phenomenon of urban farming and took a decision to improve it for the benefit of its residents. The council sought to improve urban agriculture in terms of increasing the area under urban agriculture activities and also the intensity of production per given area in a manner that would not harm the environment. In 1998 the council set-up an inter-departmental committee that was mandated to develop draft policy on urban agriculture. The committee developed a draft policy, which the council adopted in July 2000. In Zimbabwe policy at central or local



**The mayor of Bulawayo, Mr. Ndabeni Ncube addressing the stakeholder forum meeting in Bulawayo**

government level usually influences legislation in the form of Acts of Parliament or bye-laws for local authorities. The importance of the adoption of a policy on urban agriculture by the city of Bulawayo can therefore not be over-emphasized.

## **THE POLICY DOCUMENT ON URBAN AGRICULTURE**

The policy document for Bulawayo crafted by an inter-departmental committee and adopted by the city council in 2000. It is entitled **Urban Agriculture in Bulawayo – Issues and an Inception of Policy Guidelines**. The document highlights, in the first section, the key issues for urban agriculture in the city in terms of the characteristics, types of activities, and problems encountered. The second part deals with the objectives of urban agriculture in the city and the last part deals with urban agriculture proposals and policy guidelines.

The policy document defines urban agriculture as “a system of land use for agricultural purposes within the urban environment for crop and animal husbandry.” It therefore recognises urban

agriculture in its broad sense and does not limit it to crop cultivation. The policy also recognises that urban agriculture is widespread in the city and is a major land use activity with immense socio-economic benefits to the residents. It recognises urban agriculture as an industry that should be supported and organised. In Bulawayo, as well as in Zimbabwe in general, urban agriculture is seen as illegal or unwanted, so the intention of the policy is to legalise the activity in certain designated areas within the city.

The objectives mentioned in the policy document are to identify suitable land and allocate it to deserving people (i.e. the elderly, women and youths), promote the utilisation of urban wastewater, support the activity (with proper extension services, finances and project appraisals) and above all to make sure that the activity is properly coordinated. In order to control the practice, the city council must first formally accept it, register all pieces of land used for the purpose, categorise the agricultural activities and where they can be practiced, and re-affirm positive existing

**Takawira Mubvami**

✉ [mubvami@mdpatria.org.zw](mailto:mubvami@mdpatria.org.zw)

bye-laws that prohibit cultivation on certain areas like road verges, stream banks, etc., or prohibit the keeping of animals on residential plots or stands with limited space.

### URBAN AGRICULTURE PROJECTS

There are nine garden allotments in the city that are managed by the social services office in the Department of Housing and Community Services. Some of these allotments were in existence before the policy was accepted in 2000. The beneficiaries are mostly the elderly and the destitute. In addition the city managed the Gum Plantation Allotment, a massive community garden project on an estimated four and a half square kilometres. Like in the other garden allotments, preference in allocation of plots is given to the elderly and the destitute. Were most of the vegetable from the Gum Plantation Allotment for own consumption in 2000, it has been estimated that nowadays sixty percent of the vegetables are sold in the city and the rest in Francistown in neighbouring Botswana. The city still manages this Gum Plantation and wastewater from the council's sewage treatment works was and is pumped to the nine garden allotments for irrigation. Two extension officers assisted the residents with advice. However, the council has not been able to support the farmers recently due to manpower and financial constraints.



MDP  
Urban agriculture around resuscitated borehole in Bulawayo

### PROBLEMS IN IMPLEMENTATION OF THE POLICY

The major problem initially encountered in implementing the policy was the lack of a driver and an institutional home for the policy. The policy is largely a result of the work of an interdepartmental committee sponsored by the Town Planning Division, but in fact one person, who also had other duties within the city council, did most of the work. This has

changed now, since the council has agreed that the Town Planning Division will deal with urban agriculture and staff will be dedicated to the activity.

Another problem in the implementation of the 2000 policy was that it conflicted with some existing bye-laws in Bulawayo. The main conflict arose with the Bulawayo (Protection of Lands and Natural Resources) Bye-Laws of 1975, which regulate how residents in the urban or periurban area may practice urban agriculture by detailing the types of land that can be used for agriculture and restricting stream bank cultivation. Whilst the 2000 policy identified land very close to streams as being suitable and desirable for urban agriculture activities, the earlier bye-laws stipulate that cultivation is not allowed within 30 metres of a stream. The residents' association is in favour of stream bank cultivation and even some of the demarcation of land for urban agriculture has taken place in areas that do not meet the provisions of the regulations. Recent scientific research has shown that not all stream bank cultivation causes soil erosion; certain crops can actually help arrest soil degradation, such as bananas. Therefore the regulations, which proved difficult to enforce anyway, need to be specific to certain types of crops or cultivation methods.

The policy further encourages the keeping of small livestock, including pigs, rabbits and to some extent goats, within the areas designated for urban agriculture. However, the Town Planning Schemes of 1975, in Part II Condition 4 (b) state that no cattle, sheep, goats, swine or horses shall be kept without consent of the authority responsible for town planning. Most people believe this condition is no longer applicable and new initiatives to review the policy guidelines will tackle the issue.

Finally, the 2000 policy encourages the establishment of fisheries and the use of treated wastewater for the aquaculture systems. This could create a conflict because the wastewater is currently being used for the production of crops at Gum Plantation and other garden allotments dotted within Bulawayo. The diversion and use of the water for fisheries would reduce the amount available for irrigated crop production.

### THE SITUATION IN 2006

The 2000 urban agriculture policy for Bulawayo reflected the intention of Bulawayo city council to recognise urban agriculture within the city. The policy in fact was a proposal for an agriculture plan for the city. The proposals are divided into immediate-term (1-5 years), medium-term (5-10 years) and long-term (over 10 years) plans for developing urban agriculture. However, the draft proposal failed to deal with critical issues of incentives for urban farmers and how land and other resources like water and financial matters should be tackled. Unfortunately, since the adoption of this policy in 2000, no new initiatives have been developed.

### The major problem initially encountered was the lack of a driver and an institutional home

Following the introduction of the RUAF-CFF project in the city in 2005, the city council started implementing new city-wide activities (see also the article by Dubbeling and de Zeeuw in this magazine). The debate on urban agriculture was revived and the city has revisited the policy with the intention of streamlining it and coming up with a policy on urban agriculture that addresses some of the issues emanating from the current debates in the city. Some of the activities that have been embarked on include:

- Establishment of an Urban Agriculture Multi-stakeholder Forum for the city to guide the further development and implementation of the urban agriculture agenda for the city.
- Engaging a team of experts to identify pilot projects on urban agriculture. This did not get off the ground earlier due to lack of funds.
- Identification of periurban land on the edge of the city. The land is to be demarcated into 200-square-metre plots for use by households.
- Resuscitation of boreholes in the city and the use of land around them for urban agriculture.

### POLICY CHANGES

Through the experience of implementing the policy and the introduction of the RUAF CFF project in 2005, the city council and other actors learned that

several changes have to be made to the policy guidelines and that a new policy needs to be developed. They also realise that the new policy needs to be based on an inventory of the 2000 policy guidelines and current legislation. An audit of legislation was undertaken in 2003 by MDP and the Zimbabwe Environmental Law Association (ZELA) to identify relevant and current policies and legislation which impacts urban agriculture (Makonese and Mushamba, 2004). The research established that, despite the seemingly prohibitive environment, current legislation does indeed offer many opportunities for the practice of urban agriculture. This is contrary to popular belief that the law prohibits urban agriculture in Zimbabwe. In fact, the law recognises the risks that go along with agricultural production in the city, and is intended to regulate urban agriculture.

The first and main issue that will have to be addressed as a direct result of the 2000 policy is the need to establish an institutional home for urban agriculture, preferably within the city council. At the moment it is not clear which department or section within the council will be responsible. The Town Planning Section within the Engineering Department has



MDP

**Participants of the stakeholder forum meeting in Bulawayo in 2006**



been temporarily assigned responsibility. What is needed is confirmation of this arrangement as a permanent one. The policy needs to be clear on which department will coordinate urban agriculture activities. All indications are that the Town Planning Section within the Engineering Department will play this crucial role.

The second issue is that the new policy to be developed should articulate and give clear guidelines on the issue of irrigation and water harvesting for urban agriculture (i.e. both gardening and aquaculture). The policy guidelines of 2000 do not mention water harvesting and the use of wastewater for irrigation. The current description of urban agriculture in the policy guidelines does not distinguish between on-plot farming and off-plot farming activities. It is imperative to encourage the development of "on-plot" urban agriculture as land for this is already secured. There is a general feeling amongst most stakeholders that the current guidelines emphasise "off-plot" urban agriculture activities without adequately addressing issues of "on-plot" farming.

Issues related to integration of urban agriculture into overall urban development are not covered by the current policy guidelines. It is imperative that this be addressed in the revision of the policy and in the development of a new policy on urban agriculture. The action plans being developed under the current CFF programme for the city are articulating this issue.

The last important issue to consider in reviewing the 2000 policy, involves the

need for broad-based participation by all stakeholders in the reviewing of policy. As was mentioned, the policy was largely

### **There is a need for broad-based participation in the reviewing of policy**

crafted by a small committee of the city council. One of the results is that the policy has remained largely unknown among the majority of stakeholders. Participation of a wide array of stakeholders and their inputs in the development of a new urban agriculture policy will also assist in the organisation of the projects on urban agriculture at community level. It will also make it easier to find sources for funding and to regulate the activity. The CFF project has facilitated this process through the formation of the urban agriculture stakeholder forum in the city. The forum, which was established in September 2005, met five times in 2006. A summary of their deliberations is available on [www.mdpafrica.org.zw](http://www.mdpafrica.org.zw). The Urban Agriculture CFF programme is currently participating in the policy review and formulation process. Details of the MPAP process are discussed elsewhere in the article by Dubbeling.

### **CONCLUSION**

Urban centres in Zimbabwe can become home to some of the highly productive farming operations in Zimbabwe, enabling the country to achieve a much faster economic recovery than anticipated. The draft policy guidelines for Bulawayo adopted in 2000, were inadequate in addressing critical issues relating to urban agriculture, like creating an institutional home, proper integration of urban agriculture into urban development, and the absence of critical discussions on how to make resources available for urban agriculture. Constraints in funding have also contributed to this lack of proper attention. These issues are now being addressed under the CFF Action Plan for Bulawayo.

#### **References**

- Makanatsa Makonese and Shingirayi Mushamba. 2004. The Policy and Legislative Framework for Urban Agriculture in Zimbabwe  
Bulawayo City Council 2000. Urban Agriculture in Bulawayo – Issues and an Inception of Policy Guidelines.

# Legislation, policies and the practice of urban farming in Nakuru, Kenya: Contradictions abound



Dick Foeken

With a loan from ECLOF, the owner of this premise was able to expand his pig-raising activities and improve his butchery

Despite its importance as a livelihood source, farming in towns is (still) illegal in many African countries. By-laws frequently date from colonial times and forbid all agricultural activity within the boundaries of urban centres, as it does not fit in the western perception of what constitutes 'urban' (e.g. the city-is-beautiful idea) and because it is believed to cause all kinds of environmental hazards. However, as the practice has become increasingly widespread over the last two decades, government policy has generally changed from being mainly restrictive to being tolerant or even encouraging.

**T**he present situation in the town of Nakuru (population approx. 250,000), where crop cultivation and livestock keeping are quite common, can best be described in terms of tolerance. However, looking closer at the relevant legislation, the local policies and current practice, one discovers that the situation is still rather confusing.

## NATIONAL LEGISLATION

National legislation relevant for urban agriculture, and contradictions between the various documents, abound in Kenya. Some acts – such as the Agriculture Act, the Land Control Act and the Physical Planning Act – offer local authorities the legal power to decide whether or not to allow urban farming. Other acts provide the framework to control the activity. Of these, the most important one is the Public Health Act, which deals with everything that causes “any nuisance or

other condition liable to be injurious to health”. Section 118 of this Act defines nuisances in relation to animal keeping. Section 157 deals with crop cultivation and irrigation in relation to the public's health and also provides the legal backing for prohibiting irrigation with sewage water. And both the Public Health Act and the Water Act contain the legal framework to forbid the use of, for instance, chemicals in urban agriculture.

The most important national legislation in relation to urban agriculture is the Local Government Act. It provides the local authorities with full decision-making power in relation to crop cultivation and livestock keeping within the municipal boundaries. For instance, according to Section 144, a local authority may invoke this Act to temporarily provide its urban dwellers with land for urban agriculture. More specifically, Section 155 states that every municipal or town council “shall have power (...) to engage in livestock and agricultural undertakings”. The same article allows for “the planting of any specified crops by persons for the support of themselves and their families

in areas which in the opinion of the (...) council are suffering from or likely to suffer from shortages of foodstuffs”. In other words, if willing, the Nakuru Municipal Council has the legal possibility to engage in or to allow crop cultivation for the (very) poor and in areas where these poor are living.

Another provision to forbid, restrict or control crop cultivation is offered in Section 160 stating that “every (...) council shall have power to plant, trim or remove trees, flowers and shrubs in or on any public space”. This may seem like a rather harmless act in relation to urban crop cultivation, but it can become a powerful tool when the definition of ‘shrubs’ is broadened to include vegetables, as demonstrated at one time by a mayor of Nairobi. The Local Government Act also provides the legal framework for banning the use of sewage water for irrigation, because Section 173, for example, states that “any person who (...) makes or causes to be made any opening into any (...) sewer (...) shall be guilty of an offence”. The local authorities are entitled not only to control crop cultivation but also to “prohibit or control the keeping of

**Dick Foeken**  
African Studies Centre, Leiden,  
The Netherlands  
✉ [dfoeken@ascleiden.nl](mailto:dfoeken@ascleiden.nl)



animals, birds and bees so that their keeping shall not be a public nuisance or injurious to health” (Section 162).

In summary, according to the national legislation in Kenya, urban agriculture can be forbidden, restricted, allowed, controlled, facilitated or even promoted. Which line is actually followed at the local level depends entirely on the by-laws and ordinances made by the local authorities. The local authority’s power to draw up such a local legal framework is provided by the Local Government Act, while the various other acts discussed above form the legal basis for the provisions made in these by-laws.

(e.g. they caused traffic accidents). Dumping livestock waste in the street could also be punished, on the basis of By-law 93, which states that “any person who throws (...) in any street (...) or open space (...) any waste (...) or other refuse, liquid or solid likely to cause nuisance (...) shall be guilty of an offence”. However, the fact that by the end of the 1990s, quite a few of the Nakuru urban livestock keepers did dump (some of) their animals’ waste in the street shows that this ‘offence’ was not likely to be punished.

During the past five years, under the influence of developments elsewhere and

sustainable urban planning and development. However, urban agriculture is conspicuously absent in this document.

Having missed this chance and lacking any by-laws dealing with urban agriculture, the Municipal Council decided to ‘borrow’ the existing *Kampala City Urban Agriculture Ordinance*. Section 2 of this Ordinance recognises that “the production of food in the city benefits health in terms of nutrition, and may have other good effects like creating a green environment”. At the same time, however, “urban agriculture can also create health hazards and damage the environment. Therefore, it must be subject to proper planning and management”. What this “proper planning and management” constitutes is outlined in the rest of the guideline and includes such issues as urban agriculture permits, places where farming is not allowed (e.g. road reserves, green belts, parks) and practices that are forbidden (e.g. no “untreated human waste to be used as manure” and only proper use of chemicals).

In 2004, new Environmental Management By-laws were drafted. These by-laws replaced the 1994 Public Health By-laws and include (again) the prohibition of anything that causes a risk to public health or pollutes the environment. What is surprising about these by-laws, as far as urban agriculture is concerned, is that in Part XVI, which deals with “Greening and Beautification”, they simply forbid any form of urban agriculture. For instance, By-law 180 on the cultivation of food crops states that “any person found growing food crops within the Council’s jurisdiction shall be guilty of an offence”.

### Many contradictions can be found among the pieces of legislation, policies

The same applies to livestock keeping: “any person who rears or keeps any animal within the jurisdiction of the Council shall be guilty of an offence” (By-law 176). The latter was reinforced by the recently approved (in January 2005) Control of Stock By-laws of 2004: By-law 4 states that “no person shall keep or graze any stock or horse within the



Dick Foeken

**According to the new Urban Agriculture By-Laws the cultivation of maize and bananas is forbidden**

#### LOCAL BY-LAWS

Throughout the 1990s, farming in Nakuru was officially illegal but was tolerated by the authorities. The main legal control mechanisms were the Public Health By-Laws of the Municipal Council of Nakuru, for instance those of 1994. These by-laws were based on the Public Health Act, which implied that farming is prohibited if it causes a “nuisance”. It could lead, for instance, to fly and mosquito breeding, disposal of dirty water, pollution of wells and foul smells, some of which can cause diseases such as malaria, typhoid, cholera, diarrhoea, etc. Thus, any farming activity that was either considered to be detrimental to public health and/or safety or that other people complained about was dealt with by the municipal authorities, in casu the Public Health Officer. In practice, this concerned mainly livestock that were confiscated because they were a nuisance to neighbours or to the wider community

of research carried out in Nakuru itself, there has been a growing awareness among the local authorities that farming in town is very important for the livelihood of many Nakuru townspeople and that it is better to try to regulate the sector instead of maintaining a ‘laissez-faire’ attitude (which is so common in many African towns and cities) towards something that is officially illegal. A good opportunity to translate this awareness into policy was presented by the *Localising Agenda 21 (LA21)* programme. Its objective was to provide training for the development of a new approach towards urban planning and management, focusing on environment-conscious development of Nakuru (“People’s Green City”), with particular attention being paid to the low-income groups. The most concrete result of the programme concerned the preparation of the so-called *Strategic Nakuru Structure Plan* (see MCN 1999), a blueprint for

boundaries of the Municipal Council of Nakuru unless he is in possession of a permit". This permit, however, is issued only for stock held for slaughter at the Council's slaughterhouse, stock to be offered for the Nakuru Agricultural Show, or stock that has been "lawfully impounded" (By-law 5). In other words, it is not possible to obtain a permit for livestock kept in the way many Nakurians currently do. Even so, By-law 6 prohibits the construction of any stable or shed or other type of building for keeping livestock, while By-law 7 provides that "no stock shall be kept (...) in or under any portion of any building (...) used for the purposes of human habitation", so keeping chickens in a room in the house, as some people do, is illegal.

Surprisingly, however, the recently drafted Urban Agriculture By-Laws of 2006 do legalise the activity (which in itself is a big step forward). These by-laws are based on the Kampala example in the sense that farming in town is recognised as an important activity for many urban dwellers and that it is in principle permitted. At the same time, the municipality attempts to regulate the sector, for instance by introducing permits that are required by anyone who wants "to practise urban agriculture within the jurisdiction of the Council" (Section 9). Based on our survey data, that would imply some 35,000 permits, which seems like more than could realistically be dealt with in a town the size of Nakuru. It is also rather surprising that chemical inputs for crop cultivation are allowed (Section 26), provided that the farmer follows "the manufacturer's instructions". This seems impossible to control, and the use of chemicals is detrimental in any case because of the risk it poses to the nearby Lake Nakuru (a world-famous national park) with its very fragile ecosystem. Finally, "growing of any crop of more than one metre high" (Section 33) is "an offence", implying that the large majority of the Nakuru crop cultivators (maize growers) violate the law.

Both the Environment Management By-laws and the Urban Agriculture By-Laws fall under the responsibility of the Council's Department of Environment. In the former by-laws, urban agriculture is illegal, in the latter it is legal. But legal or



Dick Foeken

#### Experimenting with bag cultivation (*sukuma wiki*) in the ARDP compound

not, farming in town is not questioned by the Ministry of Agriculture. Nakuru Municipality is just one of the extension divisions of Nakuru District, although assistance is mainly restricted to people who keep cattle (Foeken 2006).

#### LOCAL POLICIES AND PRACTICE

Before any of these by-laws came into existence and thus urban agriculture was simply illegal, various farming developments were already taking place. Farming has been an omnipresent phenomenon in Nakuru for a long time, and even NGOs officially recognised by the Council have been actively involved in urban farming for some years. One of these NGOs was the Agriculture and Rural Development Programme (ARDP) – under the Catholic Diocese of Nakuru – which provided small-scale farmers with indirect support (training) or direct support (e.g. loans for buying animals, materials for building a water tank for irrigation or a zero-grazing unit for dairy cattle). Although the programme took place mainly in the rural areas, several urban and peri-urban farmers in Nakuru Municipality were also among the participants. In general, the programme was quite successful. As for the (peri)-urban farmers in Nakuru, a comparison of this group with a group of 'neighbours' (i.e. farmers not participating in ARDP) showed that the income from selling animals (mainly cattle) and animal products (mainly milk) was much higher among the ARDP farmers (Foeken 2006).

Another NGO is the Ecumenical Church Loan Fund (ECLOF-Kenya), which supports the building of sustainable communities by providing fair credit services for human development in both rural and urban areas. One of its main objectives is "to increase accessibility to credit by the economically active and marginalised micro/small business and

farming people of Kenya". The Nakuru branch was set up in 2001 and three years later it was already serving about 600 members (clients), most of whom were small-scale traders. A small proportion of the members were farmers, who benefited from ECLOF's financial assistance for expanding or improving their farming activities. Most of these farmers were engaged in dairy farming (zero-grazing) and poultry keeping in the rural areas, however, some of the farmers could be classified as *urban* farmers, i.e. living and farming within the municipal boundary of Nakuru town. Due to the requirement that the activity must be income generating, all these urban farmers were involved in livestock keeping: three in dairy farming (zero-grazing), one in pig raising and one in poultry keeping. To be eligible, the potential member must be engaged in an income-generating activity (business or farming) and at the same time belong to a registered group. This is usually a group of friends or neighbours with a common interest. Members of a group who are well known to each other are therefore able to co-guarantee one another when applying for a loan. While ECLOF-Kenya encourages already existing groups, the majority of their members came together after learning about ECLOF's activities. That applies also to the four cases that are described in Foeken (2006). All four are low-income households (including one female-headed household) and they all managed to substantially raise their income by using the loan for expanding their commercial (urban) livestock undertaking. One of the loans was used to improve and expand a pig farming business, an activity usually considered to be one of the least desirable in an urban setting from an environmental point of view.

A third (Danish-sponsored) NGO called SENVINET (Strategic Environmental Network) has been working in Nakuru since the mid-1990s on an environmental-awareness programme, focusing on school children and actively promoting organic farming at schools. It is assisted by extension officers of the Ministry of Agriculture. The impact has not (yet) been studied, but given the fact that in 2000 all secondary schools appeared to use chemicals in their crop-cultivating activities (see Foeken 2006), one may wonder how successful the programme has been.

More recently, in December 2004, an initiative called “Local Participatory Research and Development on Urban Agriculture and Livestock Keeping in Nakuru” was launched. This programme is an initiative of Urban Harvest, an international research body sponsored by CGIAR, an NGO: the Kenya Green Town Partnership Association, the University of Nairobi (Department of Soil Sciences) and also the Municipal Council of Nakuru. The major aims of the programme are to further develop the Urban Agriculture and Livestock Keeping Research and Development Centre already established next to the Nakuru dump and to help Nakuru’s urban farmers and livestock keepers to improve their livelihoods and contribute to urban food security. In a meeting in December 2004, a common understanding was reached among all stakeholders – government officials included – in that they “strongly felt that there was a need for the proposed initiative in Nakuru (...) and expressed their commitment to the project if it came to fruition.” It is as yet too early to be able to assess the impact of this programme.

### There is a growing awareness among local authorities that farming in town is very important

In addition, high-ranking representatives of the Municipal Council recently spoke quite positively about farming in Nakuru town. In November 2002, a workshop was held at which the results of the various studies in the context of the Nakuru Urban Agriculture Research Project (NUAP; see Foeken 2006) were presented to and discussed by various stakeholders, including Municipal Council officers (and also the Senior Programme Officer and Urban Agriculture Programme Coordinator from the Municipal Development Partnership [MDP], Harare). Initially, the then Director of Environment was firmly against any form of farming in town, but he had somewhat changed his mind by the end of the workshop. The then Director of the Department of Housing called the workshop “an eye-opener”, stressing that “we need to revise our housing policy”, i.e. new municipal houses should have a compound so that the inhabitants can at least produce part



Dick Foeken

**Livestock is only permitted in zero-grazing in the new Urban Agriculture By-Laws, so the owner of these animals is violating the law**

of their own food. During a consultative meeting with various local stakeholders in May 2005, the representative of the Department of Environment said that they were now actively promoting urban farming in Nakuru, at least as long as the activity is carried out in an environment-friendly way. Finally, the new Urban Agriculture By-Laws 2006 can also be regarded as a direct result of the 2002 workshop.

### CONCLUSIONS

In summary, many contradictions can be found among the pieces of legislation, policies and practices of various levels of decision-making. Comparable situations exist in Tanzania (see Foeken *et al.* 2004 and Foeken 2005), Harare (Zimbabwe) and to a lesser extent in Pretoria and Cape Town (South Africa) (see Martin *et al.* 2000). Such contradictions create a dilemma for local authorities. For a long time, a *laissez-faire* ‘policy’ prevailed, in which urban agriculture was tolerated (but certainly not necessarily welcomed), mainly because of the scale of the phenomenon and the incapability of the authorities to enforce the law. Meanwhile, local policy making has gradually shifted. Recognising the importance of the activity for the livelihood of many townspeople, awareness has grown that it is better to try to control and where possible to promote the activity – especially for the poor – than to restrict or even forbid it. The peculiar thing is, however, that the various new sets of by-laws in Nakuru

still contradict each other. Nevertheless, a positive development is that the latest by-laws on urban agriculture imply an official recognition of the sector. Despite this ambiguity, the next step should be to integrate urban farming into urban planning. In that respect, Nakuru is ahead of many cities and towns in sub-Saharan Africa, where farming is not (yet) accepted as an urban type of land use and where ‘laissez-faire’ is still the rule (see *Urban Agriculture Magazine* No. 4, July 2001).

### References

- Foeken, D. (2005), *Urban agriculture in East Africa as a tool for poverty reduction: A legal and policy dilemma?* Leiden: African Studies Centre, Working Paper No. 65. Also on <http://www.ascleiden.nl/PDF/workingpaper65.pdf>
- Foeken, D. (2006), “*To subsidise my income*”: *Farming in an East African town*. Leiden: Brill.
- Foeken, D., M. Sofer & M. Mlozi (2004), *Urban agriculture in Tanzania: Issues of sustainability*. Leiden: African Studies Centre, Research Report 75.
- Martin, A., N. Oudwater & K. Meadows (2000), *Urban agriculture and the livelihoods of the poor in Southern Africa*. Paper presented at the International Symposium on “Urban agriculture and horticulture: The linkage with urban planning”, Domäne Dalem, Berlin, 7-9 July 2000.
- MCN (1999), *Strategic Nakuru Structure Plan. Action plan for sustainable urban development of Nakuru town and its environs*. Nakuru: Municipal Council of Nakuru (Final draft).



# Making Laws for Urban Agriculture: the experience of Governador Valadares, Brazil

In 2003, the project “*Optimisation of Use of Vacant Land for Urban Agriculture*” started in Governador Valadares. This project was promoted by the Urban Management Program for Latin America and the Caribbean (UMP-LAC/UNHABITAT), the International Development Research Center (IDRC) of Canada and IPES – Promotion of Sustainable Development in Peru (see also UAM no 11).

Ivana Cristina Lovo



Discussion groups during a meeting of the Municipal Forum

**A** multi-disciplinary team was formed by representatives of municipal departments (agriculture, planning and environment), social movements, NGOs and the University of Valadares. This team created the Forum for Urban Agriculture and Food Security, which took responsibility for documenting and analysing existing urban agriculture practices in the municipality, identifying problems and opportunities and developing a municipal action plan for urban agriculture.

Governador Valadares is situated in the state of Minas Gerais along the banks of the Rio Doce river. It has a population of 247,131, of which 52 percent are women and 236,098 live in the urban zone. Considered an average-sized municipality, its economy depends on services, industrial activities, agriculture, cattle and mining (mainly of precious stones). Its urban area represents 6.55% of its total area of 2,348.88 km<sup>2</sup>. It is considered an important centre of the Rio Doce Valley, which has an HDI-M value of 0.772.

Ivana Christina Lovo  
Zilá Raquel Pereira Costa  
✉ [iclovo@uai.com.br](mailto:iclovo@uai.com.br)

## CREATING POLITICAL SPACE AND A FORUM

Participation of all stakeholders was an important starting point in the execution of this project. A first multi-stakeholder event, the First Municipal Encounter on urban agriculture, was held in April 2003. The event reunited residents of the neighborhoods where the initial studies were conducted as well as governmental and non-governmental institutes, such as the Municipality, Vale do Rio Doce University, Doce Rio Consultorias (a consulting firm), Pastoral da Criança (a church-based, child-aid organisation) and others, such as neighborhood associations, Central de Movimentos Populares (a coalition of popular grassroots organisations), Associação de Hortas Comunitárias (a community gardening association), other church-based groups and city councilpersons.

During this first event, information gathered in the project's first phase was shared and discussed, especially main obstacles and opportunities concerning the development of urban agriculture in Governador Valadares. The most important issues were access to potentially good spots for urban agriculture, the high cost of treated water, the scarcity of technical

information, difficult access to inputs for urban agriculture, lack of organisation of urban farmers, and the lack of recognition, on the part of the government, of the potential of fishing activities in the region. Towards the end of this first encounter, a plan was drawn up and accepted, which included strategies to remove the aforementioned obstacles. Among the proposals in this Action Plan was changing existing legislation and creating specific legislation to promote urban agriculture in Governador Valadares.

## These dynamics generated a sharing of experiences

A second encounter was held in October 2003, and the main theme was municipal legislation to promote urban agriculture. The group suggestions were highly productive and became a reference for further elaborating laws. At the third encounter, held in November that same year, the theme was formalisation of the political forum which had been growing in strength, creating the Municipal Forum of Urban Agriculture and Food Security, a multi-participant, inter-institutional forum open to those interested in urban agriculture. At that



moment, an administration group was set up for the forum, and the initial team, which had been taking responsibility for executing the Green City project and the Action Plan, expanded.



Ivana Cristina Lovo

#### One of the seminars

Since 2004, the encounters have been held every semester, while the administration group has met weekly. Administration tasks have always been shared by the different participants, based on collective planning and daily efforts to make urban agriculture a reality in the region. Respect for the encounters' orientations and the commitment to implement the decisions inspired confidence among the participants and turned these moments into a political forum for debating and learning. The seventh encounter was held in November 2005.

#### LEGISLATION: POLITICAL DEBATES AND ACCORDS

Aided by the debate at the second encounter, discussions began with Mayor João Domingos Fassarella, together with the municipal secretaries of planning, finances, environment, agriculture and logistics, who are considered by the mayor to be the people who are strategic to discussing the legislation. The objective was to understand to what extent laws could be proposed. The result was the confirmation of the mayor's support and his commitment to do everything necessary to facilitate alterations in the legislation, including studies regarding the possibility of tax incentives. It is important to emphasise that, during this stage, important support was also given to the administration by a councilwoman, Eliza Costa.

Upon obtaining this political commitment, the next step was to form three subgroups, involving executive members of the Action Plan's coordination, representatives from the

municipal boards and the councilwoman's aides. The subgroups took on the responsibility of elaborating legal proposals: to create the Municipal Urban Agriculture Program; to make tax incentives feasible; and to enable the use of low-cost water for urban agriculture. Each subgroup worked within its own sphere of responsibility and met bi-monthly to share its progress and facilitate discussions on problematic and/or polemic issues. In this way, legislation on urban agriculture was drafted.

This stage in the elaboration of the laws (in which issues were discussed, negotiated and implemented together with major stakeholders and the legal department) proved to be a very important moment, mainly because in this way no conflict within municipal legislation or with state and federal legislation occurred.

Two proposals were ready: one which created the municipal programme and one to establish incentives for the use of vacant lots. Final evaluation of the two legal proposals was conducted by all partners of the third encounter held on November 30, 2003. Some suggestions were discussed by the encounter's plenary assembly and, after incorporating them, the two proposals were sent on to the city's executive branch.

The subgroups' work also elaborated sample forms of documents to facilitate and legalise the use of public and private areas for urban agriculture activities. The goal was to facilitate relationships between the diverse entities involved and avoid conflicts in relation to the use of urban spaces. These standardised forms were made available to interested governmental and public entities. The issue of water caused the most debate, for example on fees for treated water, sewage, public cleaning and trash collection. Changes in the rates for these services, with the goal of promoting urban agriculture, was not viable due to difficulties in monitoring and controlling them, and also because these services represent an important source of revenue for the government. In this way, the availability of treated water, without cost, was guaranteed for community vegetable gardens registered in the municipal

department of environment, agriculture and logistics.

#### APPROVAL OF NORMS

The first two laws were approved before the end of 2003. The first one was Law no. 5,265 which created the Urban Agriculture Programme of Governador Valadares (PROAGRU). This law defines agricultural activities for the city of Governador Valadares, including the production, refinement and commercialisation of foodstuffs, as well as ornamental and medicinal plants; it lays out the programme's objectives, relating the fight against hunger and misery to the city's development; and it defines the responsibilities of the various participants, including the government and farmers, in the implementation of the PROAGRU. This law was rewritten with the approval of Law no. 5,439 in 2005.

The second law to be ratified was Complementary Law no. 051 which alters the provisions of the Municipal Tax Code, allowing a tax reduction from 3% to 0.6% for vacant lots. For this to occur, it was agreed that vacant lots – i.e., private lands on which the urban agriculture programme is implemented – would be considered to serve a social function, and would thus not be subject to progressive taxation under Article 7 of Brazilian Federal Law no. 10,257/2001 (Estatuto das Cidades or "Cities Statute").

#### It was possible to arrive at solutions to the conflicts that arose

Situations in which treated water was made available at a reduced cost for agriculture in the city only became feasible in July of 2004. They became a reality under Law no. 5,335, which is a redraft of Article 8 of Law no. 3,168 of April 5, 1989, which structures the SAAE, or *Serviço Autônomo de Água e Esgoto Municipal* (Autonomous Municipal Water and Sewage Service). In summary, it includes the practice of urban agriculture, through community vegetable gardens, as a philanthropic institution, whereby the SAAE is permitted to make treated water available without cost.

The entire legislative process, from the evaluation of the technical boards' proposals to the final vote by the

legislature, occurred without any alteration of the initial proposal by way of amendments or suppression. All of the proposals were approved unanimously. During the law-approval phase, there was a greater recognition of the richness of the political debate and movement that had occurred through the forum. thereby, supporting the proposals presented, avoiding political disputes and expediting the legislative voting process.

### MUNICIPAL POLITICAL AND LEGAL SUPPORT

The participation of municipal technical advisors, as well as Councilwoman Elisa Costa's cabinet, was very important during the process of elaborating and voting on the aforementioned laws. Their knowledge and practical experience in public management were a great help in finding alternatives that would further develop suggestions made at the encounters on urban agriculture without causing conflicts with existing legislation, especially the Brazilian law of public responsibility.

All of these dynamics generated a sharing of experiences among persons involved, technical advisors and leaders. On the one hand, the technical advisors reexamined concepts linked to urban agriculture and, on the other the public had a chance to observe executive and legislative routines.

### INCLUSION IN THE URBAN DEVELOPMENT PLAN

After the process described above, the challenge was to include agriculture in the urban development plan. The decision to begin with specific legislation arose from concrete needs that appeared with the implementation of activities on urban agriculture in Governador Valadares.

The proposal to modify the urban plan began to be considered during the second semester of 2004. A new subgroup was created, made up of representatives from the city administration and the planning department. As such, based on a detailed study of the urban development plan of Governador Valadares, it was possible to propose the inclusion of articles on urban agriculture, and also about food security and popular economics, in chapters on education, health, environment and economic development, with emphasis

on the latter. It was possible to relate these different areas, showing how agriculture can be an integrating and motivating theme for sustained urban development in a locality.

Complimentary Law no. 068 (November 17, 2004) – which modifies Complimentary Municipal Law no. 003, of June 2, 1993 (urban development plan of Governador Valadares) – was also approved unanimously at the municipal legislative assembly. This was a very important feat since 2004 was an election year in Brazilian cities (all of the above-cited laws can be obtained from the City of Governador Valadares website).

### CONFLICTS AND PROBLEMS

Through the above-described channels, it was possible to arrive at solutions to the conflicts that arose. Even with regard to fees for water and urban cleaning, which was debated more intensely, the accord arrived at was to conduct more in-depth studies on ways to seek alternate uses and recycling, to clarify costs and benefits and, as such, generate information which could make future incentives feasible. Elaboration of a specific, inter-institutional project to study the alternate use of treated water in order to stimulate



Ivana Cristina Lovo

### Community Mapping

urban agriculture arose from this process. Unfortunately, even though international funding was made available for the project, it is still under negotiation due to changes in city management in 2005.

Towards the end of 2004, the party that won municipal elections, by a small margin, opposed the government which

began the urban agriculture programme. As a result, public management changed hands in 2005 and a certain insecurity regarding the programme on urban agriculture became noticeable. On the other hand, the UA/FS forum was strong and thus able to maintain the urban agriculture agenda, including guaranteeing approval of the new law without alterations early this year. This was due to the important role played by entities present in the administration of the UA/FS Forum and by the Sixth Municipal Encounter on Urban Agriculture held in March of 2005, which enjoyed the participation of around 150 persons.

### RESULTS ACHIEVED

The new legislation legalises urban agriculture activities within city limits, clarifying principles and responsibilities for all participants. This is very important.

The change in political power brought about delays in the process in Governador Valadares, especially as regards the tax incentives, which have not yet been granted to anyone. Although various vacant lots are already being used for horticulture, their owners have not received the tax benefit. The lack of interest on the part of the present government to implement this law is currently the greatest obstacle to urban agriculture.

On the other hand, the availability of water for community vegetable gardens was of extreme importance to forming the horticultural groups. The existence of the new law means the government can be held responsible. The current city management also conducts periodic monitoring of the horticultural groups, however with the intent of seeking irregularities regarding the adequate use of available water.

This entire process also greatly helped common citizens understand that they can contribute to the making of laws. It is a great learning experience to negotiate interests between different socio-political forces, including when the government is involved. Looking at the results obtained, we can conclude that the process that occurred in Governador Valadares was a great exercise and learning experience in participative management.

# Concrete Actions: Cape Town's Urban Agriculture Assistance Programme

Urban agriculture in Cape Town principally involves vegetable cultivation, although the sight of roaming cattle in the streets is also familiar to many inhabitants of the city. During the past five years, the city of Cape Town has been formulating a policy on urban agriculture, which will mainly assist in the improvement of the lives of its citizens in terms of food security and economic development.

Christopher Hewett



Members of the Florico Farming Group working in their garden near Atlantis township 45 km north of Cape Town (within the City administrative boundaries)

The phenomenon of urban agriculture has been taking place in Cape Town since its establishment, but faced with an unemployment rate of around 23.4% (equalling 2,275,230 persons), an economic growth rate insufficiently able to absorb the expanding labour force and 32% of the city's population living below the Household Subsistence Level (HSL) in 1999, the city has been looking to further enhance the potentials of urban agriculture as an intervention strategy to achieve poverty alleviation and job creation (City of Cape Town, 2006c).

The municipality of Cape Town has been directly involved in 33 urban agriculture projects in the city, while at the same time national and provincial governmental bodies have also been implementing food production activities. NGOs in the Cape Town area also make a large contribution to the development of the city's urban agricultural sector, such as Abalimi Bezekhaya (see UAM 6). However, so far these activities and initiatives have lacked municipal coordination and a common vision on

**Stanley Visser**, Development Facilitation of the City of Cape Town <sup>(1)</sup>  
✉ [Stanley.Visser@capetown.gov.za](mailto:Stanley.Visser@capetown.gov.za)

urban agriculture. This situation led to the realisation that a specific policy on urban agriculture was necessary as this would '... provide a common vision for urban agriculture, give strategic guidance and create a mechanism to manage urban agriculture so that its maximum potential can be realised while negative impacts are being eliminated or reduced.' (City of Cape Town, 2006b: 1). A formal policy will lay the legal basis for collaboration between all municipal departments on the issue of urban agriculture and will ensure each department's undisputed commitment; and it will eliminate the need to rely on the goodwill or preferences of individuals.

## POLICY FORMULATION PROCESS

In May 2002 municipal authorities called a first urban agricultural summit to start a dialogue on the necessity and development of urban agriculture in the city with a special focus on the urban poor. The Economic and Human Development Directorate took the lead in this process and is still the 'organisational home' of the urban agricultural activities within the municipality. This summit mandated the city to compile an appropriate urban agricultural policy and assistance programme for the urban farming practitioners. The first draft of the policy document was compiled in

2002. From here on, a consultative process of policy formulation was started, which included the following steps: background study and concept clarification, determination of current status of urban agriculture in the city (a very superficial assessment), analysis of players and stakeholders, compilation of a first draft of the policy document, invitation for both internal and external comments on the draft, revision and formulation of final draft policy document (with valuable inputs also gained during a second urban agricultural summit in 2003) and submission of the final draft to the City Council for acceptance by the end of 2006. The consultative policy formulation process involved a wide array of actors: all internal municipal departments, the Agricultural Department at provincial levels, several universities, agricultural planning colleges and urban farmers and practitioners. On the one hand it presented an opportunity to educate selected players (officials and councillors) on the benefits of urban agriculture, while on the other hand, extensive formal consultation was done with urban agricultural practitioners to determine their specific needs and aspirations.

Due to a prolonged process to restructure and transform the City administration

and local government election the process got stalled. As a result both councillors and top management were new and advocates for the urban agriculture policy within the municipality, thought it wiser to take the time to re-convince the politicians, rather than to force it through. In the end, the policy formulation process produced two separate documents, namely: a baseline document (reflecting the theoretical framework, international and national experiences, the current status of urban agriculture in the city, etc.) and a policy document (indicating the vision, objectives and interventions by the city and its partners).

The Constitution of South Africa does not list agriculture as a function of local government and, therefore, a lot of motivation and lobbying was necessary during the consultative process to convince city council decision makers that the development of urban agriculture should be viewed as part and parcel of poverty alleviation and economic development, which are the concurrent responsibility of all spheres of government (Republic of South Africa, 1997). In the end, city council members were convinced by the opportunities for economic development that urban agriculture can offer, as well as by the fact that the municipality does have a sector support policy for agriculture. Both aspects reinforce the idea of supporting urban agriculture through a municipal policy.



Christopher Hewett

**Producing green vegetables near Atlantis township**

#### THE POLICY DOCUMENT

Cape Town's vision is to build a partnership with all its people to make Cape Town a world-class city in which the quality of life of every citizen steadily improves (City of Cape Town, 2004d). Urban agriculture fits very well in this vision as it is seen as a strategy towards

poverty alleviation and economic development. The draft policy document has been formulated in accordance with the city's requirements for policy documents, i.e. it uses simple language that the affected parties can understand, and it is clear and concise on what interventions the city will make and what assistance the urban practitioners can expect from the city.

The draft policy document defines urban agriculture in its broadest sense, to make it as inclusive as possible while discerning the categories of plant production, livestock production and aquaculture. It acknowledges the benefits at the individual or household level (household food security, income generation, etc.) but also at city level (improved cleansing of the city, contribution to environmental restoration and greening, etc.). After listing the challenges and opportunities of urban agriculture locally and identifying relevant stakeholders, the policy document continues with an elaboration of concrete actions to be taken to achieve the policy's objectives; and it elaborates on the institutional framework and an implementation strategy.

One of the concrete actions described in the policy document is the city's assistance programme. The remainder of this article will concentrate on this programme as its contents, criteria and concise actions have been formulated in a detailed manner, which might provide other cities faced by similar challenges with ideas and inspiration.

#### THE ASSISTANCE PROGRAMME

Although the draft policy has not been formally approved by the city council, most elements of the proposed assistance programme are already being implemented. This is also the case for Cape Town's urban gardening assistance programme. People or community groups that ask for assistance for urban agricultural activities approach the City through a variety of windows or departments. These departments then direct them to the Economic and Human Development Directorate, which then gives strategic assistance, such as in improving the organisation of the group. In many instances, day-to-day (more technical) assistance is provided by

NGOs. This division of labour is due to the lack of manpower at the Economic and Human Development Directorate. A formal policy will provide more resources and support the directorate to make it more visible in its responsibilities, allowing it to advertise its assistance more widely and be more proactive instead of reactive.

### A specific policy on urban agriculture was necessary

The Cape Town Assistance Programme for Urban Gardening works with a set of specific criteria to determine the type and extent of the assistance. Firstly, the kind of urban agricultural operation is classified. The city of Cape Town distinguishes between four different types of operations, which have been defined as:

1. home produce – home dwellers using their own gardens to grow vegetables and/or keep animals on a small scale in order to supplement the family diet;
2. community groups – a group of people who produce food collectively for themselves or for a community institution mostly on public land;
3. micro-farmers – individuals or groups of people involved in urban agriculture to generate an income on small pieces of unutilised (private or public) land; and
4. small emerging farmers – individuals or groups of people who are or aspire to be full-time farmers.

The last type is considered to take place in a formal business setting, while the other three types are regarded as informal economic activities. The policy focuses on Cape Town's urban poor, which make up all four categories mentioned above. However, as the policy is not directly aimed at commercial farmers, the small emerging farmers are mostly stimulated to contact the National Department of Land Affairs instead, where funding can be obtained from the Land Reform Programme for Agricultural Development (LRAD).

The objectives of the urban agriculture activity need to be in line with the city's strategies of poverty alleviation, economic development and/or community capacity building. Further



assessment will include the number of beneficiaries; other role-players involved; location; environmental impact; availability of water; feasibility; and the activity's compliance with integrated development planning and management.

Five main types of assistance are discerned: access to land, infrastructure, tools/equipment/implements, production inputs and extension services. While community groups can count on all types of assistance, home producers are supported only with small tools, basic production inputs and some extension services, but not with acquiring access to land or infrastructure as the Municipal Finance Management Act (MFMA) states that municipal capital may not be used to improve private assets (such as private land). A matrix in the policy document stipulates what type of operation can apply for what kind of assistance. A needs analysis performed for each applicant will be decisive for the actual assistance given.



Die Burger (local newspaper)

#### **Cattle in front of a house in Khayelitsha, one of the poor neighbourhoods**

Cape Town's assistance programme to urban agriculture also includes a so-called *start-up kit* for survivalist gardeners. Focusing on the poorest of the poor, a start-up kit is meant to support existing community groups that wish to start a gardening project. Per 10 people, the start-up kit will include basic items, such as a pick axe, spade, rake, watering can, seeds and compost. In addition, the start-up kit will be supported by skills training and extension services.

The city's assistance programme has a special focus on livestock keeping in the urban area. In Cape Town, many different byelaws on urban livestock exist as the municipality in its current form only came into being in 2000 (39 small municipalities were combined into 7 municipalities in 1996, which in turn

were united into 1 municipality in 2000). Currently, an intervention has been accepted by City Council to address the uncontrolled keeping of livestock in the urban area. As livestock represents an economic opportunity for many people, it should not be lost. Therefore, a three-prong strategy has been developed to remove the animals from the residential areas to places and spaces where they can be kept under controlled conditions. This involves the establishment of (a) community kraals (fenced areas) close to residential areas where small numbers of animals can be kept under zero grazing conditions, (b) commonage land (a traditional form of land rights, where the land belongs to the city and is meant for agricultural purposes) where larger numbers of animals can be kept under commercial farming conditions, and (c) private farms or small holdings through the grant funding system of the National Land Reform Programme. In the case of community kraals activities are located on state-owned land and the city provides all fixed infrastructure. Likewise the development and maintenance of infrastructure on commonage land is also done by the city, but participant farmers are required to pay an incremental rent which will reach a commercial rate within three years in order to give emerging micro-farmers a maximum chance to become successful small commercial farmers.

The assistance programme is founded on cooperative governance, strategic partnerships and collective action, i.e. the city has the buy-in and commitment from all the role-players so that when assistance is rendered there is no duplication of resources or distraction from the project objectives. Up until now urban agricultural assistance was done in a reactive way due to a lack of resources, but the formal introduction of the urban agricultural policy will make proactive involvement possible.



Stanley Visser

#### **Production of tomatoes in a tunnel**

## **PROGRESS TO DATE**

Due to the long consultation and policy formulation process, the city council is already implementing a number of the proposed strategic interventions of the draft policy, next to the assistance programme described above. This includes the following: an annual budget allocation for urban agriculture, recognition of urban agriculture as a land use in the Integrated Zoning Scheme of the city, provision of space for urban agriculture in new human settlements, absorption of urban agriculture as an element of development programmes (e.g. greening of the city, Local Agenda 21, poverty alleviation, HIV/Aids prevention programme, etc.) and provision of strategic infrastructure for agriculture such as the newly constructed fresh produce market.

### **Acceptance of this policy will elevate urban agriculture**

In the meantime the Provincial Department of Agriculture has opened a district office in the city of Cape Town and provides extension services and financial support to urban farmers. In the spirit of cooperation the city, the Department of Agriculture and a few NGOs have established two mechanised agricultural centres in the city as joint ventures.

Recently the Department of Land Affairs has approved a R8.7 million (equal to around US\$ 1.2 million) grant for the city to acquire a commercial farm, which will be used as commonage mainly by the urban livestock keepers. The City is now in the process of identifying an appropriate farm to buy with the grant.

In addition, the city has also started international networking activities with regard to urban agriculture and participated in a regional urban agricultural conference last year in Harare, Zimbabwe. As a result of this the city has forged a working relationship with the Municipal Development Partnership for Southern and Eastern Africa (MDP-ESA). Furthermore, Cape Town has been selected as a pilot city under the "Cities Farming for the Future" programme recently set up by MDP-ESA

*Continued on page 64*

## Food Policies in North American Cities

The next two articles describe enabling policy tools designed to improve local food systems in North American cities. These strategies can often be traced to calls from civil society movements for more accessible, safe, culturally acceptable and nutritious food grown under environmentally sustainable conditions. The goal is a food system in which food production, processing, distribution and consumption are integrated to enhance local environmental, economic, social, community, and nutritional health (Community Food Security Coalition (CFSC), [www.foodsecurity.org](http://www.foodsecurity.org), April 2006). Promotion of urban agriculture fits in this discussion on local food systems, where concerns related to the environment, social cohesion and access to healthy food join hands. Strategies developed in various cities include promoting multi-actor involvement and collaboration in policy making and programme implementation, integration of food system issues into a broader sustainable development agenda, and the creation of food policy councils that can act either as a citizen advisory body to the city council as in Toronto or Chicago (as described here) or play a formal role within the city government, as the experience of Vancouver illustrates.

# Creating and Implementing Food Policies in Vancouver, Canada

**Although Vancouver is a city of soaring glass towers and modern urban amenities, it is also located within one of the most productive agricultural regions in Canada. Combine the favourable climatic conditions with municipal policies that encourage sustainable development and the result is a city in which urban agriculture is thriving.**



Wendy Mendes

**Small Community Garden**

**V**ancouver currently has 18 operating community gardens, with two more under development. Community gardens can be found on park, school, city and transit-owned land. The demand for garden space far exceeds its availability. Most gardens have year-long waiting lists. Other popular forms of urban agriculture in Vancouver include rooftop gardens, backlane gardening, edible landscaping and farmers' markets. Alongside the popularity of urban agriculture in Vancouver, the city and its region are also contending with urban sprawl, population pressures, farm consolidation, threats to agricultural

land, and rising rates of poverty and hunger.

On July 8, 2003, the Vancouver City Council approved a motion supporting the development of a "just and sustainable food system" for the city of Vancouver. A just and sustainable food system is defined as one in which food production, processing, distribution, consumption and recycling are integrated to enhance the environmental, economic, social and nutritional health of a particular place. This commitment to food policy was made in response to more than a decade of community organising efforts. Community groups sought local government response to pressing issues including urban sprawl, threats to agricultural land, health and nutrition problems, and food access issues, particularly for marginalised populations. The Council motion reflects a growing trend in Canadian and US

cities in which food system issues are being recognised as an area in which local governments have an important role to play.

Since the July 2003 Council motion, the city's commitment to food policy has included an eight-month public consultation process; a food system assessment, approval of a Food Action Plan (see <http://www.city.vancouver.bc.ca/ctyclerk/cclerk/20031209/rr1.htm>); hiring of food policy staff; facilitation of a number of food-related initiatives including community gardens, urban beekeeping, fruit trees, and edible landscaping; project collaborations with a range of partners; and the election of an 18-member multi-sectoral Vancouver Food Policy Council.

Stemming from the Food Action Plan, strategies to create and implement enabling policy tools to improve

**Wendy Mendes**  
Postdoctoral Fellow, University of Toronto,  
Canada  
(Formerly: City of Vancouver's Food  
Systems Planner)  
✉ [wendy.mendes@utoronto.ca](mailto:wendy.mendes@utoronto.ca)

Vancouver's food system include:

- 1) promotion of multi-actor involvement in policy making and implementation, and
- 2) integration of food policy into a broader sustainable development agenda.

#### PROMOTION OF MULTI-ACTOR COLLABORATION IN POLICY MAKING AND IMPLEMENTATION

There are two inter-connected dimensions of the city of Vancouver's recognition of the importance of partnerships and collaboration where food policy is concerned. The first focuses on "internal" partnerships (within local government itself), while the second emphasises partnerships and collaboration between local government and community agencies and organisations.



Wendy Mendes

#### Rooftop gardens under construction

From the outset, the Food Action Plan acknowledged that some of the resources and policy tools necessary to address food system issues fall outside of the jurisdiction of the municipality. As such, the development of partnerships with other agencies has been instrumental to the process. Key partners include Vancouver Agreement (an agreement between three levels of government to address poverty in Vancouver's most impoverished neighbourhood, the Downtown Eastside), Vancouver School Board, Vancouver Park Board, Vancouver Coastal Health, community organisations, and local universities, among others. Examples of past collaborations include strategies to improve emergency food access in the Downtown Eastside, a food system assessment of Vancouver led by a community-based consortium of researchers, and the approval of good management practices for beekeeping in urban residential areas.

Also key to the success of urban agriculture and food policy are partnerships and collaborations among municipal departments within local government itself. Vancouver's commitment to food policy is seen as part of its commitment to sustainability. This has the benefit of associating food policy with a set of already existing policies and mandates. Like sustainability, urban agriculture and food policy are cross-cutting issues often involving a wide range of departments for effective implementation and monitoring. As such, the ability to implement food policies and programmes has been facilitated by organisational expertise developed over the years through inter-departmental collaborations in pursuit of sustainable development goals in Vancouver.

The second dimension of the city of Vancouver's recognition of the importance of partnerships and collaboration has more far-reaching implications. This dimension involves the mechanisms designed to facilitate governmental/ non-governmental partnership approaches to food policy design and implementation. This objective is best embodied in the Vancouver Food Policy Council, seen as a new model for collaborative municipal governance.

#### Vancouver Food Policy Council

Vancouver's Food Policy Council (VFPC) is considered a new model of integrated local governance involving city staff and citizen representatives. The VFPC was conceived as a multi-actor body whose mandate would be "to act as an advocacy, advisory and policy development body on food system issues within the city's jurisdiction" (Vancouver Food Policy Council Terms of Reference, 2004). From May to July 2004, the Vancouver Food Policy Task Force produced and ratified a set of recommendations for the creation of the VFPC. Recommendations included VFPC member roles and responsibilities, principles and protocols; vision and mandate; structure and election process. The result was the election of a twenty-member multi-sectoral food policy council on July 14, 2004 as the last act of the Food Policy Task Force before it dissolved.

The Vancouver Food Policy Council is comprised of individuals from all aspects of the local food system. The membership includes people with a variety of backgrounds, such as nutritionists, food wholesalers and distributors, food retailers and grocers, managers of non-profit organisations and academics engaged in the food system. This multi-

disciplinary group creates an innovative forum for discussion and action towards building a food system that is ecologically sustainable, economically viable and socially just. It also builds upon existing collaboration between citizens and government officials on numerous initiatives. The primary goal of a Food Policy Council is to examine the operation of a local food system and provide ideas and policy recommendations for how it can be improved.

Vancouver's Food Policy Council has been meeting since September 2004. In addition to education and awareness-raising strategies, the Vancouver Food Policy Council works on specific projects and goals in support of issues and action items identified in the Food Action Plan. The VFPC initially identified four priority areas including: (a) increasing access to groceries for residents of Vancouver; (b) institutional food purchasing policy for public facilities; (c) recovery, reuse, and recycling of food; and (d) creating a food charter for the city of Vancouver. Building on these areas, new priorities and strategies continue to evolve.

#### INTEGRATION OF FOOD POLICY INTO A BROADER SUSTAINABLE DEVELOPMENT AGENDA

A sustainable food systems approach to food policy supports the social, environmental and economic goals embodied in the city's existing commitment to sustainability. Goals include the promotion of health, nutrition, ecological responsibility, social inclusion and community capacity building. One of the key policy objectives for urban agriculture and other food policy initiatives in Vancouver is integration into broader sustainable development agendas. These agendas include child and youth programmes, environmental programmes, social sustainability programmes and urban development programmes.

*"Vancouver enjoys a long history of leadership on progressive issues such as environmental sustainability. Urban agriculture now forms an important part of the city's commitment to sustainable development." Peter Ladner, City Councillor.*

A specific illustration of the goal of integrating urban agriculture into existing sustainability policies, though



even predating the adoption of the City Food Action Plan and formation of the Food Policy Council, can be found in an area known as Southeast False Creek (SEFC). In 1991, the City Council directed that the area be developed as a residential community that incorporates principles of energy-efficient design in its area plan. The idea was to explore the possibility of using SEFC as a model “sustainable community”.

As part of the planning and consultation process in Southeast False Creek, a citizen advisory group was set up to provide input on the Official Development Plan as it evolved. This group, known as the Southeast False Creek Stewardship Group, took a keen interest in promoting urban agriculture on the site. In at least two reports to the City Council, the Stewardship Group identified urban agriculture as a key development priority. The rationale was that urban agriculture would provide multiple benefits to future residents including environmental sustainability by reducing the distance food travels, reducing the heat island effect, reducing cooling and heating needs, reducing storm water management costs, and creating possible reductions in emissions and transportation costs. The group also argued that urban agriculture would enhance social sustainability by providing less expensive and more nutritious food for the residents of Southeast False Creek, as well as by providing social spaces for people to meet and interact with their neighbours. Together these benefits would increase social cohesiveness and networks, which are essential for a community that relies on the participation of its members in planning and ongoing governance.

### Some of the resources and policy tools fall outside of the jurisdiction of the municipality

A second mechanism that enabled the integration of urban agriculture into SEFC was the participation of the food policy staff team in the finalisation of the Official Development Plan (ODP). By spring 2004, the SEFC Official Development Plan was ready for presentation to the City Council for approval. Because of pre-existing

commitments to urban agriculture already embedded in the SEFC policy statement and active lobbying by the SEFC Stewardship Group, the food policy staff team was able to work with the SEFC Planners and other city staff to more clearly articulate opportunities for urban agriculture, and express them more comprehensively and explicitly in the ODP itself.



Wendy Mendes

#### A selection of herbs that can be produced on your roof

Key features of the Official Development Plan now include green roofs where space will be provided for the future residents to engage in urban agriculture. A demonstration community garden and site for a farmers' market also appear in the SEFC Official Development Plan. Furthermore, targets have been set for the amount of produce consumed by residents of Southeast False Creek to be grown on-site in community gardens and private balcony and rooftop gardens.

Since the approval of the SEFC ODP, two additional residential developments have integrated urban agriculture into their vision of more sustainable communities: an area known as East Fraserlands has proposed the inclusion of community and rooftop gardens, edible landscaping and a farmers market; and a new 180-unit downtown condominium development has recently completed approximately 60 rooftop garden plots for the use of residents.

#### RESULTS AND WAY FORWARD

The two policy strategies have resulted in a number of behavioural changes among Vancouver citizens. The benefits derived from these changes address Millennium Development Goals #1 (eradicate extreme poverty and hunger) and #7 (ensure environmental sustainability). At the same time, benefits also encompass a number of important dimensions of social sustainability including community

development, social inclusion and civic engagement. Three changes in particular are:

- improved education and awareness
- enhanced collaboration between city departments and other agencies
- a shift towards a food systems approach to food issues.

A number of key lessons from this project experience should be taken into account by other local governments. These include the need to:

- build on community knowledge and expertise
- build and enhance partnerships
- adopt a systems approach to food issues
- sustain involvement of food policy staff for consistent leadership, organisational stability, keeping food system goals on the radar of local governments and avoiding lapses in activity.

Key next steps in Vancouver's case are to measure the direct impacts of urban agriculture and food policies and determine the role that urban agriculture may play in existing strategies leading to pilot programmes to address hunger, health, addiction and homelessness. In this context, the City Council also recently (June 2006) adopted a motion to implement 2010 garden plots by the year 2010 (personal communication Peter Ladner, July 2006). Furthermore, Vancouver welcomes exchanges with other Northern and Southern cities, to discuss new perspectives on sustainable food systems and integrated models of municipal governance involving citizen advisory groups, producers, NGOs, youth groups and other partners.



Bert Loef

A beautiful garden in Grant Park in Chicago



# Municipal and Civil Society Food Systems Policy Development

**There is a growing belief among Chicago citizens that all residents should have access to safe, culturally acceptable and nutritionally adequate food through a sustainable food system that maximises community self-reliance and social justice. A variety of efforts are underway to raise the level of public discourse on this issue in order to design a sustainable food system that will be able to foster the development of community food security in Chicago.**

The organisation of local forums around community food security in the past ten years, has led to the formation of the Chicago Food Policy Advisory Council (CFPAC) in 2003. CFPAC is a network of organisations and individuals who want to share their experiences and concerns about food security in the Chicago region in order to influence policy makers to make informed decisions motivated by the goals of community food security. The Chicago Food Policy Advisory Council is a long-term effort to develop plans and recommendations and then advise policy makers in all areas of food security. Membership and participation on the Council is open to anyone. It currently includes emergency food agencies (food banks and pantries), urban agriculture organisations and practitioners, public health officials, researchers, land use groups, food distributors, farmers' markets, churches, city planners, environmental organisations, chefs and community organisations.

CFPAC originated in the 1990s after the Community Food Security Coalition held its annual conference in Chicago. Out of this came an effort by organisers and participants of the conference, to examine

**Rodger Cooley**  
Heifer international  
✉ [Rodger.Cooley@heifer.org](mailto:Rodger.Cooley@heifer.org)

the feasibility of pursuing innovative programmes such as food policy councils and performing comprehensive research on the state of food access in the Chicago region. In 2001 the first Illinois Food Security Summit, funded by the Chicago Community Trust (the local foundation that makes grants available out of pooled funds from local donors), brought together emergency food providers, government and sustainable agriculture interests. The summit utilised an open space format such that participants supplied the summit's content and priorities for moving forward. This process generated more than 40 topic areas for the summit participants to vote on. The creation of a Chicago Food Policy Council was a top priority (see the Proceedings from Working Sessions in Open Space of the Illinois Food Security Summit held in 2001, available at [www.michaelherman.com](http://www.michaelherman.com)).

CFPAC has been in a process of development for over five years utilising consensus to establish a mission, organisational and operating structure and outreach to ensure inclusive membership representing a cross section of Chicago's residents. CFPAC was formed through community outreach and involvement. The organisational structure of the Council was determined to be a "hybrid" model, as it is neither government agency nor a stand-alone non-profit. There were concerns that if it was incorporated within the governmental structure accountability to the larger community would be lost. Concerns also arose that the administrative burdens of managing a non-profit would take up much of the Council's energies. CFPAC does work cooperatively with Chicago's municipal government and encourages the city's participation and support.

CFPAC is comprised of an Executive Committee and a general membership body involved with community food security in one way or another in the Chicago Region. Staff members of three not-for-profit organisations (Growing Power, Heifer International, and Sustain) were elected to serve on the Executive Committee to

support the council. These organisations were chosen because their missions overlap with CFPAC's mission and because they have committed a portion of their time to working with CFPAC.

CFPAC developed a white paper that details the budgetary commitments and responsibilities for the city of Chicago's agencies and departments in relationship to food as its first publication. The paper also includes a list of initial policy recommendations for the city. This report will be available on the CFPAC's website, [www.chicagofoodpolicy.org](http://www.chicagofoodpolicy.org), by early November 2006.

**There were concerns that if it was incorporated within the governmental structure accountability to the larger community would be lost**

The first annual Chicago Food Policy Summit, sponsored by CFPAC, was held in February 2006. Over 170 people participated in the event. During panel discussions, participants presented their concepts for improving community food security policies in Chicago. These concepts have been refined over several meetings and strategies for pursuing them are now being decided upon.

Government participation on the Council has been piecemeal up to this point. Most participation has been based on the personal interest of individuals and department heads. The Executive Committee has done outreach to the Commissioners of Planning, Environment, and Public Health as well as the Mayor's Director of Policy to find overlaps in interest and to encourage more active participation. All of Chicago's elected aldermen are now receiving notices of meetings and several staff representatives of the aldermen have attended meetings of the Council. It is hoped that within the coming year, more formal connections and relationships will be developed with government officials to help move the policy agenda forward.

# The importance of legal and political support, the case of PROVE in Brazil

**PROVE – Small Agricultural Production Verticalization** <sup>(1)</sup> Programme - is a programme designed to promote small-scale agricultural production, processing and trade. It involves many urban and periurban agricultural systems, including vegetable gardening, fruit growing and livestock keeping. Intervention is at the individual and/or collective level, especially aimed at lower income groups.

João Luiz Homem de Carvalho



Dissemination activities began with a party to celebrate the establishment of an agro-industrial facility in Betim, state of Minas

**P**ROVE-DF was designed and launched in the Federal District, located in the Center-West region of Brazil. Soon after its introduction, the programme quickly gained social visibility and political credibility, acting as a model for other states and countries. It became an alternative method for promoting the development and survival of the urban, peri-urban and rural family agriculture while reducing the rural exodus and contributing to job and income generation.

The PROVE-DF programme received the Top-5 Prize of the Public Administration and Citizenship Contest, promoted by the FGV - Getúlio Vargas Foundation, Ford Foundation and the Brazilian National Social and Economic Development Bank (BNDES), a competition with 325 other programmes.

In the period of 1995-1998, under PROVE, about 500 small agro-industrial facilities were built in Brazil and in other countries in Latin America. Despite this national and international recognition,

João Luiz Homem de Carvalho  
✉ [jluizhc@uol.com.br](mailto:jluizhc@uol.com.br)

soon after a new government took office, for the 1999 - 2002 term, PROVE-DF started to witness the complete dismantling of its supporting mechanisms; and two years later, it no longer existed as originally conceived.

## THE PROVE PROGRAMME

The PROVE was designed to enable small farmers to overcome certain fundamental stages or hurdles in the production, processing, and trade of their products which in our opinion can segregate them. For illustrative purposes, these stages are compared to rungs in a ladder (11 rungs) that small farmers have a very hard time climbing (Carvalho 2001). Enabling them to climb these rungs is a fundamental requirement to ensure the success of the PROVE and, consequently, to ensure their social integration with sustainable development and solidarity.

### 1) Motivating institutions

Brazil is a country with extreme social inequities. The quality of life has improved over the past ten years, but inequities have grown larger rather than smaller. To end this situation, the state-supported mechanisms that perpetuate them need to be changed. Therefore,

PROVE had to start by convincing people (especially those working in public institutions) that priority should be given to the most needy.

The first step consists of an inventory and assessment of the stakeholders; how and for what purpose could the existing public institutions be engaged in a programme like PROVE? It was also sought to tackle resistance that normally would occur to a programme like PROVE. The following strategies were adopted:

- All technicians were given access to all information about the programme about to be implemented.
- Training courses, meetings and seminars were organised about the need to work with the so-called excluded agriculturists; it was made clear to these technicians that the government was strongly committed to carrying out the programme.
- Priority was given to advocacy, to ensure visibility for the programme. A considerable level of support was thus achieved within the government, among the producers and within society, which helped attract those technicians who were initially opposed to our proposal.

## 2) Providing incentives

In order to motivate a socially-marginalised audience, the advantages of the programme were described. This meant explaining the added value to small rural production schemes and collective initiatives, without closing the doors to others who wished to take part in the programme individually. The producers were encouraged to create the Association of PROVE Producers. Furthermore, the NGO APROVE (Association in Support of Small Agricultural Production Verticalisation) was established for the purpose of supporting and encouraging small farmers' initiatives.

## 3) Ensuring credit lines

The following step was to design legislation to ensure legal support for the programme. Banks, either private or state-owned, give equal treatment (i.e. credit based on equity) to unequal people. To change this situation, support was thus given to the process of granting loans to small producers. To achieve this, financing agents had to be convinced that unequals deserve equity, not equal treatment.

The FUNSOL – Solidarity Fund was created with resources from the Federal District Government that together with banks insure loans of up to US\$ 2,500, which is enough to build or improve one small agro-industry of 30 to 40 m<sup>2</sup>. This would not be enough to also purchase equipment and initiate production, but the loans needed for such investments are smaller and thus easier to obtain through the banks.

A new law was also approved that created the Worker's Bank, which is operated with resources from the FUNSOL. This substantially reduced the bureaucracy and qualification requirements for loans, and it increased flexibility.

The above-mentioned actions led to an improvement in access to credit, but not for those who could not provide collateral, or with problems in their financial records. To overcome this problem, we created the mobile agro-industry.

The mobile agro-industry had a metallic structure with a PVC finishing. With 2 tons of total weight, it could be transported by truck. It could serve as

collateral for a loan, because it was a durable and transportable asset that could easily be taken by the bank if a lender failed to pay. It could then be used by another agriculturist. This was also a solution for the problems of young farmers, who faced credit restrictions precisely because they were beginning their operations and had no equity to provide.

After the creation of these laws and the mobile agro-industry, financial resources started reaching the excluded target group. The bureaucracy was drastically reduced and people who had never before had a chance to meet the financial system's demands were able to start a profitable activity.

## 4) Specific sanitary legislation and laws

It was necessary to review and reformulate the Law of the Federal District for the Inspection of Animal and Vegetal Products, as it was a hurdle for many people to engage in such activities. The state government drafted a set of rules for the construction of small agro-industrial facilities (30–40 m<sup>2</sup>) and enacted them into law. This law has served as an example for other Brazilian states and cities.

## 5) Building small agro-industrial facilities

PROVE transformed a series of regulations about the building of small agro-industries (from 30 to 40 m<sup>2</sup>). Within the set of laws that regulate the implementation and functioning of mini agro-industries of animal and vegetable products, we passed specific laws for PROVE production facilities. We also passed a specific law to prevent deviations in the functioning of the programme.

## 6) Training

Training was provided to small producers for starting the production of raw materials. Visits were paid to supermarkets to provide them with theoretical and practical guidance on how to market processed or semi-processed products. Courses on the establishment of associations and cooperatives, and rural management, food hygiene and handling, specially designed for PROVE target audiences, were provided.

## 7) Inputs

Various inputs are necessary for manufacturing different products. In addition, packaging of the processed products determines the success of marketing. Small-scale producers do not always have enough funds to buy all these inputs. For this reason, the Small Agro-Industry Counter was created to enable small producers to buy small-sized machines and equipment.



João Luiz Homem de Carvalho

## The producer kiosk of PROVE in a supermarket

## 8) Publicity and marketing

PROVE wanted the government to stimulate and fund publicity and marketing professionals on a full-time basis for designing and implementing a plan for the marketing of its products. One of the most important tasks was to create a trademark identifying the programme (PROVE means "taste it" in Portuguese) which covers all products. It also serves as a quality seal.

## 9) Trading the products

The small agro-industrial facilities make many products of excellent quality. Marketing of the products is the endpoint of the production process, which is also the most difficult stage. PROVE has shown that it is much easier to sell a good product with an attractive packaging and a professional label, even if it is manufactured at a small scale and by low-income people. PROVE products began to be sold in supermarkets as a result of an agreement between the states, supermarkets and producers (Pesquisa PROVE - Market Research 1998).

## 10) Inspection and control

For consumers to be assured of the hygienic and sanitary conditions of PROVE products, they must know that they are inspected at the production site and are subject to strict quality control measures. For this purpose, chemical and

microbiological analyses are carried out on the products, which are periodically inspected.

### 11) Follow-up

The information collected during the evaluation of PROVE (Duarte et al. 1998), showed that the programme contains the necessary elements to sustain its success - those including small farmers in the production system and restoring their citizenship rights. The fact that small producers in the PROVE programme have developed the skills to manage their own businesses, understand the cost-benefit calculations of their activities, keep accounts and plan for the future clearly indicates the changes that have taken place in the lives of these people. The excellent ratings on transferability of the programme can mainly be attributed to the massive dissemination campaigns through the national media and to the thousands of site visits paid by people coming from different parts of Brazil and abroad to the capital, Brasilia. These people have confirmed that the programme is feasible, particularly because it can be implemented easily and at a low cost for public agencies, while also boosting the local economy.

### The idea that “quality is a monopoly of the big industry” was defeated

PROVE prepared a bill regarding the programme's continuity that would ensure the continuation of tax incentives for its activities. The bill considered, for example, the specific tax legislation for handicraft products, and addressed specifically the rural population considered as “excluded” (Carvalho 2001).

The Law 1,825 (also known as the PROVE Law) was approved by the District House of Representatives on January 13, 1998. It established the PROVE – Programme of Verticalization of the Family Production of the Federal District, and created incentives and established the regulations for the simplification of the fiscal treatment towards family agro-industries. Article 20, together with Decree 19,226 of May 12, 1998, gave PROVE a legal status, apart from stating the pressing need for state intervention in the economic process, so that it cannot

neglect one of its basic functions: the promotion of social equity. The new legal framework provided small family farmers with new opportunities to exploit agricultural activities, broadening their production capacity and enabling them to enjoy the benefits of new and efficient technologies. It has also enabled the creation of new mechanisms to ensure maximum quality of the final product offered by the mini agro-industries. The idea that “quality is a monopoly of the big industry” was defeated (Carvalho 1998).

### WHY PROVE DID NOT CONTINUE IN THE FEDERAL DISTRICT

In spite of all our efforts, both in the administrative and legal aspects, to ensure the continuity of PROVE in the Federal District, it did not happen. The programme did not succeed in promoting institutional sustainability and a feeling of co-responsibility (ownership) among the several social actors. It also became vulnerable to disputes and discontinuities. The main reason is that the programme did not manage to create sustainable institutional structures, owned by the social actors involved (government, micro-entrepreneurs, University). It was therefore vulnerable to political changes.

With the change of government in 1999 in Brasilia District, the existing links between producers/micro-entrepreneurs and the government were broken. It appeared that the Association of PROVE producers (ASPROVE) still was too dependent on support by Government and could not survive by its self. In 2003, most agro-industries had stopped functioning or continued functioning marginally.

Of course in setting up programmes for the poor and excluded population one cannot expect them to be autonomous in just 4 years. There is a need for prolonged government support for the most vulnerable sector of society.

What seems to be clear is that, as soon as any government puts its institutions to work exclusively for “the excluded” population, its related actions become more complex and harder to accomplish. The state is not prepared to take on all these tasks. There is no perception of

what social exclusion means and the level of exclusion is broadly ignored. There is no general understanding that the excluded population has been abandoned for centuries, and that it is not possible to promote their social inclusion in only four years, i.e. for one governmental term. Hence the remarks made by those who oppose the programme's ideas, that the attention paid to those people was paternalistic, and that the government should not “be taking care of them”.

Another reason for the discontinuation of PROVE was that it was never a state policy. It was a programme initiated by a local government headed by the Worker's Party. As soon as it became more and more successful, it turned into that government's trademark, and into a main target of criticism from opposing parties. This enables us to state that, for the sustainability of social inclusion programmes, efforts focused on transforming the state apparatus and designing new laws will be of little value if the programme is not supported by a broad coalition of political forces. This means that the programme must be part of a serious state policy.

In addition, support to poor producers should not only focus on technical production and marketing aspects. Education, capacity building and support in leadership, political lobbying, organisation and financial management is just as important to limit vulnerability and dependency on external support.

#### Notes

<sup>1)</sup> Verticalization is the direct translation from Portuguese (*Verticalização*). It is increasingly also used in English to describe chain integration. Here it refers to the involvement of farmers and their relatives in the processing and marketing of their products.

#### References

- CARVALHO, João Luiz Homem de (Org.). 1998. Agricultura cidadã: novas formas de intervenção do Estado para um novo modelo de desenvolvimento rural. Brasília: Secretaria de Agricultura, 1998.
- CARVALHO, João Luiz Homem de. 2001. O PROVE - Programma de Verticalização da Pequena Produção Familiar. Cuaderno de Trabajo 83. Programma de Gestión Urbana - pgu@pgu.ecuanex.net.ec
- Duarte LMG, Brasil ICP, Salviano OMMF, Biserra RS. 1997. *Relatório de Pesquisa – Avaliação do Prove*. Brasília: Secretaria de Agricultura do DF
- UNDP, Relatório de Desenvolvimento Humano de 2003. <http://www.pnud.org.br/rdh/>



# Urban Land Use Policy in Peddie; a former homeland town in Eastern Cape Province, South Africa

**The promotion of land redistribution, especially for use by the urban poor to meet subsistence needs, often collides with historical and political barriers. Findings from a recent PhD case study conducted by the author in a small former homeland (or black reserve) in South Africa reveal that the availability of vacant land is often not known to those who may seek to use it for urban agriculture.**



Alexander Thornton  
The MCGP's first harvest of butternut in 2004

**T**he post-apartheid South African government has emphasised poverty alleviation, equality and sustainable development in the following key policy documents (White Papers), in which different types of urban agriculture are mentioned.

In addressing the complexities of land redistribution, the *White Paper on Spatial Policy and Land Use Management*, calls for "a reallocation of commonage [land] to poor residents who wish to supplement their incomes, [which] could help address local economic development and provide an inexpensive land reform option" (South African Government, 2001). The White Paper further asks local governments to ensure a process takes place which empowers people to invest socially and economically in the land, stating that "municipalities [...] are empowered to set aside land [...] for pasturage of stock and for [...] establishing garden allotments" (ibid). Before garden allotments can flourish, the White Paper argues that "tenure security is a precondition for people to invest in land improvements and encourages environmentally sustainable land use practices" in both urban and rural areas (ibid). Rogerson (1996) claims that the *White Paper on Agriculture* (South African

Government, 1995) represents the clearest signal of official support for urban agriculture in the era of post-apartheid reconstruction, in declaring that "the development of a periurban agriculture sector has been suggested as an option for livelihood opportunities for the urban poor". However, the homeland system (1) implemented during the apartheid era negatively influences current attempts of local people to gain access to urban vacant land for agricultural purposes. Challenges are largely bureaucratic, but they also include environmental impacts such as soil erosion, overgrazing and drought. As the case presented below of the Masizame Community Garden Project demonstrates, the granting of land use rights at the municipal level for agricultural purposes can be controversial and it is a slow process. According to the Minister of Land Affairs, Ms. Thoko Didiza, in many parts of the country municipalities currently *manage*

## Good communication and availability of information is imperative

municipal commonage (largely periurban land), which they traditionally only *administered*. Municipalities have thus been empowered by the national government to set aside this land for the benefit of poor residents. Using this commonage land as pasture or for the establishment of garden allotments

provides access to land for supplementing income (subsistence farming) and serves as a stepping-stone for emergent (commercial) farmers. However, research in the former homeland town Peddie shows that limited awareness of and important exceptions to land use rights have stunted development of urban agriculture.

## PEDDIE

Peddie, formerly Ciskei, is one of South Africa's ten former homelands, and it plays an important role as the administrative seat of Ngqushwa Municipality. Peddie has an estimated urban population of 5,086. Out of the estimated total of 20,757 households in the municipality, 70 percent have members who are unemployed, which is higher than the national average (45 percent). Further, 72 percent of households with employed members in the municipality earn less than R800 per month (US \$125) and, overall, women head 52 percent of the households. The local government in Peddie is in principle in favour of granting municipal commonage land use rights for community garden projects (Badi, 2004: pers. comm.; Department of Agriculture representative, 2004: pers. comm.). Moreover, the municipality's Integrated Development Programme (IDP) gives specific mention to developing community gardening (Ngqushwa IDP, 2001).

Peddie has sufficient, suitable, periurban land available to satisfy both housing demands and land for urban agriculture. Despite the region's fragile ecosystem (semi-arid), various forms of urban agriculture are practiced, such as low-intensive, small-scale cultivation of maize, the rearing of small herds of livestock (goats, pigs, cattle, chickens), and vegetable gardening (from 50 to 100 m<sup>2</sup>) in both the informal settlements and formal government-subsidised housing settlements. In the periurban residential area known as German Village, households now use the tracts of land

Alexander C. Thornton

✉ [alec.thornton@stonebow.otago.ac.nz](mailto:alec.thornton@stonebow.otago.ac.nz)



once farmed by German settlers during the region's colonial-era as grazing land for small herds of cattle and goats (figure). These animals graze where the land has not given way to blue bush and acacia thorn bush, which was a common consequence of overgrazing in the past.

Respondents to a questionnaire survey in Peddie, both households practising urban agriculture and those that did not practice it, frequently commented on the limited amount of space available to grow crops at home, and expressed their interest in pursuing community gardening. However, a lack of awareness of the municipality's current, post-apartheid land use policy and important exceptions are preventing many households from gaining access to available lands, and thereby preventing the municipality from realising the full potential of urban agriculture. This was illustrated by the case of the Masizame Community Garden Project (MCGP).

Figure 2: Residential areas in Peddie

Source: World Atlas 1: 50 000 Map Series (no date). Geography Department, Rhodes University. Data arranged by the author using ArcView 3.2 GIS Software for Windows

### THE MASIZAME COMMUNITY GARDEN PROJECT (MCGP)

The Masizame Community Garden Project (MCGP) in Durban Village was established in the 1990s by a few local women as a response to the need for income and to provide low-cost food for their household members. At the time the research was conducted (in 2005), the MCGP consisted of 15 members, three of whom were male. Through a community-based intervention process, the MCGP secured formal market access in town (at a local greengrocer) for their surplus butternut (see photo). The project currently occupies a piece of land on the fringe of Durban Village that was once used as an agricultural showground by the former Ciskei government.

With great effort over a period of ten years, the MCGP finally secured government funding for its project, but the land tenure issue has still not been completely resolved. Complexities of land tenure in the former homelands have caused the members a great deal of frustration in the past decade. In the former homelands, the state still owns all rural land, so municipal authorities can only issue land rights in urban areas. Interviews with MCGP members, representatives from the Department of Agriculture (DoA) and town officials revealed that some confusion remains regarding the land where the MCGP is located. The DoA and town officials explained that the municipality granted the MCGP members land use rights to cultivate. However, the MCGP members have (mis-) interpreted 'rights' as 'ownership'. The members were asked if they were given a deed, to which their response was 'no'. Unfortunately, a town-planning map indicates that a new school is planned on the current site of the MCGP, which could threaten the sustainability of the project. In a follow up interview, town officials were non-committal on the status of the MCGP with regards to plans for the new school (Badi, 2004: pers. comm.). Before receiving grant approval, the MCGP's members were under the impression that they were fighting to gain ownership of the land they were cultivating. Apparently, it was never explained to them that the national government has empowered municipalities to grant land use rights to the poor who seek to engage in agricultural activities. If the MCGP members had been (made) aware of this redistribution policy they could have applied for land under these rights instead of labouring for nearly ten years to secure the right to cultivate their community garden. Good communication and availability of information is thus imperative for (potential) urban agriculturalists to become aware of their rights.

### CONCLUSIONS AND LESSONS

Urban agriculture plays an important role in Peddie as a livelihood and survival strategy. The development of MCGP could be replicated by other would-be community gardeners in the area, because there are enough opportunities for low-income communities to market produce, both in the formal and informal markets. Moreover, the abundance of periurban land offers low-intensive subsistence gardeners and livestock owners the chance to emerge. Obstacles to development at the policy level (such as vague terms and concepts and limited awareness and implementation of current policies at the municipal level) should be removed, so that the potential for promoting urban agriculture and other livelihood strategies can materialise. Awareness of this potential should be created among researchers, planners and policy makers. In Peddie and similar areas, institutional stakeholders (governmental and non-governmental) and advocacy groups concerned with poverty alleviation should take the lead in informing the public of their rights and stimulating them to secure a livelihood by taking advantage of government-mandated land redistribution policies.

#### Notes

<sup>1)</sup> The homeland system was a result of controlled black urbanisation and racial segregation, which served to provide key sectors of the economy with black labour (Lester *et al.*, 2000).

#### References

- Badi, B. (2004), Works Superintendent, Ngqushwa Municipality, personal communication  
 Department of Agriculture representative (2004), Peddie, Ngqushwa Municipality, personal communication  
 Lester, A., Nel, E., and Binns, T. (2000), *South Africa past, present and future*, Longman, Harlow. S.; Sabel-Koschella, U.; de Zeeuw, H. (eds), *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda*, Feldafing, Germany: German Foundation for International Development (DSE)  
 Ngqushwa Municipality IDP (2001), First Draft of the Integrated Development Plan, Office of the Municipal Manager, Peddie, Ngqushwa Municipality  
 Rogerson, C. (1996), Urban cultivation and urban reconstruction in South Africa, *Geographical Journal of Zimbabwe*, No. 27, p. 11-20  
 Rogerson, C. (2003), Towards 'pro-poor' urban development in South Africa: the case of urban agriculture, *Acta Academica Supplementum*, 1, 130-158.  
 South African Government (1995), White Paper on Agriculture, <http://www.gov.za/whitepaper/1995/agriculture.html>, [10/02/2003]  
 South African Government (2001), White Paper on Spatial Policy and Land Use Management, <http://www.land.pwv.gov.za/White%20Paper/w hitetab.htm>, [05/05/2003]

# Effecting Policy Change and Implementation in Urban Agriculture, Kampala, Uganda

This paper presents the process, experiences and lessons learnt pertaining to urban agriculture policy change in Kampala. Specifically, it chronicles the legal and policy framework related to urban agriculture before 2001, and the participatory process culminating in the formulation of the current Bills for Ordinances that will serve to promote and regulate urban agriculture in Kampala City.



Marielle Dubbeling

Urban women farmer showing her garden in Kampala

**K**ampala, the capital city of Uganda, covers approximately 195 km<sup>2</sup> of hilly terrain with low-lying wetlands that are covered with lush green vegetation. The city has a population of 1.2 million with a population density of 4,581 people per square kilometre (UBOS, 2002). Its population is steadily increasing at a rate of 3.9 percent per annum due to high rural-urban migration and natural population growth (KCC, 2006a).

Despite it being illegal until very recently, urban agriculture has existed in Kampala since the 1890s (Urban Planning & Land Management Department, KCC, 2005). To date more than 30 percent of Kampala's population practices urban agriculture (Muwanga, 2001). Although it is recognised as an important coping strategy to ensure household food security and income, it also continues to be perceived as a nuisance and a threat to public health and the environment.

It was not until the late 1980s that research documenting the importance of urban agriculture in Kampala began to emerge. This research contributed to a

gradual shift in the perceptions of local policy makers. In 2000, the Kampala City Council (KCC) acknowledged the importance of urban agriculture and the need to legalise and regulate the practice. The Council also recognised that existing bye-laws were not supportive of urban agriculture and were obsolete given current economic and social realities.

In 2001, the KCC hired a consultant to review all urban bye-laws developed during the post-independence period of the 1960s. The only bye-laws that existed relating to urban agriculture were *The Kampala City Registration and Control of Dogs Ordinance, 1964*, which emphasised the control of rabies; *The Kampala City Maintenance of Law and Order Ordinance, 1964*, which emphasised the control of roaming livestock and proper disposal of carcasses; and the *Public Health Act, 1964*, which emphasised the growing of trees and ornamental plants in the city. There were no laws pertaining to crop and livestock production, fish farming, or related agricultural activities even though they were all widely practiced at the time by Kampala citizens.

In 2001, KCC established a committee of people from various disciplines who worked in collaboration with the consultant to review, develop, and amend the respective bye-laws. The six draft Bills for Ordinances that resulted from the process included:

- The Kampala City Registration and Control of Dogs Ordinance, 2001*
- The Kampala City Maintenance of Law and Order Ordinance, 2001*
- The Kampala City Fish Processing and Sale Ordinance, 2001*
- The Kampala City Urban Agriculture Ordinance, 2001*
- The Kampala City Sale of Milk and Milk Products Ordinance, 2001*
- The Kampala City Meat Ordinance, 2001*

In 2003, the KCC – in collaboration with Environment Alert, the Ministry of Agriculture, Animal Industries, & Fisheries, the National Agricultural Research Organization, and Makerere University – was supported by CGIAR's Urban Harvest and the Department for International Development of the British Government (DFID) to spearhead a second consultative process to re-examine the six Draft Bills for Ordinances. The two-year review resulted in five Draft Bills for Ordinances, including:

- The Kampala City Livestock and Companion Animals Ordinance*
- The Kampala City Fish Ordinance*
- The Kampala City Urban Agriculture Ordinance*
- The Kampala City Sale of Milk and Milk Products Ordinance*
- The Kampala City Sale of Meat and Meat Products Ordinance*

In 2005, KCC assented to the newly developed Ordinances to "provide for licensing, guidance, control, and regulation of urban agriculture and to provide for other connected matters" (KCC, 2006b)

## ADVOCATING FOR POLICY CHANGE

One of the aspects that contributed to policy change in Kampala was knowledge sharing and exposure to the existence of urban agriculture and its contribution to food security, financial stability, health and nutrition, and the creation of green

Ssemwanga Margaret Azuba

✉ [msazuba@yahoo.com](mailto:msazuba@yahoo.com)

Sarah McCans

✉ [sarah\\_mccans@yahoo.com](mailto:sarah_mccans@yahoo.com)

environments. This exchange was facilitated by the interaction of agricultural extension officers with other KCC Officials through the sharing of research findings and exposure to local community-based projects. This created a demand for a change in policy.

#### KEY ISSUES

During the stakeholder consultative process, several issues relating to the practicality of the ordinances were raised and the ordinances were amended accordingly. The new ordinances are intended to be “user-friendly”, and they outline regulations for city farmers and traders to promote sound management practices for each form of urban agriculture and marketing. Provisions were included for permits to legitimise farmers’ activities and licenses to regulate quality standards of commercial production. Subsequent sections of the ordinances place restrictions on where agriculture can be practiced and ban the use of unsafe inputs such as pesticides and chemical fertilisers. Also the disposal of wastes from agricultural practices is clearly addressed. Any breach of the ordinances could result in legal action. However, it is also recognised that the successful practice of sustainable agriculture in Kampala City will require ongoing development of technologies that are economically viable, ecologically friendly, and culturally appropriate.



Marielle Dubbeling

**Multistakeholder meeting with farmers, NGOs and local authorities**

#### PILOT TESTING OF THE ORDINANCES

The KCC, in collaboration with KUFALCC (Kampala Urban Food Security, Agriculture and Livestock Coordination Committee), prepared guidelines to operationalise the ordinances. These are currently being pilot-tested in two parishes of Kampala to assess the practicality of the developed

ordinances in terms of adherence at the individual and community level, enforcement, and challenges of implementing the bye-laws.

### One of the aspects that contributed to policy change was knowledge sharing and exposure

Some of the issues that have come up during the pilot testing phase thus far include:

- Resistance on the part of farmers to adopt the permit and licensing system. This can be attributed to a deep-seated reluctance to pay taxes stemming from the KCC’s failure in the past to provide services in exchange for taxes collected from Kampala residents and businesses.
- The need for a clear definition of urban agriculture (e.g., what level of agricultural production will require – or be exempted from – a permit?)
- The need for flexibility within the permit and licensing system in order to accommodate the dynamic nature of urban agriculture (e.g. over time farmers may shift from one type of agriculture to another due to changing market forces).

#### LESSONS LEARNT

Lessons drawn from the International Livestock Research Institute (ILRI) case study on Kampala “Process and Partnership for Pro-Poor Policy Changing” (Hooten, 2005) revealed that wide consultation and stakeholder involvement are key aspects when drafting policies. This process contributes to sensitisation and is imperative to creating a sense of ownership among all stakeholders.

Partnerships involving committed individuals from key organisations in the policy process are important. Strong and committed individuals in key positions can be crucial in arguing for change, especially in the case of issues such as urban agriculture that had been ignored and marginalised for many years.

Champions within organisations can help change the behaviour within those organisations through their leadership. Strong political champions play a key role in this respect. The policy making process is iterative,

slow, and expensive. This requires resource mobilisation as well as a long-term vision about the outcome that can transcend changes in political administrations.

#### LINKING REALITY WITH VISION

The existence of urban agriculture in Kampala prompted the development of related policies. Its wide acceptance and acknowledgement is evidenced in the manifestos (working documents) of the President of Uganda, and the Mayor of Kampala as key strategies for poverty reduction. KCC’s Urban Planning and Land Management Department have also recognised the ambiguity of a paragraph in the City’s Master Plan document relating to multiple land uses, which does not specify urban agriculture, but can be adapted to integrate urban agriculture into future city development. The existence of urban agriculture in other towns in Uganda has prompted a study to establish the magnitude of its practice as a basis for creating a dialogue on the inclusion of it in national policy frameworks.

#### CONCLUSION

The policy change in Kampala is a remarkable achievement considering that urban and periurban agriculture is still restricted or only tacitly accepted across the Sub-Saharan region. The breakthrough comes on the heels of increasing recognition of the contribution of urban agriculture to urban food and nutrition security, income-generation and employment and its potential impact on poverty reduction, health improvement and women’s empowerment.

#### References

- Hooten, N. 2006. Learning Lessons from the Kampala Urban Agriculture Policy Process. Workshop Report. 31 January 2006. Hotel Equatoria, Kampala. ILRI/ODI publication. <http://www.pppppc.org/content/files/documents/Kampala%20workshop%20report%20final%2028-03-06.pdf>
- Kampala City Council. 2006a. *Three Year District Development Plan 2006/7 to 2008/9*
- Kampala City Council. 2006b. *The Kampala City (Urban Agriculture) Ordinance, 2006*
- Kampala City Council. 1964. *The Kampala City (Maintenance of Law and Order) Ordinance*
- Kampala City Council. 1964. *Public Health Act*
- Kampala City Council. 1967. *The Kampala City (Registration and Control of Dogs) Ordinance*
- Muwanga, J. 2001. *Informal Food Markets, Household Food Provisioning, and Consumption Patterns Among the Urban Poor of Kampala*. Master’s Thesis. MUK. Geography
- Uganda Bureau of Statistics. 2002. *Population and Housing Census*



# An Enabling Policy Framework for Urban Agriculture in Rosario

While the city of Kampala principally adopted a regulatory approach to urban agriculture based on a system of permits, licenses, control and use of legal instruments, the city of Rosario placed its emphasis on development of an enabling policy framework based on economic incentives, communicative and educative instruments and design instruments (see also article De Zeeuw and Wilbers in this issue).



Maricela Dubbeling

The urban agriculture programme has allowed many men and women to improve their livelihoods

**W**ith a population of over one million inhabitants, Rosario is the largest city in the Argentine province of Santa Fe and the third most populous urban area in the country. During the last 30 years, the city has witnessed an increasing number of unemployed, and following Argentina's economic crisis in 2001 more than 800,000 people, or some 60 per cent of the city's entire population, were thrust into poverty.

Many citizens in Rosario began cultivating available plots of land throughout the city to ensure a steady supply of food for themselves and their families. NGOs were also driven to progressively assume a greater role in social development programmes, with urban agriculture as a significant part of their work. For its part, the municipality has gradually transformed its development activities into social programmes and policies aimed at tackling the situation of those groups excluded from the formal labour market. The local authorities removed restrictive bye laws to make public lands available for farming. The city also provided many fledgling urban farmers with tools, seeds, and other essential supplies.

**Raul Terrile**

✉ [raulterril@arnet.com.ar](mailto:raulterril@arnet.com.ar)

**Antonio Lattuca**

✉ [lattucao@arnet.com.ar](mailto:lattucao@arnet.com.ar)

## BUILDING AND INSTITUTIONALISING A MUNICIPAL URBAN AGRICULTURE PROGRAMME

The city created the Urban Agriculture Programme hosted by the Department of Social Promotion, which now has a staff of 33 full or part-time workers and a budget of US\$ 430,000 (in 2006). It brings together urban farmers, municipal officials, agricultural experts, and representatives of non-governmental organisations. Through this programme urban farmers are assisted in securing and protecting agricultural spaces, taking advantage of value-added agricultural products, and establishing new markets and market systems.

### Consolidation of the process was sought by formally incorporating urban agriculture into the City Strategic Development and Master Plan

Further consolidation of the process was sought by formally incorporating urban agriculture into the City Strategic Development and Master Plan. In this plan, urban agriculture is recognised as a permanent and legitimate use of urban land and promotes its integration into other public activities and projects related to management of green areas, equipment, housing, infrastructure, transportation, etc. Some ordinances are described in the box (on page 67).

## RESULTS

Rosario's urban agriculture programme has allowed many men and women to improve their livelihoods. There are currently 600 groups of producers (made up of around 10 persons each) in the city, 150 of which are actively involved in marketing. Six markets are held weekly in public spaces (in the city centre as well as in the various districts). Every day, there is a market somewhere in the city. Through market sales, the producers generate an income of US\$ 40 to 200 (the latter amount, and at times even more, is earned by those who devote themselves exclusively to this activity).

*"I think this is a process that is being consolidated over time. It has not been an isolated experience but one that has been integrated into the social and urban policies that the municipality of Rosario has been developing for already more than 15 years. I think that over time we will witness even greater attention being paid to integrating these processes of urban agriculture into the daily life of the city." Miguel Lifschitz, Mayor of Rosario.*

In addition, there is one producer-led agro-industrial facility in the city that processes vegetables and another that produces natural cosmetics using medicinal plants. Two others are under construction, in the south and southwest districts, with funds allocated by the participatory budget.

Four garden-parks currently being set up in the city will serve as models for more to be established in the coming years.

An urban producer network was also recently set up (2006) that aims to further strengthen the productive, marketing and policy lobbying capacities of its members. The network will embark on activities such as formation of a team of trainers that can train interested community members in ecological production techniques. Income generated through sale of these services will, amongst others, be used to strengthen the network.

*Continued on page 67*

# Books

## *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*



René van Veenhuizen (ed). 2006. Published by RUAF Foundation, IDRC and IIRR. ISBN 1-930260-14-4  
Since 1999, partners of the International Network on Urban Agriculture and Food Security (RUAF Foundation) have been playing a crucial role in

improving access to information on urban agriculture and in enhancing the capacities of local authorities, NGOs, farmer organisations and other stakeholders regarding local participatory diagnosis and strategic action planning on urban agriculture. This publication presents the current state of affairs in the development of sustainable urban agriculture and as such indicates what progress has been made since the first major works on urban agriculture were published (the UNDP book "Urban Agriculture" by Smit *et al.* published in 1996 and the DSE book "Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda" by Bakker *et al.* published in 2000).

This book is available in PDF format at <http://www.ruaf.org/node/961>, and in HTML format at [http://www.idrc.ca/ev\\_en.php?ID=100638\\_201&ID2=DO\\_TO](http://www.idrc.ca/ev_en.php?ID=100638_201&ID2=DO_TO) PIC. The 460-page hard copy can be ordered from IIRR through [bookstore@iirr.org](mailto:bookstore@iirr.org) / [www.iirr.org](http://www.iirr.org)

## *Growing Better Cities: Urban Agriculture for Sustainable Development*



Luc J.A. Mougeot. 2006. IDRC. ISBN 1-55250-226-0  
Summarising and synthesising 20 years of research experience in urban agriculture, the text is both clearly written and nicely presented so that the reader can quickly and easily grasp the main points.

This book serves as a focal point for the IDRC thematic web site on urban agriculture: [www.idrc.ca/in\\_focus\\_cities](http://www.idrc.ca/in_focus_cities). The full text is available online and leads the reader into a virtual web of resources that explores two decades of research into this important issue. A copy of the In-Focus web site on CD is included with the book (with texts in Spanish and French).

## *Irrigated Urban Vegetable Production in Ghana: Characteristics, Benefits and Risks*

Emmanuel Obuobie, Bernard Keraita, George Danso, Philip Amoah, Olufunke O. Cofie, Liqa Raschid-Sally and Pay Drechsel. 2006. Available at <http://www.cityfarmer.org/GhanaIrrigateVegis.html>. A limited number of hard copies are also available on request from [e.abraham@cgiar.org](mailto:e.abraham@cgiar.org) (RUAF c/o IWMI Ghana)



More than 200,000 urban dwellers eat exotic vegetables daily on Accra's streets and in canteens and restaurants. Most of the perishable vegetables are produced on open spaces in the cities or its fringes due to insufficient cold transport and storage. This activity is highly profitable and can lift vulnerable groups out of poverty. It can also contribute to flood control, land reclamation and city greening. However, it has become increasingly difficult for poor farmers to find unpolluted water sources in and around the cities to use for irrigation. This book gives a comprehensive overview of urban and periurban vegetable farming in Ghana's major cities with a special focus on wastewater use. It ends with recommendations

on how the health risks for consumers could be effectively reduced in a low-income country like Ghana, while simultaneously supporting the important contribution of open-space urban and periurban agriculture. The book highlights further research needs and will serve as an important resource for students, academics and decision makers.

## *Food Security in Practice: Using Gender Research in Development*

Agnes R. Quisumbing and Bonnie McClafferty. 2006

To download or order a copy, go to:

<http://www.ifpri.org/pubs/fspractice/sp2.asp>

This new practitioners' guide from the International Food Policy Research Institute bridges the gap between research and practice by providing up-to-date, relevant information on why and how gender issues, when taken into account, can improve the design, implementation, and effectiveness of development projects and policies. The guide presents key research findings from IFPRI's gender and intrahousehold programme in the framework of project and policy cycles. The authors field-tested the guide among practitioners in Africa, Asia, and Latin America to see whether the findings were relevant outside the study countries.

## *To Subsidise my Income: Urban farming in an East African Town*

Dick Foeken. 2006. Afrika Studie Centrum Series Vol. 7. Leiden. ISBN: 90-04-15202-4

As illustrated in earlier publications, and the article in this issue, urban agriculture is in the subject of research and development in Nakuru. Following the publication on Morogoro and Mbeya in Tanzania, this publication focuses on urban farming in this Kenyan city. The work is based on surveys and studies carried out by various researchers including Kenyan university students. It considers farming techniques, the socio-economic aspects of urban farming and the environmental issues involved. It shows that urban agriculture is omnipresent in Nakuru, that it is very important in the livelihoods of urban households, that it is tolerated by the authorities, and given increasing attention by city stakeholders.

## *Managing Cities in Developing Countries, the Theory and Practice of Urban Management*



Meine Pieter van Dijk. 2006. EE. UK. ISBN-10: 1 84542 880 3. Published in Chinese by Renmin University Press.

The author brings together a number of theoretical approaches and practical experiences to study the economic and financial aspects of urban management with a focus on developing countries. A number of opportunities and themes are discussed, a.o. provided by decentralisation, that urban managers should use to make their city more competitive. The author argues that urban managers should focus on issues brought up by stakeholders instead of a sectoral approach. Participation of urban stakeholders will lead to an integrated analysis of urban problems and to integrated solutions, including indications of stakeholder contribution.

## NEW CDs AND DVDs

### *Small Urban Producers Organizations: Key Partners for Sustainable Development*

Produced by World Report Foundation for IDRC, FAO, IPES and ETC. 2006

This film on DVD reflects the result of comprehensive studies on urban and periurban food and agriculture producers' organisations. The thirteen and a half minutes of footage cover experiences from Amsterdam, Dakar, Hyderabad and Rosario to illustrate and analyse the contributions of these organisations to food security, reduction of urban poverty and sustainable development. A limited number of copies are available on request from RUAF.

### *Recycling Realities in African Cities*

IWMI produced (with the support of IDRC) this high-quality, short recording (three and a half minutes only), which draws the attention of policy makers to the question of how to preserve the benefits of wastewater use for food production, while minimising its risks. A Water Policy Brief is also available, which focuses on the forthcoming WHO guidelines and the range of alternative risk reduction measures that can be taken when no comprehensive wastewater treatment is possible.  
<http://www.iwmi.cgiar.org/waterpolicybriefing/files/wpb17.pdf>

### *Urban Green Space*



Produced by World Report Foundation for ALTERRA Green World Research, funded by EU. 2004. [www.greencluster.org](http://www.greencluster.org)

This film on DVD presents the results of the Greencluster Project and includes practical tools for researchers, spatial planners, and politicians

working with the development and maintenance of urban green spaces in Europe.

### *PAPUSSA Interactive DVD*



This DVD contains documents, films, and photos that are the output of the PAPUSSA Research Project on Production in Aquatic Peri-Urban Systems in Southeast Asia (see also UAM no. 14).

### *Cities Farming for the Future*

The RUAF partners produced this DVD as a special feature for the World Urban Forum III, held in Vancouver in June 2006. It contains information on urban agriculture, which can also be found at [www.ruaf.org](http://www.ruaf.org)

### *Water in the Context of European Union's Environmental Research*



This DVD contains a project synopses of the 5<sup>th</sup> and 6<sup>th</sup> Community Research Framework (1998-2002 and 2002-2006 respectively). Information can also be found at [http://europa.eu.int/comm/research/fp6/index\\_en.html](http://europa.eu.int/comm/research/fp6/index_en.html).

From page 50

and RUAF. This project will include the review of baseline information on urban agriculture in Cape Town, filling of research gaps, an assessment of the policies and legislation regarding urban agriculture, assistance to establish a stakeholder forum, and the set-up of monitoring systems to show the impact per community as well as to compile a multi-year urban agricultural development programme for the city.

### THE WAY FORWARD

Sufficient internal and external understanding of and support for urban agriculture has been generated over the last three years and now is the opportune time to submit the final draft policy to the city council for approval. Acceptance of this policy will elevate urban agriculture so that it can compete equally with other priorities for improved resource allocation. With this formal recognition, urban agriculture can become a very useful element of Local Economic Development (LED) strategies and can

eventually help move bigger farmers back to the rural and commercial farming areas. Urban agriculture is currently not significant in the city of Cape Town and this draft policy is seen as the trigger for more explosive development of this practice.

#### Note

1) **The views and opinions expressed in this article are those of the author and do not represent those of the municipality of Cape Town.**

#### References

City of Cape Town, 2006a. Baseline Document for the Development of an Urban Agricultural Policy. Directorate: Economic and Human Development. Unpublished.  
City of Cape Town, 2006b. Draft Urban Agricultural Policy. Directorate: Economic and Human Development. Unpublished.  
City of Cape Town, 2006c. Economic and Human Development Strategy. Directorate: Economic and Human Development. Unpublished  
City of Cape Town, 2004d. Integrated Development Plan for 2004/05. Directorate: Integrated Development Plan. Unpublished.  
Republic of South Africa, 1997. The Constitution of the Republic of South Africa: Annotated Version. Constitutional Assembly. Hn Communications.

# Websites

[http://www.idrc.ca/en/ev-92997-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-92997-201-1-DO_TOPIC.html)

The IDRC web site features under the "In\_Focus" programme a variety of resources on urban agriculture, including slide presentations, short stories, case studies, research reports and books. These are only part of the reported results of IDRC-supported research.

<http://ictupdate.cta.int/index.php/article/frontpage/53>

The ICT Update is a bimonthly printed bulletin, a web magazine, and an accompanying email newsletter. It is published by the Technical Centre for Agricultural and Rural Cooperation (CTA) of the EU. No. 33 has just been released which features ICT's (Information and Communication Technologies) and Urban Agriculture.

[http://www.worldhungeryear.org/fslc/ria\\_040.asp?section=1&click=1](http://www.worldhungeryear.org/fslc/ria_040.asp?section=1&click=1)

The World Hunger Year web site provides an enormous amount of information, including pages on policy initiatives like Community Food Security, CSA, Farmers' Markets, Community Gardens, Community Food Assessments and more.

[www.chasque.net/asudhi](http://www.chasque.net/asudhi)

The Uruguayan Association of Hydroponics aims to promote the technology of hydroponics for communities and vulnerable populations to produce food in urban areas, and to promote integration and cooperation with national and international societies. It has been active in Ecuador, Argentina and Uruguay.

[www.portals.wdi.wur.nl/msp/](http://www.portals.wdi.wur.nl/msp/)

This web site gives you practical information on how to facilitate participatory learning processes with various stakeholders. It provides theoretical foundations, concrete case studies, methods and tools to create learning processes, facilitation tips, examples, literature and links. The aim of providing this information is to build capacity for multi-stakeholder processes and social learning.

[www.pps.org](http://www.pps.org)

PPS is a non-profit organisation dedicated to creating and sustaining public places that build communities. It propagates a multi-faceted "place-making" approach to planning and design. The site is meant to be a virtual public space, where people can always go for information and inspiration.

[www.tve.org/ho/doc.cfm?aid=1398](http://www.tve.org/ho/doc.cfm?aid=1398)

Television Trust for the Environment (TVE) is an independent, non-profit organisation, which promotes global awareness of the environment, development, human rights and health issues through the platforms of broadcast television and other audio-visual media. BBC World features the TVE/ITDG series on urban agriculture.

<http://www.cuhi.utoronto.ca>

The Centre for Urban Health Initiatives (CUHI) is a Canadian urban health research centre located in University College at the University of Toronto. CUHI facilitates research that examines how the social and physical conditions in cities affect the health of the people who live there.

<http://www.livablecities.org>

The International Making Cities Liveable Council is an interdisciplinary, international network of individuals and cities dedicated to making our cities and communities more liveable.

<http://www.megacitiesproject.org>

The Mega-Cities Project is a transnational non-profit network of community, academic, government, business, and media leaders dedicated to sharing innovative solutions to urban problems. Its aim is to make cities more socially just, ecologically sustainable, politically participatory and economically vital.

[http://www.toronto.ca/health/tfpc\\_index.htm](http://www.toronto.ca/health/tfpc_index.htm)

Toronto has long been at the forefront of public health initiatives and food security research and one of the first with a food policy council. At this site you will find information on the Toronto Food Policy Council.

<http://www.practicalaction.org/>

Practical Action assists in the development of skills and technology to build a better future. On this site Practical Action has made available at not cost a very large selection of Technical Briefs -factsheets with basic practical information.

[www.enn.com](http://www.enn.com)

For over 10 years, the Environmental News Network™ has helped to educate the world about environmental issues. ENN produces several environmental radio programmes that are syndicated across the United States, including EarthNews® Radio and ENN Radio, hosted by ENN Publisher, Jerry Kay.

[www.oisat.org](http://www.oisat.org)

OISAT Info is a new and easy-to-read web-based information service on non-chemical pest management in the tropics directed towards the needs of smallholder farmers. The information service presents preventive and curative methods of managing pests with the overarching goal of increasing the self-regulatory mechanism within agricultural systems, and reducing the use of synthetic pesticides.



# EVENTS

**29th Annual National Food Policy Conference  
(Washington, D.C., USA)  
September 2007**

The National Food Policy Conference is a Washington institution. It is coordinated by the Consumer Federation of America, in cooperation with the Food Products Association, and is held at Washington's National Press Club. It is a key national gathering for those interested in agriculture, food and nutrition policy. For the latest information, visit the CFA web site at: [www.consumerfed.org/events.cfm](http://www.consumerfed.org/events.cfm)

**Greening Rooftops for Sustainable Communities Conference  
(Minneapolis, MN, USA)  
29 April 29 - 2 May 2007**

The fifth annual International Greening Rooftops for Sustainable Cities Conference will seek to raise awareness of the many benefits of green roofs, share new research findings, provide information on the latest designs, implementation techniques and products, and broaden networks while working towards building more sustainable cities through green roof implementation. Conference streams fall under policy, design and case studies, and research. For more information visit: <http://www.greenroofs.org/>

**6<sup>th</sup> Regional Meeting on Urban Agriculture and Food Security  
(Montevideo - Uruguay)  
8 -10 November, 2006**

The Programme "Integrated Support to Social Sectors in Most in Need in the Periurban region of Montevideo (PAPPUM in Spanish), and the Regional Office for Latin America of FAO, with the Republic University together organise this regional meeting. The event aims to facilitate exchange of experiences and generate discussions on policy development for urban agriculture and food security. For more information, please contact [centralhuertas@fagro.edu.uy](mailto:centralhuertas@fagro.edu.uy)

**Regional EMWater Conference: "Efficient Management of Wastewater Treatment and Reuse in the Mediterranean Countries (Amman- Jordan)  
30 October -1 November, 2006**

This conference is organised in the framework of the EMWater Project (Efficient Management of Wastewater), which is funded by the EU under the MEDA Water Programme Initiative. You can contact [ismailalbaz@nets.com.jo](mailto:ismailalbaz@nets.com.jo)

**Local Agro-Food Systems Network's Third International Congress - Food and Territories ALTER 2006 (Baeza, Andalusia, Spain )  
18 - 21 October 2006**

The LAFS (local agro-food systems) network is an interdisciplinary and international network comprised of academics, researchers, development agents and institutions from numerous European, American and southern Mediterranean countries. Its goal is to establish a platform for scientific exchange that encourages the application of economic, territorial, technological and rural development approaches that can generate, validate and provide feedback to the creation of knowledge and methodologies related to the study of local agri-food production systems. LAFS organises a bi-annual congress. For more information visit: <http://www.gis-yal.agropolis.fr/index1024.htm>

**10th Annual Conference of the Community Food Security Coalition (Vancouver, Canada)  
7-11 October 2006**

This year's conference of the North American Community Food Security Coalition ([www.foodsecurity.org](http://www.foodsecurity.org)) focused on the following themes: food secure communities; food and institutions; food and cities; and global food issues. For more information visit: [www.bridgingbordersconference.org](http://www.bridgingbordersconference.org)

**World Conference on Accelerating Excellence in the Built Environment (Birmingham, UK)  
2-4 October 2006**

This conference is part of a world conference series that will enable practitioners, government policy makers, scientific and management innovators to accelerate excellence in physical regeneration, urban development and construction. WCAEBE International is hosted by the West Midlands Centre for Constructing Excellence in collaboration with the Chartered Institute of Building (CIOB) and the Office of the Deputy Prime Minister's Centre for Procurement. For more information visit: [www.acceleratingexcellence.com](http://www.acceleratingexcellence.com)

**World Water Congress of the International Water Association on Sustainable Water Management Practices (Beijing, China)  
10-14 September 2006**

More information on this conference can be obtained from [www.iwa2006beijing.com](http://www.iwa2006beijing.com).

**E-courses on Food Security (Toronto, Canada)  
September - December 2006**

Ryerson University's Food Security Certificate programme offers three courses: CFNY405 Food Security: applied research methods and evaluation; CFNY407 Food Security: community development and food security; and CVEH233 How safe is our food? Unfortunately by the time of printing this magazine, the courses will have started. Course overviews are available at <http://www.ryerson.ca/ce/de> (click on course overviews and scroll down to the course of interest).

**World Urban Forum 2006 (Vancouver, Canada)  
19-23 June 2006**

The World Urban Forum is convened by UN-HABITAT every two years to discuss urban issues for the purposes of developing action-oriented proposals to create sustainable cities. The WUF3, held in Vancouver, Canada received over 10,000 participants from more than 100 countries. For a report see <http://www.unhabitat.org/categories.asp?catid=41>. RUAF and IDRC organised two sessions on urban agriculture as part of the official programme: one on RUAF's experiences, titled "Cultivating Inclusive Cities", in which representatives from the cities where RUAF is working participated, and one on urban design and planning titled "Growing Better Cities", in which four municipal representatives (including mayors) participated. Both events were fully packed (over 200 participants each) and discussions continued beyond the two-hour limit of the networking events. In addition RUAF organised an exhibition of its work, which was illustrated on posters, a dvd, and flyers. The RUAF book "Cities Farming for the Future" (see the book section) was launched.

# EVENTS

## ***International Workshop on Urban and Peri-Urban Agriculture in the Asian and Pacific Region (Tagaytay City, the Philippines) 22-26 May 2006***

This workshop aimed to stimulate the sharing of experiences in the region by providing a venue for getting acquainted and sharing experiences focused on urban and periurban agricultural technologies resulting from research and development. Participants came from Japan, Indonesia, Korea, Malaysia, Taiwan, Thailand, Vietnam and the Philippines. More information on this workshop is available at the web site of the co-host: the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development: <http://www.pcarrd.dost.gov.ph/in%20the%20news/june/itn0609.htm>

## **PARTNERS**

### ***The Coalition for the Promotion of Urban and Peri-Urban Agriculture in Africa (CAUPA Association)***

The CAUPA association was formed in Yaounde, Cameroon, following the workshop "Agriculture and Urban Development in West and Central Africa" held in the Cameroonian capital in November 2005. The workshop was organised by the agricultural research institutes of Cameroon (IRAD), Benin (INRAB) and Senegal (ISRA), in partnership with CIRAD, and with the support of the French Foreign Ministry. IWMI and IAGU participated for RUAFA. The proceedings of the workshop will be available in the first quarter of 2007. The complete report of the workshop is available for downloading on [www.agricultures-urbaines.com](http://www.agricultures-urbaines.com). CAUPA is a network of farmers, market gardeners, animal breeders, traditional chiefs, NGO

members and officials, researchers as well as different stakeholders involved in agricultural activities in the urban and periurban areas. CAUPA's general objective is to provide a framework of reflection, exchange and action to urban and periurban agricultural actors.

### ***Development of Allotment Gardens in Cagayan de Oro, the Philippines***

At the inauguration of the city's fifth allotment garden in San Isidro, Barangay Kauswagan, in Cagayan de Oro, Councilor Caesar Ian Acenas, who represented Mayor Vicente Emano during the inauguration rites, requested for continued support from Germany and said the City Council is now preparing legislation that would institutionalise and set up policies for the establishment of allotment gardens all over the city. In UAM 10 and 11 Dr. Robert Holmer reported on the development of allotment gardens in the Philippines. These gardens enable poor families to plant vegetables in vacant and idle lots for their consumption and sell them to increase their household income. The five allotment gardens are implemented with the technical assistance of the GTZ, in cooperation with the City Local Environment and Natural Resources Office, Agricultural Productivity Office, and the barangay governments. The proposed legislation, according to Councilor Acenas, would include incentives to lot owners who allow the use of their lands for the project. This might be in the form of tax credits, among other measures, to encourage them to be part of the programme for poverty alleviation. Aside from benefiting from incentives, the lot owners would protect their properties against squatters and have a major role in environmental protection.

For more information contact Dr. Robert Holmer: [rholmer@xu.edu](mailto:rholmer@xu.edu)

From page 62

Ordinance N° 4713 (1999) related to the "Municipal programme for community gardens", which proposed the establishment of community gardens on public and privately owned land. In the first case user permits may be directly obtained from the relevant authorities. In the second case, private owners are invited to lease their vacant lots to the municipality of Rosario, which in turn will lease it to community gardeners, for the duration of two years. During this period the private owner is exempted from paying property taxes on the land.

Ordinance N° 7341 (2002) established the "Municipal programme for development of organic agriculture", which promotes the creation of organic production units as well as associated micro-enterprises for production of organic bio-fertilisers, compost and tools and for processing of organic produce. It foresees the provision of training, seeds and irrigation, provides technical and financial support for the establishment of agro-enterprises and marketing, and facilitates contacts with local supermarkets.

Ordinance N° 7358 (2003) established the "Programme for the promotion of productive social enterprises in Rosario" which supports agro-industries and farmer markets.

Ordinance N° 6493 (2003) relates to the permanent identification and inclusion of vacant land suitable for urban agriculture in the "Municipal land bank of the city of Rosario". This ordinance facilitates the process of assigning land to community groups. It also foresees in the identification of land for urban agriculture in urban rehabilitation and housing programmes.

Finally, Decree 1074 (2004) called for implementation of "The programme for garden-parks" in the city of Rosario, in which productive and leisure activities are integrated with management of green and natural areas (such as flood zones or road reserves).

Many challenges remain, such as to increase the scale of production and marketing in the city, reduce urban producers' dependency on government support and integrate urban agriculture into other areas of public management, specifically urban neighbourhood improvement and construction of new settlements.

# The Urban Agriculture Magazine

We are currently working on issue no. 17 of *UA-magazine*, which will focus on **Strengthening Urban Producers** and be distributed in December this year. We have already received a number of contributions among which articles from two programmes (IPES/ETC/IDRC/FAO) on urban producers.

In 2007 and 2008 we will continue with the production of two magazines per year. In addition the RUAF partners are working on systematisation of experiences and knowledge gained in the RUAF programme Cities Farming for the Future. Subscribers to the electronic RUAF Update will receive regular progress updates.

We informed you earlier that *UA-Magazine* no. 18 would focus on the issue of urban water for agriculture. However, since we depend in this production on another programme (SWITCH), we had to postpone this topic to a later stage. Your contributions are still welcome though, but this special issue on water will be produced later in 2007 or in early 2008.

The next two issues of *UA-Magazine* in 2007 will be:

## **NO. 18: COMMUNITY-BASED URBAN AGRICULTURE MAY 2007 DEADLINE FOR CONTRIBUTIONS: 1 FEBRUARY 2007**

This issue will seek to discuss experiences related to social inclusion of migrants, youth and marginalised groups by urban agriculture. Experiences from both the South and the North (community gardening in the USA, migrant farming in Europe, etc.) will be discussed. The issue will look at social inclusion and community building in relation to various topics such as revitalisation of neighbourhoods, productive use of open spaces, etc. Moreover, experiences with urban agriculture and HIV/Aids projects (with a focus on SE Africa) will shed light on social inclusion in relation to health aspects.

## **NO. 19: INNOVATION IN URBAN FARMING SYSTEMS NOVEMBER 2007 DEADLINE FOR CONTRIBUTIONS: 1 AUGUSTUS 2007**

Here we seek to gather and discuss a broad range of experiences with a broad range of other programmes (Urban Harvest, Prolinnova, CIRAD, etc.) involving new technologies and methodologies of urban agriculture, such as participatory technology development, farmer field schools, urban innovator farmers, space-confined technologies, the use of ICT (radio, etc.).

*In addition the RUAF partners will produce a number of working papers. In 2007 a working paper will be produced on the lessons learned with Multi-stakeholder Action Planning and Monitoring for Urban Agriculture (see also articles in this issue no.16). You are most welcome to share with us your experiences.*

**For the coming years we are considering the following topics:** (the sequence may change)

### **\* Sustainable Urban Water Management and use for Urban Agriculture**

Optimisation of urban water management and use for urban agriculture: collection, storage, treatment, nutrients, re-use, marketing, legislation, guidelines, risk mitigation, etc.

### **\* Urban Agriculture in Crisis Situations**

Experiences in Serbia, Sudan, Sierra Leone and elsewhere show the role urban agriculture can play in these situations in providing food and income. The focus will be on both the role of urban agriculture in emergency relief and in rehabilitation.

### **\* Urban Food Systems**

In this issue attention will focus on urban agriculture as part of urban and regional food systems. What is its role in stimulating and improving these more localised food systems, stimulating the local economy, and serving the diverse interests of stakeholders, food policy councils, etc.?

### **\* Chain Development and Micro Enterprise Development (in urban agriculture)**

In this issue the focus will shift from supporting producers' organisations to supporting urban agricultural enterprises in improving production, marketing and enterprise development.

*Articles on urban agriculture submitted to UA-Magazine should consist of approximately 2,300 words (for three-page articles), 1,600 words (for two-page articles), or 700 words (for one-page articles), preferably accompanied by an abstract, references (maximum of 5), figures and good-quality digital images or photograph. The articles should be written in a manner that can be readily understood by a wide variety of stakeholders all over the world.*

*We also invite you to submit information on recent publications, journals, videos, photographs, cartoons, letters, technology descriptions and assessments, workshops, training courses, conferences, networks, web-links, etc.*



## Urban Agriculture Magazine

GENDER AND URBAN AGRICULTURE

ISSN 1571-6244

No. 16, October 2006

UA Magazine is published three times a year by the Network of Resource Centres on Urban Agriculture and Food Security (RUAF), under the Cities Farming for the Future Programme, which is financed by DGIS, the Netherlands, and IDRC, Canada.

UA Magazine is translated into French, Spanish, Chinese, and Arabic, and distributed in separate editions through the RUAF regional networks, and is also available on [www.ruaf.org](http://www.ruaf.org).

### The RUAF Partners are



\* *Latin America:* IPES Promoción del Desarrollo Sostenible, Lima Peru; email: [au@ipes.org.pe](mailto:au@ipes.org.pe); Magazine in Spanish: [www.ipes.org.pe](http://www.ipes.org.pe);



\* *French Speaking West Africa:* IAGU Institut Africain de Gestion Urbaine, Dakar, Senegal; email: [moussa@iagu.org](mailto:moussa@iagu.org); Magazine in French: [www.iagu.org/ruaf/ruafiagufr.php](http://www.iagu.org/ruaf/ruafiagufr.php)



\* *English Speaking West Africa:* International Water Management Institute, IWMI-Ghana; email: [o.cofie@cgiar.org](mailto:o.cofie@cgiar.org)



Website: [www.iwmi.cgiar.org/africa/west\\_africa/projects/RUAFIL-CFF.htm](http://www.iwmi.cgiar.org/africa/west_africa/projects/RUAFIL-CFF.htm)



\* *East and Southern Africa:* MDP Municipal Development Partnership (MDP); email: [tmubvami@mdpafrika.org.zw](mailto:tmubvami@mdpafrika.org.zw); website: [www.mdpafrika.org.zw/urban\\_agriculture.html](http://www.mdpafrika.org.zw/urban_agriculture.html)



\* *South and South East Asia:* International Water Management Institute, IWMI-India; email: [r.simmmons@cgiar.org](mailto:r.simmmons@cgiar.org)



Website: [www.iwmi.cgiar.org/southasia/index.asp?nc=9106&msid=119](http://www.iwmi.cgiar.org/southasia/index.asp?nc=9106&msid=119)



\* *North Africa and Middle East:* American University of Beirut, email: [zm13@aub.edu.lb](mailto:zm13@aub.edu.lb); Magazine in Arabic: [www.ecosystems.org/esduhomepage.php](http://www.ecosystems.org/esduhomepage.php)



\* *China:* IGSNRR Institute of Geographical Sciences and Natural Resource Research of the Chinese Academy of Sciences; email: [caijm@igsnr.ac.cn](mailto:caijm@igsnr.ac.cn); Magazine in Chinese: [www.cnruaf.com.cn](http://www.cnruaf.com.cn)

\* *Coordination and Support:* ETC Foundation; email: [ruaf@etcn.nl](mailto:ruaf@etcn.nl); Magazine in English: [www.ruaf.org](http://www.ruaf.org)

Editors, No. 16

This issue has been edited by René van Veenhuizen (Responsible Editor) with the ETC-UA team and the RUAF Partners.

Web Editing, Events, and Books  
Marije Pouw and René van Veenhuizen

Administration  
Ellen Radstake

Language Editor  
Catharina de Kat-Reynen

Design, Layout and Printing  
Koninklijke BDU

Subscriptions

The editor: [ruaf@etcn.nl](mailto:ruaf@etcn.nl)

Address  
Urban Agriculture Magazine  
P.O. Box 64  
3830 AB Leusden  
The Netherlands  
Visitors' address: Katanjelaan 5, Leusden.  
Tel: +31.33.4326000  
Fax: +31.33.4940791

e-mail: [ruaf@etcn.nl](mailto:ruaf@etcn.nl)  
website: [www.ruaf.org](http://www.ruaf.org)