This chapter briefly covers some key issues that are of concern for UPA both for the producer groups and for governments, consumers and all those who live and work in the urban areas. Examples of what is being done to improve the situation are given from different countries and continents demonstrating that there are sound and practical solutions available.

Dealing with these issues can mean safer, more hygienic production of food, better management of urban waste and waste water, greener more pleasant cities with land productively used even alongside roads, rivers and railways. Such a situation would clearly be to the benefit of all and would in turn help to improve the image of urban agriculture.
Chapter 2: Key issues

The key issues identified are concerned with:

- Group organisation – an overriding and essential prerequisite to accessing resources, providing a voice and lobbying power and to increase the legitimacy and image of UPA.
- Access to the resources of production – land, water, inputs, tools, markets, training etc.
- Financial availability – credit and loans allowing investment in better, safer and more profitable UPA activities.
- The policy and regulatory environment – to acknowledge the demand and need for UPA and to support and regulate urban agriculture for the benefit of all.
- Local government and institutional support – through extension departments, water and health authorities, city planners, NGOs and other support organizations to provide the information, training and assistance needed to better integrate UPA into the cities.
- Environmental and food quality/safety standards – to ensure health, safety and environmental concerns are met and hence also to combat the negative view of UPA.
- Analysis of the above mentioned issues from a gender perspective – focusing on the constraints faced by women urban producers and their group strategies for overcoming them.

This chapter can be used by the Group Advisor (GA) as an introduction to these issues in discussion with the producer groups and at stakeholder meetings such as with government, local institutions, and support agencies. The examples given are to show that improvements are possible and can be used as a starting point to discuss what can be done in the specific situation of each city.

More detailed discussion of each issue and specific actions and discussion points are given in the following chapters (3-7).
Chapter 2: Key issues

I. Group organisation

The issue

Government, NGOs and Aid agencies cannot generally provide assistance to individuals due to the cost and time involved. Without organisation, individual low-income producers have little or no opportunity to improve their conditions. As individuals, they often lack access to the resources of production – land, water, credit, inputs etc. Whilst they may find space where they can grow some food for themselves and sometimes even a surplus for sale, their options are severely limited whilst they act alone.

Harare, Zimbabwe

Groups in Chitungwiza (a dormitory town of Harare) have accessed training more as groups than individuals. Many individual farmers reported that they had no access to training prior to joining groups. In Mabvuku, groups have received training from an NGO called Environment Africa as well as state bodies such as AREX (Department of Agricultural Research & Extension services, University of Zimbabwe). In Budiriro and Warren Park, groups received specialist training in mushroom production. In Chitungwiza the strawberry producers are receiving continuous support and training from AREX.

(City case studies, Harare, Zimbabwe)

Individuals also have no power and no voice in attempting to improve any of the above critical areas for UPA whilst they act alone. Improving access to inputs, credit, advice and training, applications for land and water rights, lobbying power – become achievable goals once urban producers are organised.
**What can be done?**

Many agencies – government, Aid agencies, NGOs, credit organisations – are able to work with groups, particularly registered well-organised groups and can actively encourage their formation.

For a group to be effective though, members need to have common needs and objectives, not simply to have come together in order to access credit or training where this is only available to groups. Groups formed for such reasons have no real motivation to work together beyond accessing the training or credit and hence have very little effect on improving member’s conditions in the long term.

Groups comprising urban producers who are able to combine their resources, skills and knowledge are essential for action on all the other issues mentioned above. Once a group is well established, possibilities for improving access to resources, working with others, expanding activities and improving standards and acceptance of UPA all improve.

In some cities and countries, forming groups may be particularly difficult – particularly where the activities of the group are themselves illegal. An agricultural production group in an area where agricultural production is not permitted, while it will have some benefits of group action, will not be able, for example, to access government advice and subsidies.

*Suggested actions for the Group Advisor and the issue of forming and working with groups are covered in detail in Chapter 3*
2. Access to resources

The issue

Access to the resources of production, particularly land and water, are obviously critical to urban producers. In many cases, they grow produce illegally on waste land, roadsides, temporary vacant building lots etc. This is often due to lack of choice but can also be due to lack of knowledge of where land is available since many cities have large areas of temporarily unused (and often more suitable) land available.

The land may be unsuitable and is often of low quality but whilst there is no legal agreement or tenure on its use, there is little or no incentive to invest in making the land more productive.

Access to water is a similar and perhaps even more important issue since plants can be produced under hydroponics systems (where nutrients and water are delivered directly to the root of the plant) without the use of soil, but not without the use of water.

Millions of small-scale farmers around the world irrigate with marginal-quality water due to the lack of alternatives. Around cities in developing countries, farmers use waste water directly from residential, commercial and industrial sources without treatment. This poses health risks both to the farmers who are in direct contact with the waste water and also to the consumers from the risk of eating vegetables irrigated with waste water.

The limited access to other resources of production such as inputs, tools and equipment, markets, advice and training are linked to issues such as the lack of a supportive environment for UPA. Where UPA lacks policy support, it often means that producers are not able to access official sources of assistance.
Chapter 2: Key issues

The story of Seidu, an Urban vegetable farmer

“I am yet to be 30 years. Six years ago I joined my brothers in Madina, Accra, from Bawku in the Upper East Region. I had the hope of learning and practicing a trade in commercial transport operation. I learnt the trade but could not practice due to lack of favourable openings. I decided to join hands with my three brothers (two are night shift security men and the other like me is a full time farmer) to cultivate three plots of land (about 2 acres) that were yet to be developed into residential facilities in North Legon.

We grow spring onions, cabbages, green pepper, carrots and occasionally chilli pepper. Due to the continuous use of the land for 5 years, the fertility has declined and insects have increased. We therefore have to use fertilizers and pesticides (including herbicides, insecticides and growth regulators). We sell directly to households (who come to the farm) and to market women. The cash flow is good although it is low during August to September when the amount of produce from the rural areas and from imports increases.

The future is unknown for me because the land owner can claim the plots any time at short notice.”

(City case studies, Accra, Ghana)

What can be done?

Access to suitable land can be increased in a number of ways without going against the long terms plans of city authorities or private sector developers, particularly through the use of temporary licences. Mapping of as yet unused land within cities is often a first step to help city authorities decide where UPA could be permitted at least on a temporary basis.

In the city of Cape Town, South Africa, underutilised land around public facilities, road verges etc., are leased out to groups of urban poor households. NeighborSpace in Chicago, USA, an organisation independent from but close to the City Council, liaises between the city (as land owner) and community gardeners who want to use the land.

(UA Magazine no. 16 - Formulating Effective Policies on Urban Agriculture)
Incentives (such as tax reductions) for land owners to allow temporary use of vacant land for UPA is another approach, as is direct partnership with land owners. In most cases, access to land will, however, only be granted to groups, not to individuals (see 6 below).

Waste water can be very suitable for agriculture with a minimum level of treatment, though where and how it is used needs regulation and training to be safe and effective, both for the farmers and the consumers. Waste water can provide nutrients that contribute to crop growth, but it can also contribute to the spread of disease when improperly used.

Similarly, as cities grow, their waste disposal problems also grow. Much of the organic waste can be separated and used in agricultural production as compost rather than being a landfill problem for cities. Plastic, cardboard, metal and glass can be resold bringing in income.

Organisation into producer groups and working with partners can go a long way toward overcoming these constraints as well as improving access to the other resources of production – tools and equipment, inputs, information, knowledge, advice and training etc. (see 6 below). Access to land and other resources is a major reason why UPA producers come together for joint action.

**Suggested actions for the Group Advisor and the issue of access to resources are covered in detail in Chapter 4**
3. Financial constraints

The issue

Without effective funding, access to the resources of production is very limited. Most urban producers have very low-incomes and cannot afford to invest in tools, better seeds, pesticides, post harvest storage facilities and other inputs. They have problems with managing their cash flow and even funding basic operational costs. Women producers in particular often find it difficult to access credit because of lack of collateral. The end result is often that their produce is of poor quality and production levels are low which in turn results in poor market prices. Low production and sales and poor prices can only result in low incomes, which creates a vicious cycle.

What can be done?

Assisting urban producers to form groups can help to provide access to funding and subsidies (whether through their own savings and loans or through outside sources). Generally, it is preferable to help set up group savings and credit schemes first rather than to encourage application for loans from outside. This helps establish a habit of saving and repayment of loans.

Aid agencies, NGOs and government authorities could also consider adjusting the rules or criteria for lending (as has been done with the Grameen Bank in Bangladesh), or to encourage bank lending to UPA (particularly lending to womens’ producer groups). This practice is now widespread for rural groups (e.g. in India), but not as yet for UPA groups.

Suggested actions for the Group Advisor and the issues of reducing financial constraints and improving access to credit and savings are covered in detail in Chapters 4 and 7.
4. **The policy and regulatory environment**

**The issue**

Government policy towards urban agriculture has implications for all aspects of production. Without security of access to land, there is no incentive to invest in the land. Access to government institutional support such as extension and training services, credit and subsidies etc. is also blocked or is very limited where city laws oppose the practice of UPA (see 4 below).

Often laws are inconsistent – some banning UPA and others encouraging it in another way such as through the encouragement of small group businesses.

Lack of regulation of UPA in turn, allows widespread use of unhealthy, unsafe and environmentally damaging practices in production. Disease, and the smells and noise associated with UPA can, in turn, contribute to the negative attitudes towards it by the authorities and those who live and work in the cities. In some cases though, as with small-scale dairy units in Hyderabad, India, consumers will tolerate the bad smells etc. in order to have ‘fresh milk’.

*In Hyderabad, India, whilst there are a number of policies and laws restricting or even banning agricultural production within city boundaries, there are other laws, such as the Companies (amendment) Act, 2002 that actively promote the formation of ‘Producer Companies’ concerned with agricultural production.*

*(City case studies, Hyderabad, India)*
Chapter 2: Key issues

What can be done?

A balance needs to be found between controlling the potential hazards of urban agricultural production, whilst recognising and encouraging aspects such as food security, employment, use of organic waste etc. When national and local authorities work together with urban agriculture groups, rather than against them, there can be considerable environmental and nutritional benefits for all. Policy towards UPA needs to recognise and support its contribution to cities whilst regulating the health and environmental aspects.

Care needs to be taken that regulations for UPA do not add so much to the costs that production becomes inflexible and inefficient – as has happened in some cases. This can mean that while UPA is legally permitted, in practice the costs ensure that it stays outside the law and so remains unregulated with all the associated health hazards. Most urban producers have little or no resources to spare and any regulations which add to their costs, may mean that they simply cannot be implemented.

Capacity building of UPA groups can help them to have a stronger voice in working directly with the authorities and other stakeholders on these issues. Specific training on advocacy and lobbying can be particularly useful here.

*Suggested actions for the Group Advisor and the issues of legitimacy, attitudes toward UPA and working with others are covered in Chapters 5 & 7.*

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The by-laws of the Accra Municipal Assembly (AMA - Ghana) state that: “no person shall keep any swine, cattle, sheep or goat within the area of administration of the AMA and without a permit issued by the AMA for that purpose which shall be determined in accordance with the fee-fixing resolution”. i.e. one must consult and pay fees, whether poor or rich and be licensed to operate in a limited area. Such costs, in themselves, may ensure that urban agriculture stays illegal and unregulated in some areas. Other regulations concerning waste disposal and waste water use, limit the operation of irrigated farming. The regulations do not take into consideration simple technology that can transform waste water into useful agricultural water and solid waste into good fertilizer.

*(City case studies, Accra, Ghana)*
Policy approaches

In developing a national policy for urban agriculture, approaches vary considerably around the world according to perceptions of what would and would not work in a specific country. For example, Kampala, the capital of Uganda, has adopted a regulatory approach to urban agriculture based on a system of permits, licenses, and use of legal instruments.

In contrast, the city of Rosario, Argentina has developed a policy framework based on economic incentives, communication and training tools. NGOs, government departments and municipal officials, work together to actively support urban farmers. Restrictive by-laws have been removed to make public lands available for farming and farmers are provided with training and advice, tools, seeds, and other essential supplies.

The programme has helped establish over 600 groups of producers, two producer-led agro-industries, one processing vegetables and one producing natural cosmetics using medicinal plants.

(UA Magazine no. 16 - Formulating Effective Policies on Urban Agriculture (edited))
5. Local government and institutional support

The issue

Access to advice and support from local government and other institutions, is often not available due to the illegal status of UPA. Agriculture and agricultural extension, water, health and sanitation authorities, markets, parks and gardens are amongst government institutions that can have a major impact on the integration of UPA into cities where UPA is legal.

NGOs and Aid agencies also have limitations in the extent to which they can work with urban producers. For most national and local organisations to work with urban producers, they first require that the urban producers are organised in groups and often secondly that they have some form of legitimacy such as legal registration. (See Group Organization - issue 1 above).

Urban agriculture is not going to go away

Enforcing the laws have resulted in gardens of squatters being “pulled down 13 times to be rebuilt on each occasion” (Hart, 1970). In 1992, officials of the Department of Parks and Gardens gave ‘stop cultivation’ orders to a group of growers at a place near the Osu Castle in Accra. “....in that year it was the interventions by the President himself that saved us and the livelihood of many”

(City case studies, Accra, Ghana)

Where UPA is not recognised as a legitimate activity, it is often actively stopped by law enforcement agencies. In contrast, where UPA is recognised as a legitimate activity by city authorities, the institutional support needed to properly control and regulate production can be made available. Such local institutions can provide the essential advice and support needed to ensure the safe practice of UPA.
Since UPA supplies a clear need, even without the support of local government and institutions it continues unregulated with all its associated potential dangers. Institutional support, regulation and control are in the clear interests of all stakeholders.

**What can be done?**

Once national, or at least local government policy, allows UPA as a legitimate activity (see issue 4 above), support, advice and training from city authorities and local institutions can be provided. City authorities can map land available and help plan where UPA is suitable, integrating it into city plans. They can issue temporary permits for government owned land and offer incentives to private land owners (see 2 above). Agriculture and Agricultural Extension departments can offer advice and training. Water and waste authorities can ensure provision of suitable water and also enlist UPA producers in keeping the city clean.

Where the policy environment expressly prevents any UPA activities, it can still be worthwhile investigating whether there are other laws or criteria which allow small group businesses or horticultural activities (for example) in urban areas.

**Participative municipal strategies**

In July 2005 authorities and representatives of municipalities from Lima, Perú metropolitan area attended a workshop focusing on municipal strategies for urban agriculture.

As a result, mayors drafted, and later signed, municipal declarations that recognized urban agriculture as an strategy for enhancing food security and creating more inclusive, productive and ecological cities.

Key guidelines for promoting urban agriculture were given including:

- facilitate access to land through use of vacant plots and tax exemptions
- increase access to water through use of gray water and the re-use of treated waste water
- re-use organic waste
- inclusion of UA in existing micro credit systems and participatory budgets
- strengthen and empower urban producers

(RUAF website: www.ruaf.org)
In all cases, institutional support and the opportunity to participate in city planning is usually only available to groups rather than individuals, hence again, a first step is for UPA producers to be organized into groups.

_Suggested actions for the Group Advisor and the issues of institutional support and working with partners are covered in detail in Chapters 4 and 5._

### 6. Environmental and food quality/safety standards

#### The issue

Many of the objections to urban agriculture are because of the sights, sounds, smells, waste products and health and environmental hazards associated with agricultural production.

Production of crops and livestock can create water and air pollution as well as food contamination. Dumping and burning of livestock waste, chemical residues from fertilizers and pesticides applied to crops, or infection of produce, particularly when it is washed in waste water are all serious health and environmental hazards. Spread of disease through raising of animals in unsuitable urban spaces, uncontrolled use of sewage and other waste in production and the unhygienic processing, transport and sale of produce, all add to the dangers and negative image of UPA. Urban production can also be

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_Agricultural nuisance?_

_In Accra, Ghana, residents complained about the rearing of animals in homes “because they say the situation posed security and sanitation problems in the area…the practice is a worry and concern to them since they are sometimes chased by excited cows. The residents have therefore appealed to the city authorities to enforce the regulations which prohibit the practice, as stipulated in the Accra Municipal Assembly (AMA) by-laws”_  

_(City case studies, Accra, Ghana)._
seen as anti-social as well as unsafe by many residents and can lead to arguments, disputes and complaints to authorities.

Negative perceptions of UPA by city residents and authorities, in turn lead to a negative policy and legal framework making it difficult for UPA producers to work with local authorities.

**Health risks – Irrigation in Ghana**

Studies conducted on (peri) urban farm produce in Ghana revealed widespread contamination by microbial organisms, both in the field and at the distribution points. Sources of contamination are mostly related to:

- irrigation water, whether waste water, surface water or pipe-borne water from ground reservoirs;
- fertiliser inputs; and
- handling and storing of produce at points of sale.

The most common bacteria found included E. coli and Salmonella, as well as others commonly found in faecal matter.

A recent study in the Accra Metropolitan Area showed that waste water was the most frequently used water for irrigation purposes (used by 60% of farmers).

In 1995 the Accra Metropolitan Assembly enacted a by-law for the “Growing and Safety of Crops,” strictly banning the use of waste water for irrigation. These by-laws however have never been enforced.

Further contamination with health threatening micro-organisms occur at the market due to poor handling and storage even affecting vegetables produced using tap water.

A third source of potential contamination is found in manure. Poultry manure, which represents 75% of the organic fertiliser used, generally contains health threatening bacteria.

Despite the significant health risks related to this type of contamination and its widespread frequency, (peri) urban agriculture continues to expand. Any solution needs to consider water quality, soil fertility, treatment of waste water and solid waste, education and sensitization of producers and consumers.

(UA Magazine no. 3 - Health aspects of urban agriculture (edited))
What can be done?

There are limits to where it is suitable to raise animals and where manures and untreated waste water can be used in cities. City authorities, urban producers groups and other stakeholders need to work together to agree how production can be controlled within acceptable bounds and areas. Ideally urban agriculture needs to be deliberately integrated into city development plans with controls on environmental issues. In practice this rarely happens as urban agriculture is predominantly practiced by the poorest, living often in slum areas, which are often ignored by the city authorities. Where UPA producers work together in groups, are willing to work with the authorities and have received training in advocacy, they can increase their influence with city planners. Under such conditions, where city authorities work together with producer groups, there are possibilities to restrict the worst health and environmental excesses whilst encouraging good practices and providing a better livelihood for the UPA producers.

Safe food production and sale are vitally important issues and urban producers need clear guidance and training on how to produce food safely in the cities, how to use waste water and other waste suitably and how to process, transport and handle produce hygienically. City authorities need to ensure clear guidelines are produced, producers understand what is needed and that the standards are enforced for UPA to become more widely accepted.

*Suggested actions for the Group Advisor and the issue of safe production are covered in detail in Chapter 7.*
Summary

The key issues identified are the need to improve:

- access to the resources of production
- access to finance
- the policy and regulatory environment
- local government and institutional support
- environmental and food quality/safety standards

In all cases, urban producers need to become organized. Working together in groups is an overriding need to increase access to resources and to have greater influence over policy issues. Those who work with urban producers can do little with individuals alone, but can help in many ways in all of the identified areas when urban producers are willing and able to work together. UPA will continue whether or not it is regulated. However, it is in the interests of all to work together to improve the safety and quality of produce.