Chapter 2
Sustaining Urban Agriculture Requires the Involvement of Multiple Stakeholders

Urban agriculture relates to a variety of urban issues, like urban poverty, land use planning, waste management, food security, economic development, public health, and community development. Many stakeholders can be identified who play a role and who (should) have a say in planning and development of urban agriculture and related activities, like input provision, vegetable production, aquaculture, livestock production, processing and marketing. To increase the contribution of urban agriculture to sustainable urban development requires involvement in planning and policy making of these different stakeholders. Multi-stakeholder processes dealing with urban agriculture are of recent nature. The lessons learned in the International Network of Resource Centres on Urban Agriculture and Food security (RUAF) are described.
Introduction

Urban Agriculture is a dynamic concept that comprises a variety of production (ranging from subsistence production at household level to fully commercialised agriculture), processing and marketing systems of food and non-food products. It takes place within heterogeneous resource situations, e.g. under scarce as well as abundant land and/or water resource situations, and under a range of policy environments that can be prohibitive or supportive to its existence and development.

Urban agriculture (UA) has been promoted over the last couple of years by a large number of local and national governments, urban actors and international agencies, such as UN-HABITAT’s Urban Management Programme, FAO, International Development Research Centre (IDRC- Canada), CGIAR-Urban Harvest and the International Network of Resource Centres on Urban Agriculture and Food Security (RUAF) as a strategy to promote food security and poverty reduction, sustainable resource use and environmental management, social integration and local participatory governance (see Chapter 1).

Urban agriculture takes place in a multi-sectoral environment, touches on a large number of urban management areas (e.g. land use planning, environmental and waste management, economic development, public health, social and community development), and involves a large diversity of systems and related actors (input provision, vegetable production, aquaculture, livestock production, processing and marketing). UA can thus be seen as a cross-cutting issue involving a wide range of often disconnected actors or stakeholders needed for effective implementation, policy making and monitoring.

Increasing the contribution of UA in more sustainable urban development requires its inclusion into policy and planning and the involvement of different stakeholders related to UA (urban producers and their organisations, NGOs and researchers, private organisations and different levels and departments of governments) in these processes.

Integrating Urban Agriculture into policies and planning

Traditionally, urban agriculture met a lot of resistance by urban authorities and planners, who saw UA – due to an urban and often elite bias – as a relict of rural activities that would pass away with the growth of the city, or just as a nuisance and a health hazard. Most urban policies in developing countries give little attention to UA and tend to prohibit or severely restrict it. Agriculture is usually not considered within urban land use and development plans. Also, agricultural research, extension and credit institutions with their focus on rural areas tend not to attend to urban farmers, while their urban counterparts generally do not consider agriculture as an urban enterprise.
The challenge for much of UA practised by the urban poor and others is for it to become a social, economic as well as environmental benefit rather than a liability, and to be seen in this light by the authorities. Because poor urban producers often operate illegally, on marginal and often hazardous sites, with limited means and assistance, their practices are often unsustainable, and in some situations pose risks to their own health, that of their family and consumers.

Recognising and legalising UA as a legitimate urban land use is a crucial first step. Technical assistance and training to urban producers is essential to promote more sustainable production, processing and marketing techniques (see also Chapters 11, 12 and 13). Potential health risks, for example related to the use of agrochemicals, non-treated organic waste and wastewater, and lack of hygiene in food processing and marketing activities, need to be managed and regulated. Providing urban farmers with more secure access to land (see further Chapter 3) and water sources, as well as to services and capital (see further Chapter 4) are also important in this respect (Dubbeling and Santandreu, 2003).

A sustainable approach to UA focuses on maximising its potential social, environmental and economic contributions - contributions that, as also highlighted in Chapter 1, include the promotion of health and nutrition, ecological responsibility, social inclusion and community capacity building. In this way, one of the key policy objectives for urban agriculture is its integration into broader urban development agendas, for example related to children’s and youth programmes, environmental programmes, social welfare programmes and housing and urban development programmes, as illustrated by the case of Vancouver (see at end of this Chapter). Benefits include capitalising on existing momentum, infrastructure and expertise promoting collaboration between municipal departments; and enabling inter-connected social, economic and ecological benefits for citizens (Mendes, 2005).

Dynamic planning must provide for UA land uses to evolve as the city expands and transforms itself. Space-limited and capital intensive forms of UA (fruit trees, medicinal and ornamental plants, silk worms, mushrooms, catfish, small stall-fed livestock) can thrive in a city’s core, while more land-intensive and waste-generating forms of UA could relocate to outer-lying and less populated locations (Mougeot, 2005). In order to match the demands of urban growth with activities of high economic and social value, urban agriculture should be included as a multifunctional component in municipal land use planning, zoning, master plans and neighbourhood development plans (Cabannes, 2003), as will be further discussed in Chapter 3.

Involving multiple stakeholders in project development, policy and planning

The number and composition of stakeholders directly or indirectly involved in UA differ from city to city, but include:

- different levels of government (national, provincial and local governments),
- relevant municipal departments and professionals (e.g. Parks and Gardens, Health Department and inspectors, Public Works, Urban Planning Department, Water boards, Departments for community development etc.),
- local leaders and village councils,
- the private sector,
- academic organisations or research institutes,
non-governmental organisations, social movements, grassroots and religious organisations, and
male and female producers and their organisations, who are directly involved in agricultural production and related processing and marketing activities (farmers; local producers of inputs such as grass, compost, equipment; transporters; processors; vendors on streets and local markets).

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To be effective, project, policy and planning processes on UA should address the needs and priorities of the different stakeholders involved, as well as the specific socio-economic and political-institutional context in each locality. In the Netherlands, for example, independent water boards have a key role to play in water management. Any decision to combine a productive function of urban agriculture or aquaculture with water storage, recreation or a natural park would require agreement between, amongst others, the water board, the province and the municipality (Deelstra, et al, 2001: see the Delft case study).

Effort has to taken in identifying the different stakeholders involved (see further stakeholder inventory described below) and motivating them to participate in project development, policy and planning. Such a multi-stakeholder approach has in principle - and compared to other approaches - the following benefits:

- it allows for better quality decision finding and making (through better understanding of priority issues and needs of different stakeholders involved),
- it improves the likelihood of implementation (through enhanced ownership, improved mechanisms and processes for coordination, and more effective use of available human, technical and financial resources), and
- it gives to the process (and its results) a higher credibility, as well as wider outreach (Hemmati, 2002).

On the other hand, multi-stakeholder processes may lead to undue increase of some stakeholders’ influence, (especially when there is a lack of transparency throughout the process), require specific financial and skilled human resources, as well time to allow for changes in cultures towards public participation in decision-making.

Few city authorities and other local stakeholders have experience with these so-called participatory and multi-stakeholder processes, and therefore require well-designed methods and tools, technical assistance and staff training. Spaces for participation should be created and formalised. Special consideration needs to be given to the non-organised and often excluded segments of the population (women, immigrants and youth, for example). Stakeholders involved need training in how to work together with people they have never worked with before. Innovative means to involve urban producers in identifying, developing and monitoring urban agriculture projects and policies is needed. This also means that urban producers should learn to negotiate with different levels of government and other external agencies to achieve their
goals. Funds would be needed to jointly implement defined action and policies. Yet, questions remain on how to effectively use multi-stakeholder processes to influence policymaking and planning.

This chapter intends to respond to the issues stated above, describe and illustrate different experiences and suggest a general approach for multi-stakeholder action planning and policy design for urban agriculture. Further chapters will then illustrate specific policy fields related to UA (land use planning, financing of UA, marketing of UA, gender and UA) as well as describe in more detail different production systems such as urban horticulture, forestry, livestock and aquaculture.

**Multi-stakeholder Processes on UA: What and How?**

Multi-Stakeholder Processes (MSPs) are:

- processes that aim to involve stakeholders in improving situations that effect them
- forms of social interaction that enable different individuals and groups, who are affected by an issue, to enter into dialogue, negotiation, learning, decision making and collective action
- about getting government staff, policy makers, community representatives, scientists, business people and NGO representatives to think and work together (see also http://portals.wdi.wur.nl/msp/).

**Figure 2.1 Characteristics of a MSP**

- Involves stakeholders with a common interest in the situation
- Has focused objective to bring and change
- Stakeholders are involved in a learning process
- Bottom up and top down strategies are integrated
- Has a set of agreed rules and agreements about cooperative
- Deals consciously with power and conflict
- Has a clear frame and process
- Engages with structural institutional change
- Works across different sectors
- Works across different scales
At the heart of MSPs lies the capacity to design a process, in which different stakeholder groups engage in diverse forums and activities so that,

- knowledge is generated;
- ideas, values and perspectives are shared and contested;
- conflicts are negotiated;
- principles for action and policy design are defined, and
- collectively binding decisions are made.

The skill and art of facilitating any MSP is to create situations where people can learn collectively on how to improve their situations. This does not necessarily mean trying to gather all interested stakeholders in one place at one time. Rather, an MSP is likely to run over months, if not years, and will involve different combinations of stakeholders working together in diverse ways. The wide use of participatory planning processes has led to the development of diverse methodologies with varying purposes (http://portals.wdi.wur.nl/msp/).

Broadly speaking, MSPs are built around the different and iterative phases of (UN-HABITAT and UNEP, 1999):

1. Diagnosis, assessment and stakeholder inventory;
2. Consultation to confirm political support and consolidate stakeholder participation;
3. Strategy and action planning;
4. Implementation,
5. Follow up and consolidation, and
6. Integrated monitoring and evaluation (see also figure 2.2).

These phases or steps are described below.

**Figure 2.2 Phases of a MSP**
Any MSP approach should accept the reality that there are many different and often conflicting interests with respect to any particular development question. Motivating the different stakeholders to participate in the process requires understanding and responding to their different needs. Bringing together different stakeholders in processes where individual or group power and interests are at stake requires skills in conflict mediation, resolution and facilitation, and transparent information sharing in order to arrive at informed decision-making.

Multi-stakeholder processes dealing with UA were amongst others developed in the context of implementation of Local Agenda 21 (as is the case of Vienna-Austria), the UN-HABITAT’s city consultations or city development strategies, promoted by its Sustainable Cities and Urban Management Programmes (Quito-Ecuador, Rosario-Argentina –see attached case study–, Dar Es Salaam-Tanzania), or more recently in North American and Canadian cities promoting sustainable food systems through Food Policy Councils (i.e. Toronto and Vancouver-Canada - see also the attached case study– Arizona, Michigan and San Francisco – USA). Systematic review of these experiences (see also box 2.1) have led partners of the International Network of Resource Centres on Urban Agriculture and Food security (RUAF) to use MSPs in UA in various partner cities around the world (see further www.ruaf.org).

**Box 2.1 Analysis of experiences with MSPs on urban agriculture**

Analysis of various experiences indicates that MSPs in UA should integrate elements of:

**Enhancing public awareness and motivating the different stakeholders to actively participate in action planning and policy design.** A prerequisite for any policy related to urban agriculture is the recognition of the value, the benefits and the resulting needs of urban agriculture by political leaders and heads of administration. Therefore it is necessary to raise their awareness on the issue, and to provide them with adequate information. It is also useful to demonstrate the positive aspects of urban agriculture with some local examples. Publicising the issue through opinion-makers and leaders such as the media is another strategy. Urban producers themselves should also be mobilised to participate, to enhance political pressure and to be involved in strategy and action planning.

**Capacity building** among local actors for developing participatory processes of diagnosis, problem identification, implementation of solutions according to previously established priorities, conflict mediation and negotiation, policy design and joint implementation of actions, systematisation, monitoring, and control of municipal policy changes.

**Building trust and cooperation** among the main actors (building commitment). Permanent and transparent information flows among the different stakeholders is crucial in this respect, as is communication on agreements made, implementation of these and results. Commitments among different actors can be formalised by means of an inter-actor agreement or any other formal arrangement for promoting transparency and institutionalisation of the process. To develop the AGRUPAR Program (Agricultura Urbana Participativa) in Quito (Ecuador), the local government, several NGOs, UMP-LAC/UN-HABITAT, and community representatives signed an Inter-Actor Agreement for carrying out a participatory diagnosis and for developing an action plan on UA.

**Policy making as well as joint action planning and implementation.** Efforts to establish policies before initiating action planning/implementation often result in policies that do not work due to lack of political will, lack of resources or severe distortions during translation into actions later on in the process. On the other hand, actions that are not translated into adequate guiding/facilitating policies tend to stay rather localised with few or less sustained impacts on the livelihoods of larger segments of the population. Policies should relate to current UA activities and farming systems as well as new activities identified in a multi-stakeholder planning process.

Review and adaptation of existing legal frameworks (regulations on health, land use, housing). A review and analysis of the policy and legislative framework in Zimbabwe (Makonese and Mushamba, 2005) for example identified that there is no written government policy statement specifically addressing UA in Zimbabwe. A legislative framework for UA does exist but scattered in national legislation and municipal by-laws. The study thus recommends that the Government of Zimbabwe promulgates a clear statement and law on UA so that actors in the field can be guided accordingly and programmes can be implemented in the framework of the policy.
Step-by-step

Preparatory actions
The initiative for developing an MSP will most often be by one organisation taking the lead in raising awareness and motivating other stakeholders to become involved. Often a project team or core group that will further promote and implement the MSP is formed. This MSP team will be responsible for facilitating and strengthening dialogue with the larger group of stakeholders involved in UA who will become involved in further communication, analysis, and action planning or policy design.

It is helpful if local MSP teams integrate community members/urban producers, NGO or University staff and (local) government representatives from the start. Representatives of urban producers could provide insights into their experiences, views and needs, and facilitate contact with other urban producers. NGO and University staff could support action-oriented research and facilitate the dialogue between producers and government representatives. Local government representatives can facilitate access to certain information (for example statistics on UA, land use maps, laws and regulations related to UA) and support in describing and analysing the legal and institutional context in which UA is currently taking place or will take place in the near future (depending on strategic city development plans for example).

Whenever possible, it is important in this first phase to negotiate and formalise initial agreements and commitments (see box 2.2 for a sample inter-actor agreement elaborated in Quito-Ecuador) on how the process will take place, what objectives it is aiming at and which stakeholders will participate in what role, to promote transparency, building of trust and institutionalisation of the process.

Diagnosis, assessment and stakeholder inventory

Diagnosis and assessment often take the form of situational analysis, diagnosis or baseline studies and are concerned with describing, understanding and analysing
a. the local socio-economic, institutional and legal context in which UA takes place (characteristics of the city, legal and planning framework related to UA, stakeholders involved)

b. the presence and location of urban agriculture in and around the city

c. the variation in UA farming types (horticulture, forestry, livestock or mixed systems) and activities (recycling, production, processing, marketing), and their functions or impacts

d. an inventory of (probable) key issues to be addressed including the specific problems encountered, development potentials of UA in relation to poverty alleviation, environmental management or social integration, and changes that might affect urban agriculture in the future – for example in relation to land use pressure, transport network development, and guiding the formulation of potential interventions for action.

Box 2.2 Inter-actor agreement for development of an baseline study and action plan on urban agriculture

We (names of stakeholders ……….) sign the present inter-actor agreement, containing the following clauses:

First clause - Objective
The above-mentioned stakeholders agree:
(a) To gather data on the development (key data and impacts), farming types, involved stakeholders and key issues (problems) of urban agriculture in the city (baseline study),
(b) To facilitate and strengthen dialogue with involved stakeholders to identify broad strategies to address these key issues, highlighting the consequences if key issues are not addressed,
(c) To regularly monitor project development and results, and
(d) To disseminate project results through different local forums and media.so as to encourage other organisations to join in further development of action planning and policy design on UA.

Second clause - Project Team
A Local Project Team has been formed to facilitate the process of participatory diagnosis, action planning and establishment of a multi-stakeholder platform on UA. The actors signing this present agreement will form part of this team and will be in charge of planning and implementation of the activities.

Third clause – Tasks of the Local Project Team
(a) Coordinate all the efforts needed to implement the afore-mentioned activities using a participatory and multi-stakeholder approach, and ensure the results are achieved,
(b) Assign a project coordinator who will maintain efficient communication among team members,
(c) Support project implementation with human and financial resources and existing logistical facilities:
- the local government will make available the latest land use (GIS) maps and cadastre, as well as the present city development plans and legal/normative frameworks related to UA
- the NGO will make its office and communication facilities available for regular team meetings
- the University will support participation of two students for field work and organise transport to the field
(d) Identify and mobilise new stakeholders and donor agencies that will contribute to successful project implementation and further development of an action plan,
(e) Prepare monthly reports on activities realised, results achieved and lessons learned to facilitate project monitoring and inter-regional exchange.

The agreement can be modified upon agreement of all signing parties. (signatures of all stakeholders …….)

Source: Translated from the Spanish version of the inter-actor agreement elaborated in the context of a city consultation on UA, supported by the Quito municipality, IPES/UMP-LAC and IDRC. (2000-2002).
To be able to formulate more inclusive proposals for action later on, diagnosis and assessment should explore issues of gender (See also chapter 5) and generation gaps, and should include the communities’ (farmers) perceptions and values.

A combination of different tools and techniques can be applied to collect the necessary data and information:

- Analysis of existing literature and research reports; review of available statistics
- Analysis of city maps and available Geographic Information Systems (GIS) materials; visits to various parts of the city and its surroundings (field studies)
- Identification and mapping (e.g. with GIS and local observations) of agricultural activities in the city, available open spaces that could be used for UA and classification of the suitability of those areas according to various criteria (see Box 2.3 and Rosario case study attached)
- Interviews with key informants or focus group meetings with representatives of the various stakeholders and farmers
- Participatory Rapid Appraisal (PRA) exercises in selected areas.

Box 2.3 Identification and mapping of urban agriculture and vacant land areas

Identification, mapping and analysis of (potentially) productive land areas in the context of UA and farming systems will provide important data such as areas of land already under cultivation, the area of vacant land that potentially can be used for UA, and the importance of specific types of UA systems. It will also lay a basis for further definition of ways and means to include UA into municipal physical planning policies and practices that increase the access of the urban poor to available and suitable space for food production.

As illustrated by the Rosario case study (attached to this chapter) and in order for vacant areas to become urban productive spaces, reliable and up-to-date information is necessary on aspects such as ownership, soil quality, contamination and characteristics, accessibility and land use regulations. Such information facilitates decision-making on the type of land best suited for the purpose, and how and for how long it can be designated to urban agriculture.

Often the exploratory study will be followed by more focused in-depth studies of specific problems and potential solutions. Diagnosis and assessment thus form the basis for policy development and planning of UA projects, as illustrated in Accra-Ghana (see Box 2.4). Involving the stakeholders identified in the assessment can also help to strengthen collaboration between the actors involved in UA.

Stakeholder inventory

Stakeholder analysis can help define who to involve in designing a MSP and how, and find out whose information needs must be considered. This exercise is useful:

- to identify which stakeholders to involve in (re-) designing a project or programme, and to assess their interests and how these relate to the project/programme.
- to use during a specific phase or for a specific project component to analyse stakeholder relations, including cooperation and conflicts and considering external factors affecting stakeholders and their activities. It can assist you in making an appropriate selection of the stakeholders most central to the task/issue at hand.
- to provide a foundation and strategy for participation throughout the project/programme, thereby making it easier for stakeholders to learn from each other (http://portals.wdi.wur.nl/msp).
Box 2.4  Exploratory study in Accra, Ghana

An exploratory study on urban agriculture in the Accra metropolis (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 are to be produced from this study, including a policy brief prepared in consultation with policy makers, and a study report for discussion with the identified stakeholders. The exploratory study revealed the phenomenon of UA in the Accra Metropolis, and highlighted constraints for its development, especially in terms of UA 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 UA, however, the by-laws and regulations of the Accra Metropolitan Area put limitations to livestock production (obviously due to health and environmental concerns). Strategies for implementing an UA 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.


Defining which stakeholders should be involved and when they should be involved in a MSP process is thus largely dependent on the defined purpose, but can also be influenced by the pragmatic identification and involvement of certain stakeholders to effectively reach results (Box 2.5).

Box 2.5  Key questions to identify stakeholders

- Who might be affected (positively or negatively) by the concern to be addressed?
- Who are the “voiceless” for whom special efforts may have to be made?
- Who represents those likely to be affected?
- Who is responsible for, can control or influence what is intended?
- Who is likely to mobilise for or against what is intended?
- Who can make what is intended more effective through their participation or less effective by their non-participation or outright opposition?
- Who can contribute relevant knowledge, expertise or financial and technical resources?
- Whose behaviour has to change for the effort to succeed?

The type of stakeholders involved in UA and their level of participation in the process will vary depending on local circumstances. It is important to identify the current mandate and roles of the different stakeholders in relation to UA development and the relevant information they have on UA and related projects and policies, and get their views on the potentials and risks of UA, and their contributions (human and/or financial) to the MSP. The inventory and analysis will enable the development of a strategy that motivates and facilitates the participation of various stakeholders and identifies their potential roles in the different phases of the process (diagnosis, planning, implementation and monitoring). Some of these roles are identified below (de Zeeuw, et al., 2001):

Local, provincial and national governments play a key role, ensuring the availability and secure tenure of land and water, access to public services, approval of regulations and standards. These different levels of government are already engaged in many areas of service provision and regulation, such as urban planning, water treatment, waste collection, management of green spaces, which have direct interactions with urban agriculture. Activities started up without the involvement of those who influence decision-making (mayor, council members, heads of departments, policy advisers) may achieve little in the long term. Therefore, it is
essential to involve government representatives in the discussions throughout the planning process, in order to acknowledge their opinion and suggestions, overcome possible resistance and gain support for policy review and formulation.

Interaction between different levels of government, as well as between governments and other decision-making bodies should be specifically looked into as the Delft, Vancouver and Rosario case studies illustrate. From the outset, Vancouver’s Food Action Plan for example acknowledged that some of the resources and policy tools necessary to address food system issues fell outside of the jurisdiction of Vancouver City Council. As such, the development of partnerships with other agencies has been and will continue to be instrumental to the process. Key partners include Vancouver Agreement, Vancouver School Board, Vancouver Park Board and Vancouver Coastal Health and community organisations (Mendes, 2005).

Also, UA does not always share the same boundaries as local authority areas. Therefore, it is worth considering at the very onset of the process whether cooperation with neighbouring local authorities is sensible and beneficial. Although resources can be shared and actions made more effective, varying political interests between municipalities could well complicate the process.

Commercial and subsistence farmers and gardeners and their organisations
One should bear in mind that urban producers do not form a homogeneous group. Livestock farmers have different interests from horticulture or aquaculture farmers. Commercial farmers differ in their interests to subsistence or hobby farmers. Promotion of different UA production systems therefore requires different policies and interventions (see also other Chapters in this book). Taking into account the expertise, local knowledge and views of different producers and producer groups is important in this regard. As direct stakeholders, urban farmers should also play a key role in project management and coordination, and in the evaluation and control of the activities carried out.

Micro-enterprises involved in urban agriculture
Alongside urban and peri-urban farmers and gardeners, specialised micro-enterprises are also involved in the production of agricultural inputs (eg. compost), the processing of agricultural produce (eg. Making cheese, jams and marmalades, dried fruits and flowers) and marketing (eg. street vending of fresh products or processed food, small shops and local markets, food box schemes, etc.). An important aspect in the development of UA programmes is strengthening of linkages between the different parts of the production chain (input supply, production, processing and marketing).

Residential neighbours and other interest groups
As already mentioned, urban agriculture may play an important social role in providing opportunities for education, training, recreation and leisure. Actions to promote the social aspects of urban agriculture should be discussed with the targeted groups (i.e. children and schools, urban citizens, community and health care organisations) and their associations. Among citizens, it would be important to involve individuals or groups, whose dwellings or activities are located near sites of urban agriculture, and who are or might be affected positively (improved greening and contact with nature) or negatively (pollution, noise) by current and future UA activities.

NGOs, community-based organisations and universities
Urban producers may lack expertise regarding specific aspects of urban agriculture (i.e. specific production or processing techniques). Universities, research centres or NGOs could provide support for the development of appropriate technologies for food production and processing and provide methodological support in diagnosis, monitoring, and training. NGOs or community-based organisations could also play a crucial role in linking urban producers with governmental authorities or research institutes. Finally, these organisations
could often help finance and implement projects that are defined as a result of multi-

stakeholder processes.

**Private sector and support organisations**
The private sector and support organisations can play a role in facilitating access to inputs and services (e.g. marketing.). In El Rímac (Lima-Perú) for example, the municipality signed a cooperation agreement with a private corporation, Purina Center Rimac Corn (producer of poultry food), whereby the company took responsibility to provide training and technical assistance in poultry-raising to interested farmers free of charge (Cabannes, et al., 2003). The role of micro-finance institutions or credit-cooperatives should be considered regarding different forms of financing for UA (see also Chapter 4)

**Policy narrative**
Based on the diagnosis, assessment and stakeholder inventory, a study report or ‘policy narrative’ could be elaborated (see also Box 2.3). This document can serve as a good instrument to brief the larger group of stakeholders and to advance the planning process with them.

The policy narrative can include:

1. Presentation of the key data regarding urban agriculture in the city (presence, types and locations),
2. Important constraints encountered by urban farmers and other actors,
3. Expected potentials of urban agriculture for various policy goals,
4. The expected negative consequences of non-intervention / continuation of the present policies, and
5. Draft proposals/ outline for set up of an urban agriculture programme in the city.

**Consultation and creation of a broader institutional framework and commitment**
This phase aims at wider sharing of the findings of the diagnosis and assessment, strengthening and broadening involvement of the different stakeholders, formalising and approving new commitments to the process (eg. by signing a new inter-actor agreement defining more specific tasks, responsibilities of different stakeholders and funding mechanisms) and setting up a structure(s) or platform(s) that will guide and coordinate future action planning, implementation, resource mobilisation and institutionalisation.

This step could be developed through:

1) **Meetings/workshops or focused consultations** with the direct and indirect stakeholders to:
   a. Discuss in-depth the most important problems/issues identified and to explore alternative solutions and intervention strategies
   b. Discuss their possible roles and identify available human and financial resources to support development of an UA programme and check/strengthen their initial commitments.
   c. Discuss the organisational set up of the intended UA programme.

The workshop/meetings will eventually result in initial commitments of the institutions and organisations to cooperate in the preparation and implementation such a programme.

2) The constitution of a **multi-stakeholder structure/platform or forum** to give continuity to and promote the empowerment of all the stakeholders in the MSP. The objectives and tasks of such multi-stakeholder forums could include:
• Bridging the communication gap between direct stakeholders and the institutional actors in urban agriculture and functioning as a more permanent platform for information exchange and dialogue,
• Coordinating the planning, implementation and monitoring of a concerted city agenda on UA, including activities related to policy analysis, lobbying and formulation
• Stimulating the institutionalisation of such activities.

The forum should preferably operate with a formal status and institutional commitment. 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 can be to agree on a City Strategic Agenda on UA (identifying policy objectives and including agreements on the key issues in UA that the city wants to work on). The strategic agenda includes preliminary strategies and an assessment of their likely impacts on living conditions and urban development, together with an examination of institutional and managerial implications. In most cases the strategies proposed are not alternatives, but a variety of overlapping and complementary strategy components. These strategy components, with the associated implementation instruments, will form the basis for elaboration of detailed action plans at a later stage, as illustrated by the example of Governador Valadares in Brasil (see Box 2.6).

**Strategy and action planning and implementation**

On the basis of the diagnosis and assessment and further consultations, strategies and actions will be defined as part of an action plan that identifies and operationalises solutions (action/activities) to meet local needs and identified key issues.

Strategies and actions forming part of an action plan can include:

• pilot or demonstration projects,
• capacity building activities,
• further research or studies,
• review and adaptation of municipal policies, legal and normative tools,
• development of new structures of financial management and allocation of resources (setting up of rotating credit funds, channelling public subsidies), and
• setting up of new institutional structures that promote and guarantee community participation.

For example, action plans developed by various cities have included the following:

• Promoting safe re-use of urban organic wastes and wastewater in agriculture by establishing quality criteria for compost and wastewater used for irrigation, establishment of low cost facilities for sorting of organic wastes and production of compost, animal feed or biogas, implementation of pilot projects with decentralised collection and treatment of household wastewater for re-use in local agricultural production, farmer education regarding the health risks associated with re-use of urban wastes and ways to mitigate those risks (proper crop choice, selection of irrigation methods - Accra-Ghana, Hyderabad-India, Dakar-Senegal);
• Enhancing support to processes of technological innovation in urban agriculture by improving the coordination between research institutes, agricultural extension agencies, NGOs and groups of urban farmers, improving the access of urban farmers and micro-entrepreneurs to credit programmes, and strengthening organisations of urban producers (Rosario-Argentina; Beijing-China; Gabarone-Botswana);
Box 2.6 Elaboration of an urban agriculture action plan in Governador Valadares, Brasil

In Governador Valadares (GV), an exploratory study on urban agriculture was conducted in 2002. Analysis of the data showed that agricultural production is practised by around 80 percent of all households. The main crops planted include fruit trees, vegetables and medicinal plants. The areas used for UA production are basically limited to privately-owned household plots. The limited availability of land was identified as the major obstacle for further UA development, though land use maps have shown that large areas of vacant (public land) are available in GV. This indicates a problem related to individual or communal access to non-household plots (for example green spaces, river margins, and institutional land). Other problems identified relate to the lack of water for crop irrigation and lack of support for UA production and marketing.

In GV, a Municipal Forum on Urban Agriculture and Food Security was called together upon finalisation of the exploratory study. The forum counted over 100 community 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) were also invited. The forum’s first event was used to present the results of the exploratory study (the policy narrative) and to find common agreement on the development and general objectives for a city action plan on UA.

Key issues for UA were discussed and prioritised and three objectives of an action plan on UA were defined: (a) improve access to public and private spaces for UA (2) provide funds and other incentives for UA production (3) stimulate the use of water sources other than drinking water for UA.

A working group was established to identify and elaborate possible strategies to fulfil the defined objectives. The working group then called together a meeting of community and farmer representatives. The community representatives were split up in three groups of adult men, adult women and youth (both sexes) each of which had to prioritise what they considered to be the most important strategies. In a follow-up community meeting 10 actions that were considered most important by all three groups were identified.

A task group was then formed with farmer and community (men, women and youth) representatives and representatives of the local government, NGOs and other institutions, to prepare a draft local action plan, taking into account the feasibility of implementing the 10 actions, institutional interest and commitment to support the plan and a possible time frame.

At the second forum discussion this proposed action plan was presented to the entire forum. The strategies for implementing the action plan were discussed and the roles and contributions of different stakeholders were agreed upon.

The following results were achieved after two years:

- 13 Community gardens were established,
- An Association of Community Gardeners was formed,
- The first urban farmer market was inaugurated,
- UA was incorporated into the general City Plan,
- Regulations for ceding public and private areas for UA were developed and implemented,
- Economic incentives for UA production (reduction in property tax and water tariffs) were provided.

The Municipal Forum on UA and Food Security continues to function (end of 2005).

- Promoting ecological farming practices through farmer training and local experimentation with ecological farming methods, providing licences and incentives (e.g. tax reduction) to micro-enterprises that produce and supply ecologically friendly inputs (compost, bio-pesticides, quality seeds - Havana-Cuba),

- Facilitating local marketing of fresh urban-produced food by authorising local farmer markets, food box schemes and other forms of direct selling of fresh agricultural produce to local consumers and creation of the minimum infrastructure required for local farmers markets, and enhancing urban producers’ access to market information (Governador Valadadores-Brasil; Rosario-Argentina, Hanoi-Vietnam).

Actions can be prioritised for short-, medium- or long-term implementation, based on the expected impacts and the potential for scaling up, the problems that could arise if no action is taken, the number of expected beneficiaries, and the viability of implementation (social and political viability, availability of resources).

The implementation of the short-term actions is important to motivate and ensure continued interest of the involved stakeholders (by looking for short-term and concrete results). It also provides the space for learning by doing, and thereby provides valuable information for policy formulation and design of longer term projects. Therefore, it is useful to develop, right from the start of the process, pilot projects or actions that produce outputs or have an impact in the short term, which then create a positive environment for more complex and long-term processes.

Specific attention should be paid to formulation of “affirmative actions” related to gender equity and social inclusion of vulnerable groups (see chapters 1 and 5). It is also important that the action plan is officially be endorsed by the local government. Funding for implementing these actions can be sought through local or (inter)national resources.

**Follow up and consolidation**

Alongside implementation, policy analysis, lobbying and formulation should ensure the sustainability and consolidation of the UA programme beyond the period of a given political administration and facilitate a change in the programme’s scale: from working with a small group of stakeholders and beneficiaries to working with larger groups; from working in one or a few neighbourhoods to working in many; from working in one city or municipality to working in several cities.

As stated earlier, efforts to establish policies before initiating action planning/implementation often end up with policies that do not work due to lack of political will or lack of resources. On the other hand, actions that are not translated into adequate guiding/ facilitating policies tend to stay rather localised with few or less sustained impacts on the livelihoods of larger segments of the population.

Review and adaptation of existing municipal by-laws, norms and regulations help to remove unnecessary restrictions on UA and to develop specific regulations and norms for legal use of various types of urban land for UA. Institutionalisation of UA into national and municipal policies and programmes is central, and can take shape through:
Inclusion of UA in national, city or neighbourhood strategic and development plans (the normative or planning framework). The inclusion of UA into strategic development plans would give UA a much more permanent and firmer basis (see also box 2.6 on Governador Valadares). It would also create support for integration of UA into other sectoral policies on poverty alleviation and social inclusion, health and nutrition, environmental and waste management and economic development. (see case of Vancouver).

Integrating UA in (sub) municipal land use plans. Land use plans should exist not only at the overall municipal level, but also at lower levels as in neighbourhood improvement plans, subdivision plans, district development and urban renewal plans. They should include elements of micro-planning to delineate spaces that could potentially be used for UA with clear rules concerning use, density, etc, taking into account mixed use of plots (eg., residential and agricultural). Also multi-functional land use (combinations with recreation, water management, landscape management, maintenance of buffer zones) could be promoted (see further also Chapter 3 of this book).

Review of current municipal policies and elaboration of a facilitating (and regulating) legal framework related to UA, as done in Kampala, Uganda (box 2.7). (By-)laws, ordinances and regulations for UA could enable access to land through granting of temporary user rights, defining land taxation and tax exemptions, promoting safe use of wastewater for agricultural purposes and ecological farming and facilitating access to credit and marketing.

Creation of an appropriate institutional framework. The roles and functions of urban agriculture within local policies are manifold. In order to develop UA’s full potential to contribute to sustainable urban development, it is important that this potential is also recognised by the urban administration. This recognition should not only be reflected in the relevant political programmes and plans, but should also result in the creation of a municipal UA department or programme that incorporates institutional and municipal budgets, as has been done by Villa Maria del Triunfo-Lima, Peru (Box 2.8).

**Box 2.7 Revision of ordinances on urban agriculture in Kampala, Uganda**

In Kampala City, Uganda, approximately 30 percent of the households are seriously engaged in urban agricultural enterprises, of which 75 percent involve and are owned by women. Despite its positive contribution, urban agriculture has been banned for a long time, (Public Health Act, 1964 and The Country and Town Planning Act, 1964) as it is considered to be illegal, a health hazard and economically insignificant.

In 2003, the Kampala City Council (KCC) in collaboration with the Kampala Urban Food Security, Agriculture and Livestock Co-ordination Committee (KUFSALCC), spearheaded a consultative process of re-examining the Draft Bills for Ordinances related to urban agriculture in Kampala City. The KUFSALCC consists of KCC technical officials, officials from the Ministries of Agriculture, Animal Industry, Fisheries and Health, Makerere University staff, staff of the National Agricultural Research Organisation, farmers, representatives of Urban Harvest, and the Media. The review identified a number of gaps in the “Kampala City Draft Bills for Ordinances 2001” related to Urban Agriculture and Livestock. In December 2003, the Council approved the recommendations / inputs provided by the stakeholders for incorporation into the final Bills for Ordinances, with the objective of legalising UA and promoting more sustainable UA systems, while protecting public health (see for the final Ordinances: www.ciprotato.org/urbanharvest/home.htm).

In Villa Maria del Triunfo–Lima (Peru), UA has been included in the city’s Integral Development Plan for 2001-2010, as well as in the Concerted Economic Development Plan that is being drafted. Following the inclusion of UA in the City Integral Development Plan, the Municipality’s UA Programme was created and institutionalised as a sub-department under the Local Economic Development Department, reflecting the Municipality’s interest in turning UA into an economic activity. For 2004, the Municipality set aside approximately USD 50,000 from its budget for a fund to co-finance different UA activities (for input production, farming, processing, and commercialisation). This amount does not include the human resource and operational expenses of the sub-department of UA, valued at USD 20,000. The Municipality is also using and managing external resources for the development of Urban Agricultural projects. Source: Merzthal G. and R. Barrera, 2005. Paper developed for the World Urban Forum 2006.

Participatory monitoring and evaluation
Monitoring and evaluation activities are an integral part of any MSP and should not be considered as isolated activities to be done at a certain stage or at the end of the process. Both time and funds have to be set aside for this purpose from the beginning. Monitoring and evaluation allow for the review and improvement (re-orientation) of the strategies/methodologies used to achieve the expected outcomes of interventions by documenting and sharing lessons learned concerning both successes and failures. Monitoring and evaluation also allow for keeping track of the impacts of the MSP on policy change and on the livelihoods of different stakeholders involved, and thereby to communicate successful efforts to a wider public and to 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. Monitoring and evaluation can comprise both quantitative (e.g. number of home-gardens established, complementary income generated from UA activities) and qualitative (e.g. improved access to and control of resources by men, women and other social groups, local institutional capacity built, uptake of projects results for specific policy or technology interventions) data.

The state government of Mato Grosso do Sul in Brazil, for instance, included changes in social and economic conditions, gender and generational gap issues, technology transfer, and environmental impacts in the evaluation of its UA programme. Surveys among urban producers and micro-enterprises were carried out for this purpose (Cabannes, et al., 2003).

Multi-stakeholder Processes: Challenges and Future Perspectives
The hope in promoting MSPs is that these processes contribute to building participatory and democratic governance (in the cities and institutions involved) and facilitating change. MSPs are based on principles of participation, ownership and commitment, mutual trust and collaboration (in planning, decision-making and control). MSPs are in fact political processes through which power relations are redefined. One should not underestimate the challenges involved in getting around the same table partners/stakeholders who often do not trust each other (for example urban producers or community representatives and local government officials), who are afraid of being controlled or who are not at all used to these new forms of collaboration and management (political administrations in many cities have never promoted public participation). Time, perseverance, financial and human resources are needed, and feelings of ownership of the MSP should continuously be promoted among all stakeholders involved. Transparency in information sharing and decision-making, formalisation of agreements, and implementation of actions that lead to short-term results...
and impacts, as well as visualisation and dissemination of these results are all important strategies to sustain MSPs.

Three specific challenges related to some of the above mentioned issues in terms of (1) strengthening the organisation of urban producers to support their participation in processes of planning and decision-making (2) improving impact monitoring on UA and (3) institutionalising not only UA but also the MSPs themselves are highlighted below:

**Strengthening (involvement of) urban producers’ organisations**

The integration of UA production systems into urban policies and planning, the allocation and combination of appropriate UA with other urban activities and technical assistance to producers to improve their practices are only possible if government and other agencies can relate to UA producers as legitimate actors or stakeholders in processes related to urban management and decision-making. In the urban arena, it is crucial for different interest groups to be organised not only to secure recognition, legitimisation, representation and direct participation, but also to get support in becoming more professional and accountable for their trade, and in increasing their contribution to the local economy through partnerships and alliances with other stakeholders. Unless urban producers form legitimate organisations, or at least find recognition and strengthening for their informal organisations, they cannot make claims on public resources nor participate in policy decisions which impact on them (Mougeot, 2005).

MSP on UA should thus be designed and implemented in such a way that they contribute to strengthening urban producers organisations (improving the functioning of existing organisations or creating new organisations), by:

- Strengthening internal management and (financial) sustainability of the organisations,
- Strengthening linkages between different farmers’ organisations in the city and between producers’ organisations and micro-enterprises or vendors (enhancing production chains),
- Enhancing enterprise development and marketing of produce (specifically for niche-markets),
- Supporting development and uptake of appropriate and sustainable production, processing and marketing technologies through participatory technology development, farmer-to-farmer exchange and farmer-field schools,
- Enhancing their lobbying and policy influencing capacities.

**Need for impact monitoring**

As illustrated in this chapter, diagnosis and assessment of UA, action plans, pilot projects, and new institutional, normative and legal frameworks on UA have been introduced in a number of cities around the world. Some cities have created municipal programmes in partnership with other local actors, including UA in municipal budgets, in development and land management plans. Other cities have issued new regulatory provisions and fiscal measures to support UA. This increased interest and commitment demonstrates the potential and calls for the need to gather more hard facts and figures on how the different forms of UA
contributes to poverty alleviation, local economic development and environmental sustainability. Easy-to-measure and realistic indicators to monitor the impact of UA on urban food supply, urban employment, income and food expense savings and urban land use should be developed and more consistently applied.

Impact monitoring methods and tools widely used in rural agriculture (such as producer and market surveys, household budget and consumption registers) are sufficiently generic for application in the context of urban agriculture. However, potential limitations to the use of participatory tools have to be considered, given that in many cases, urban farming is not a legal activity per se, and farmers have felt uncomfortable mapping their fields or sharing production data. This calls for more formal/structured methods to generate quantitative, technical information that is more familiar and acceptable to urban government leaders and policymakers. GIS to map green urban spaces and large-scale surveys to determine the contribution of agriculture in the city to meet urban food demand are some examples.

As is the case with any form of monitoring, the use of these tools and impact indicators for UA and the analysis of findings have to be judged also on their limitations. A food consumption survey for example may not reflect urban reality if it ignores food supply from street kitchens and vendors, particularly for the highly mobile working sector of the urban population who rely on street food. Furthermore, formulation of impact indicators suffers from definitional and boundary-setting problems that plague urban agriculture in general. As long as approaches are not homogenised, it becomes difficult to really compare data between different cities. There is a definite need for more case study material on measuring UA impact, on conventional and participatory approaches applied and on the specific tools used (Campilan, et al., 2003). In short, a more systematic effort is needed to improve the breadth, frequency and consistency of monitoring UA. This may be partially achieved by incorporating UA related indicators into common urban databases and monitoring programmes, such as the Global Urban Observatory, the Millennium Development Goals and the World Food Reports.

It should be made clear however that most of these indicators and programmes are related to monitoring outcomes of development projects and not so much to the processes that lead to the outcomes. Therefore, it is suggested that additional work should be done in order to clarify and demonstrate how and to what extent UA connects with and impacts upon urban governance or participatory democracy as examples of process monitoring.

Institutionalising MSPs

Traditionally, participatory approaches have focused primarily on communication and planning aspects among stakeholders and less on the institutional dimension. Here, the term ‘institution’ is not being used as a synonym for organisation, but in the broad sociological sense to mean any established law, custom, social practice or organisation that forms part of the social structure and influences the regular patterns of human behaviour. In other words, institutionalisation of MSPs is about making multi-stakeholder processes the “regular way of doing things”. The changes needed to effect this change take time to be understood, accepted, and routinely applied. It demands steady, gradual and progressive changes in people’s understanding and acceptance of the principles of participatory planning and decision-making on the one hand, and corresponding adaptations in institutional structures and
cultures on the other. The purpose of institutionalisation is to build incrementally upon the impacts achieved by MSPs in UA and to turn the steps of the MSP into familiar and repeatable day-to-day practices.

What to institutionalise?

a. Principles of participatory planning and decision-making. These principles have to be understood, accepted and integrated into attitudes, behaviour, and routine institutional procedures. They include: stakeholder involvement as integral to decision-making; focusing on connectivity between issues, sectors and institutions; shifting from a sectoral approach to planning to a more integrated approach considering cross-cutting issues and establishing strategic planning and management founded upon co-operation and collaboration around issues.

b. Capacities and functions. These are the technical capacities and expertise that are built up through the participatory planning and decision-making process, and which support activities within the different phases of a MSP (for example, diagnosis and assessment, or action planning). These specialised capacities and functions allow different actors to collaborate more effectively, complementing each other’s capabilities and roles, and are also the system-wide functions and general capacities that are needed by all or most of the participating stakeholders.

c. Products of the planning and decision-making process. These are the concrete outputs generated during the process, including specific strategies, action plans, investment project profiles and proposals, funds mobilised for implementation, demonstration projects implemented etc.

How to institutionalise?

The scope, pace and nature of institutionalisation in a given city will be shaped by local factors, but in general the following steps are likely to be useful:

- Strengthening existing institutional structures in order to improve their effectiveness in planning, management, and co-ordination between different sectors and actors; when necessary, creating new institutions to accommodate special requirements – both technical and managerial – not covered by existing institutions;
- Changing or adjusting mandates of existing institutions in order to integrate new functions and roles;
- Identifying and tasking anchor institutions to take the lead and provide a home base for particular activities or phases;
- Linking to established strategic policy instruments such as annual budgeting, human resource allocation, sectoral work programming, etc.;
- Developing skills necessary to support and routinely apply the process (for example, information collection, negotiation, facilitation, strategy formulation, action planning, project management, etc.);
- Modifying legal and administrative frameworks to enable a procedural framework for smooth and effective functioning of institutions;
- Providing funds to support expenditure and equipment for capacity building and sustaining the framework, primarily through public budgetary provisions or allocations;
- Maintaining knowledge support and a learning process (for example, by documenting and evaluating experiential lessons and building collaboration with local research or consulting establishments) (UN-HABITAT, 2001).

The development and institutionalisation of MSPs should go hand in hand with the development and institutionalisation of UA. This chapter has described the principles, phases and challenges of a Multi-Stakeholder Process developed for urban agriculture. The following chapters will describe in more detail the technical and policy aspects of urban agriculture and provide insights in how to further develop and promote it.
Note

1 Stakeholders are all those who have an interest in a particular decision, either as individuals or representatives of a group. This includes people who influence a decision, or can influence it, as well as those affected by it (Hemmati M., 2002).

References


Hemmati M. (with contributions from F. Dodds, J. Enayati and J. McHarry), 2002.


Politicians and planners are faced with many competing claims for the use of scarce land in and around cities in the Netherlands. Multifunctional land use—combining different functions within one area—offers them a solution. The sole function of agriculture in industrialised countries has until recently been seen as food production. This case study in the highly populated west of the Netherlands shows that urban agriculture can be promoted in industrialised countries by regarding it as one element of a land-use combination that offers other valuable functions to society.

Many possible win-win situations exist to meet urban and periurban challenges as urban planners in the Netherlands seek to create attractive land-use combinations and satisfy the many demands placed on scarce land. Many of these combinations can be based on urban agriculture, for example:

- agriculture combined with childcare and educational facilities;
- reed production combined with recreation and wastewater treatment;
- aquaculture combined with water storage and recreation;
- production of added-value agricultural products such as cheese, jams and cosmetics, combined with recreation and tourism; and
- urban forestry, which offers health and microclimate benefits, combined with energy crops and recreation.

A good example of combining land-use functions in a heavily populated area is the case of the ‘Bieslandse Bovenpolder’ in the city of Delft, the Netherlands.

Planning in Delft

Delft is a city of around 95,000 people in the densely populated province of South Holland. The region is home to approximately 3.4 million inhabitants with a population density of 1,179 inhabitants per square kilometre (CBS). As a result, every square metre of land is designated under the country’s planning system that operates at three levels: national, regional and local, all of which have roles to play in spatial planning.

In theory, the government at lower levels should operate within the framework of the objectives set out by policy at the higher levels. In turn, policies made at higher levels of government should provide general guidelines within which plans proposed at lower levels can be realised. Of course it is not always possible to accommodate the wishes of all. The plan for the mixed use of the Bieslandse Bovenpolder provides an interesting example of integration of land-use functions and policy objectives.

The Bieslandse Bovenpolder

The ‘Bieslandse Bovenpolder’ lies on the eastern urban fringe of Delft and comprises a total of some 35 hectares. Before the realisation of the plan described here, six tenant farmers...
operated in the area on annual leases obtained from the municipality of Delft. Longer leases were not granted because the municipality wanted to have access to the land on short notice in case it should decide to develop the area. This gave rise to uncertainty among the farmers and, with six farmers on 35 hectares, use of the land was inefficient in agricultural terms, even though each farmer also worked land elsewhere in the area.

The Plan

In 1996, Jan Duijndam, one of the six farmers who had for some time been considering converting his business into an organic farm, decided to act. Together with a planner from the Delft Initiatives for Nature group (IND), Jacques Schievink, discussions were initiated with the other farmers in the area. Agreement on a plan was eventually reached between the six farmers, including Duijndam’s take-over of their tenancy rights.

The ‘Bieslandse Bovenpolder’ plan was finalised in March 1997 and, importantly, was adopted in the manifestos of a number of local political parties for the municipal elections of May 1998. Election of a new ‘green’ administration meant that the plan could go ahead. Work on the ground to implement the plan began in the winter of 1999-2000. The total costs of implementation, excluding maintenance, were around Euro 100,000.

Box 2.9 Urban farmer Duijndam in the Bieslandse Boven Polder

Duijndam now has a twelve-year lease of the land from the municipality. He added 30 of the 35 hectares of the Upper Bieslandse polder to the 50 hectares he already farmed organically in the area, to improve economic viability. As is the case for many organic products in Europe, organic milk too commands a premium price in the Netherlands.

The remaining five hectares Duijndam devoted to nature development, including traditional Dutch polder landscape features with an ecological function: a water meadow with fluctuating groundwater level, a reed bed and marshy woodland. Each gives a habitat to wildlife that is increasingly under pressure from rising urbanisation. The nature areas are laid out along the edges of the site so as to make them visible for visitors making use of the footpaths, cycling and bridle paths constructed as part of the plan. This also means that farming can be carried out more or less unrestricted in the centre of the area.

Whilst this part of the land does not bring an agricultural income, it does generate subsidies from the provincial government for land management that benefits nature development and recreation. In addition, Duijndam receives subsidies from the local water board (‘waterschap’) for his contribution to their integrated water management strategy. In effect, the farmer carries out the work of others and gets paid by them for that work. Such subsidies deliver approximately 10 percent of the farmer’s income.

Similar initiatives exist elsewhere in the Netherlands where local authorities have an obligation to store a certain amount of water for water-management reasons. By paying farmers to devote a part of their land to water storage, the municipality ‘buys off’ its obligation relatively cheaply and, in effect, the farmer gets paid for cultivating water.
The case of the ‘Bieslandse Bovenpolder’ shows that urban agriculture can offer cities in industrialised countries more than “only” food production. Through a combination of land uses and integration of policies between different organisations at different levels, Delft has obtained a viable organic farm, an attractive recreational area and has restored the opportunities for wildlife in the urban fringe. This in turn provides a valuable resource for environmental education in a densely populated urban region. Essential benefits in terms of the environment, health, education, recreation and nature are provided to the city and its residents. Combining land-use functions has also delivered extra income to farmers from unexpected sources.

Realisation of multifunctional land use demands integration of planning between different levels of government. In the highly institutionalised planning systems common to most industrialised countries where national, regional and local plans are drawn up, such an approach should be feasible, even though it poses some difficulties. Such integration should be accompanied by innovative economic instruments, which favour multifunctional land use, such as subsidies or tax relief, where possible. Farmers should be made aware of the possibilities of such support.

Integration of policy between different types of organisations is also vital. In the Netherlands, for example, independent water boards have a key role to play in water management. Any decision to combine a productive function of urban agriculture or aquaculture with water storage, recreation or a natural park would require agreement between, amongst others, the water board, the province and the municipality.

The success of the Bieslandse Bovenpolder can be at least partly attributed to the fact that representatives of three different groups of society – a farmer, an environmentalist and a municipality – realised the benefits of combining multiple land use in the area.

**Note**

1 Energy Crops are grown specifically for the purpose to produce large volumes of biomass and have high energy potential. The most common crops grown in the UK for bioenergy are willow (short rotation coppice) and miscanthus. Brazil has an extensive program for the production of bioethanol from sugar, whilst the U.S. relies heavily on corn for its ethanol production.

**References**


The project “Optimising the use of vacant land in the Municipality of Rosario” was undertaken in the context of the Rosario Municipal Urban Agriculture Programme. The project was implemented in the period 2002 to 2003 by the Secretariat for Social Promotion of the Municipality of Rosario, the National University of Rosario and community-based institutions and NGOs, and supported by IDRC-Canada and IPES’ Urban Management Programme UMP-LAC in Ecuador. The project has led to the formulation and institutionalisation of an enabling regulatory and legal framework, facilitating poor urban households’ access to land for urban agriculture.

Context

The city of Rosario has an area of 17,869 ha and a population of 1,164,800 inhabitants (National Population Census of 2001). Over time, the area around Rosario has grown to accommodate irregular settlements, mostly inhabited by groups of poor families, as a result of high unemployment in the region and a large rural and urban migration from provinces in the north of the country.

Unemployment and the lack of social welfare coverage for growing groups of the population have driven NGOs to progressively assume a greater role in social development programmes, with urban agriculture as a significant part of their work. Meanwhile, the government administration has gradually transformed its development activities into social programmes and policies aimed at supporting the situation of those groups excluded from the formal labour market.

A major strength the city has in terms of developing urban productive activities is the availability of numerous public and private vacant lots that can be converted into cultivable areas for groups of poor families. Therefore, facilitating access to and tenure of these productive land spaces to low-income groups is a key to achieving their inclusion in society.

The city has a large amount of vacant or partially vacant land (in total 35 percent of the municipal area), much of which could be converted to urban agriculture given its proximity to marginal settlements and existing housing projects. In fact, a high percentage of urban gardens – voluntary initiatives or fostered by the municipal Urban Agriculture Programme – are already located in these areas.

Many of these vacant lots may however not directly be suitable for agricultural production. It is therefore important to determine the potential of these lots for agricultural use. Reliable and up-to-date information is necessary to facilitate decision-making on the type of land to be used, and how and for how long it can be designated to urban agriculture. Participatory diagnosis and assessment makes it possible to determine the current situation of urban agriculture in the city, and to study the potential of using vacant land to sustain agricultural activities.
Diagnosis and Planning of Land Use

During the first phase of the project, information was gathered through participatory baseline studies, based on which an action plan was developed, outlining strategies for the optimisation of agricultural land use. During this process, the theoretical and methodological concepts “suitability” and “accessibility” were discussed and agreed upon in workshops with urban gardeners and municipal officials. The following variables were selected to define “suitability” of the land: environmental quality; potential agronomic use; actual use (and previous use, if the area has been used for example as a dump or for other hazardous activities); current regulations for land use; urban and city projects planned; water supply; and ownership. The variables considered for defining “accessibility” of the land for urban agriculture were: legal status; current regulations of access and tenure; fiscal debt; public policies; and the value of the land.

On this basis, a typology of vacant spaces was developed (for example private vacant spaces, green areas, roadside or railway reserves a.o.), each type requiring different policies and interventions in order to be put to use. All vacant lots were identified on a geo-referenced base map (using Geographic Information Systems), which is now used as input for planning and monitoring of urban agriculture in the Municipality of Rosario.

Participatory Consultations

The diagnostic process combined different participatory approaches related to the collection and organisation of baseline information. Maps identifying the location and size of vacant lots were prepared and the most suitable and accessible land areas were identified. The main sources of information used included:

- Basic information on urban and city planning;
- Urban Agriculture Programme of Rosario;
- Participatory workshops held with representatives of 70 community gardens;
- Interviews with technicians, municipal officials and urban producers;
- Meetings with other municipal, institutional and community agencies;
- Consultations with programmes involved in activities related to UA, such as Prohuerta (providing seeds and technical support to home-gardeners) and Crecer (promoting food production for schools).

As mentioned, several workshops were held with representatives from producer groups. In a first workshop, the project was presented, its objectives and expected results discussed and issues for further study identified. The land use maps were used to share and visualise information on land use regulations, ownership and use of the identified vacant land areas. The maps were also used by the participants to locate their urban gardens and additional potential vacant land areas for agriculture. The second workshop, aimed at making an in-depth characterisation of UA gardens already in operation, characterising the social groups that work in the gardens, and collecting supplementary information to determine the suitability and level of accessibility of existing gardens and identified empty lots. The third workshop focussed on deepening understanding of the problems experienced in gaining secure access to land; defining related conditions and requirements for farmers, and identifying policy support needed from the municipality. The community workshops also identified the
need to improve the suitability of the land for agriculture. Therefore a specific study was undertaken to identify low-cost techniques for soil improvement, resulting in a training manual for urban farmers.

The proposals made by the community were shared with several municipal departments involved in land use planning and management (City Strategic Planning office, Secretariat for Housing, Land registry, Parks and Gardens Department) and were analysed by their staff at two workshops. The conclusions and recommendations of these workshops were incorporated into an action plan for optimising the use of vacant land for UA in Rosario.

**Action Plan**

The action plan incorporates activities aimed at converting the vacant spaces for productive use, improving the quality of soils to facilitate agricultural use, and the formulation and institutionalisation of public policies facilitating access to land.

In June 2003, “Comprehensive Design Workshops” were organised to involve the community and landscape architects in the design of productive uses of garden parks in public spaces or along banks of urban streams (see illustration).

At the same time, proposals were developed for the gradual inclusion of urban agriculture into municipal policies and plans, resulting in the inclusion of urban agriculture into the City Master Plan, facilitating the inclusion of UA into land use strategies, spatial and functional policies and programmes, and a variety of urban development projects.

Furthermore, regulations on ceding of land and granting temporary user rights to producers were formalised and a Municipal Land Bank was set up to permanently map and monitor the use of vacant and UA land areas.

Lastly, procedures for the management and administration of vacant lots for UA have been simplified by centralising them at the Secretariat for Social Promotion (which hosts the Municipal Urban Agriculture Programme), which in turn co-ordinates its activities with the Land Registry, the Planning Office and the Parks and Gardens Department. Community and individual requests for the (temporary) use of vacant lots are granted on the basis of criteria defined by the producers themselves in the community workshops, such as commitment to longer periods of farming, and the groups’ management capacities.

Presently, more than 10,000 families have secured access to more than 60 ha of private, institutional and municipal land through this project for UA and benefit from improved food security, social recognition and income generation.

**Notes**

1 Summary prepared by Marielle Dubbeling (IPES/ UMP-LAC) based on project documents elaborated by Elio Di ernardo, Laura Bracalenti, Laura Lagorio, Virginia Lamas and Marina Rodriguez (CEAH, Universidad Nacional de Rosario- Argentina) and Raul Terrile and Antonio Lattura (CEPAR)

2 Notably the the Centre for Human Environment Studies (CEAH) of the School of Architecture, Planning and Design.

3 The Centre for Agro-ecological Production Studies (CEPAR) and NGO Nacimiento have actively participated in the development of project, specifically the participatory baseline study, community consultations, and development of the action plan.
Urban Agriculture and Sustainability in Vancouver, Canada

Wendy Mendes

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 also 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; approval of a Food Action Plan (see http://www.city.vancouver.bc.ca/cyclerk/cyclerk/20031209/rr1.htm); hiring two 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 a 20-member multi-sectoral Vancouver Food Policy Council.

Urban agriculture is one component of Vancouver’s broader food-related policies. These policies are being designed and implemented by the City of Vancouver in partnership with community organisations and a citizen advisory group. As one way to achieve a ‘green and productive city,’ Vancouver’s food policy initiatives constitute an innovative municipal governance strategy that can contribute towards achieving the Millennium Development Goals (MDGs).

Box 2.10 Community Gardens in Vancouver

Twenty five percent of British Columbia’s food is produced in areas reached within an hour of downtown Vancouver and another 25 percent within 2 hours of downtown. However, the region is also contending with urban sprawl, population pressures, farm consolidation and threats to agricultural land. At the same time, Vancouver has a thriving community of urban agriculture enthusiasts. For example, a recent Ipsos-Reid poll (2002) showed that 42 percent of people in Vancouver grow food that is vegetables, fruit, berries, nuts or herbs in their yard, balcony or community garden. Vancouver has approximately 900 community garden plots in 17 operating community gardens on Park property (11 gardens), Engineering property (5 gardens) and City Real Estate property (1 garden), with one additional new garden under development. Furthermore, the goal of creating more community gardens was identified as a priority in the City of Vancouver’s Food Action Plan (2003), as well as investigating the possibility of providing spaces to grow food in private developments.
Urban Agriculture In Vancouver

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. Urban agriculture in Vancouver is used in strategies to address a range of urban challenges involving various stakeholders.

Vancouver’s Food Action Plan follows a 2-tiered strategy: (1) integration into a broader sustainable urban development agenda, and (2) promoting multi-actor involvement and collaboration.

Integration of Urban Agriculture into existing sustainability policies

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. In this way, 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.

A specific illustration of the goal of integrating urban agriculture into existing sustainability policies can be found in Southeast False Creek (SEFC), a major City development. In 1991, the City Council directed that Southeast False Creek be developed as a residential community that incorporates principles of energy efficient design in its area plan and explores the possibility of using SEFC as a model “sustainable community.” As a sustainable neighbourhood, SEFC provided an opportunity to integrate urban agriculture into the Official Development Plan (ODP) as it evolved.

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, providing ecological benefits of reducing the heat island effect, reducing cooling and heating needs, reducing storm water management costs, and possible reductions in emissions and transportation costs. Urban agriculture was also argued to enhance social sustainability by providing less expensive and more nutritious food for the residents of Southeast False Creek, as well as providing social spaces for people to meet and interact with their neighbours. Together these benefits can increase social cohesiveness and networks, which are essential for a community that relies on the participation of its members in planning and ongoing governance.

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. By spring 2004, the SEFC Official Development Plan was being made 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 the 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.

Facilitation of collaboration and multi-actor partnerships
A second key policy objective for urban agriculture and food policy in Vancouver is the promotion of partnerships and collaboration. There are two inter-connected dimensions of the City of Vancouver’s recognition of the importance of partnerships and collaboration where urban agriculture is concerned. The first focuses on ‘internal’ partnerships, while the second emphasises partnerships and collaboration between local government and community agencies and organisations.

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 Vancouver. As such, the development of partnerships with other agencies has been, and will continue to be instrumental to the process. Key partners include Vancouver Agreement, Vancouver School Board, Vancouver Park Board, Vancouver Coastal Health and community organisations among others. Also key to the success of urban agriculture and food policy are partnerships and collaborations among municipal departments within local government itself.

Box 2.11 Vancouver Food Policy Council

Vancouver’s Food Policy Council (VFPC) is considered a new model of integrated local governance involving City staff and a citizen group. 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.

Vancouver’s Food Action Plan was argued to reinforce the City’s commitment to sustainability. This had the benefit of associating food policy with a set of already familiar policies and mandates. Urban agriculture and food policy benefited from internal education campaigns on sustainability that had already taken place in the organisation. Like sustainability more broadly, urban agriculture is a cross-cutting issue often involving a wide range of departments for effective implementation and monitoring.

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.

The Vancouver Food Policy Council is comprised of individuals from all aspects of the local food system. Membership includes people with a variety of different 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 is also builds upon collaboration between citizens and government officials to work together on 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. Currently, the VPFC has identified four priority work 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) Food Charter for the City of Vancouver.

Results and Way Forward

The two policy strategies have resulted in a number of behaviour changes of and benefits to Vancouver citizens. 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:

- Education and awareness
- Enhanced collaboration between city departments and other agencies
- Food systems approach to food issues

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

- Build on community knowledge and expertise
- Build and enhance partnerships
- Adopt a systems approach to food issues
- Food policy staff is critical

A key next step in Vancouver’s case is to determine the role that urban agriculture may play in existing strategies leading to pilot programmes to address hunger, health, addiction and homelessness. At the same time, it should be recognised that hunger exists to varying degrees in all Vancouver neighbourhoods. Accordingly, research should be based on a sustainable food system approach to alleviating hunger.
Multi-Stakeholder Processes for Governance and Sustainability - Beyond Deadlock and Conflict
This practical guide explains how MSPs can be organised and implemented in order to resolve the complex issues in and around sustainable forms of development, whilst recognising the rights of, and risks faced by, all parties. It includes detailed examples of MSPs in practice and provides functional checklists, explaining how to bypass adversarial politics and achieve positive results. This important contribution to the understanding of participatory approaches to decision-making will be invaluable to policymakers, NGOs, business unions, local authorities and activists.

This toolkit aims at supporting participatory urban decision-making. It has been prepared as one of the products of the ”Global Campaign on Urban Governance”, led by UN-HABITAT in collaboration with a whole range of partners. It provides tools and short case studies on aspects such as mobilising stakeholders, building collaboration and forging consensus, identifying key issues and formulating priority strategies, negotiating and implementing action plans, monitoring and evaluation and institutionalisation.

The Sustainable Cities Programme Source Book Series, UN-HABITAT/UNEP, 1999
The Sustainable Cities Programme (SCP) is a joint UN-HABITAT/UNEP facility established in the early 1990s to build capacities in urban environmental planning and management. The programme targets urban local authorities and their partners. It is founded on broad-based stakeholder participatory approaches. The environmental planning and management (EPM) approach of the Sustainable Cities Programme (SCP) addresses the urban challenge by promoting the sustainability of cities. Experiences with EPM have been captured and translated into effective tools - in the form of manuals - that can be used to inform, support and guide the environmental planning process in cities. Five volumes of the SCP Source Book Series provide guidance on the step-by-step SCP process following similar steps as described in Chapter 2. They can all be downloaded from the following website: http://www.unchs.org/programmes/sustainablecities/SCPProcess.asp

- Preparing the SCP Environmental Profile, The SCP Source Book Series (Vol.1)
- Measuring Progress in Environmental Planning and Management, The SCP Source Book Series (Vol. 9)
- Urban Air Quality Management, Handbook (Parts A and B) and Toolkit (Part C), The SCP Source Book Series (Vol. 6)
- Organising, Conducting and Reporting an SCP City Consultation, The SCP Source Book Series (Vol. 2)
- Building an Environmental Management Information System (EMIS), The SCP Source Book Series (Vol. 7)
- Establishing and Supporting a Working Group Process, The SCP Source Book Series (Vol. 3)
- Integrating Gender Responsiveness in Environmental Planning and Management, EPM Series (Vol. 4)
- Formulating Issue Specific Strategies and Action Plans, The SCP Source Book Series (Vol. 4)
- Institutionalising the Environmental Planning and Management Process, The SCP Source Book Series (Vol. 5)

www.unchs.org/programmes/sustainablecities/SCPProcess.asp

www. portals.wdi.wur.nl/msp/
This website 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. Tools include those that can be applied for collecting information, stakeholder analysis, planning and decision-making.

www.iclei.org
The Local Agenda 21 (LA21) Campaign promotes a participatory, long-term, strategic planning process that helps municipalities identify local sustainability priorities and implement long-term action plans. It supports good local governance and mobilises local governments and their citizens to undertake such multi-stakeholder process. The ICLEI website offers a variety of resources on Local Agenda 21 and urban governance, which include case studies, publications and toolkits.

http://www.unchs.org/programmes/sustainablecities/SCPProcess.asp