

CHAPTER 1

Gender in urban agriculture: an introduction

Abstract

This chapter discusses the important role that women play in feeding urban populations (in particular the urban poor), and the need to mainstream gender in policies and programmes regarding urban food security and urban agriculture. It identifies and explains key issues related to gender and urban agriculture that require the attention of policy makers, planners, researchers, and practitioners. The chapter also provides an overview of urban agriculture, highlighting its importance in the light of increasing urban poverty and urban food insecurity.

Why Women Feeding Cities?

Women are in the majority among urban farmers in many cities around the world, but they tend to predominate in subsistence farming, whereas men play a greater role in urban food production for commercial purposes. This observation prompted the initial exploration of an area of scholarship termed 'Women Feeding Cities' which led to a similarly titled workshop in September 2004, and ultimately to the production of this book. These endeavours combined initiatives by two organizations, the RUAF Foundation (International Network of Resource Centres on Urban Agriculture and Food Security) and Urban Harvest (the System-Wide Initiative on Urban and Peri-urban Agriculture of the Consultative Group on International Agricultural Research – CGIAR). The result is a comprehensive framework for gender mainstreaming – ensuring that the goal of gender equality is central to all activities – in urban agriculture research and development

Frameworks on gender and agriculture already exist (see for example Hovorka, 1998; Feldstein and Jiggins, 1994); however, the context of gender and agriculture differs in urban settings compared with rural settings. This is largely owing to the fact that structures, institutions, and circumstances create specific gender dynamics in and around cities. There is a diversity of cultural values merging in urban areas such that traditional definitions of gender roles, responsibilities, characteristics, and behaviour are not necessarily appropriate, and often become hybridized with alternative perspectives. Thus there is potential for different political, economic, and social scenarios in urban settings, compared with rural contexts. Specifically, the urban setting often brings with it more diverse sources of family income; greater opportunities for women's schooling, wage labour, and financial credit; new configurations

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of mobility; heightened insecurity regarding land tenure and ownership (particularly for women); a greater incidence of theft; less involvement of children in food-production activities; new opportunities for co-operative efforts among community members; and flexibility in gender roles, as men and women adapt to urban life. In other words, it cannot be assumed that what is happening in rural agriculture is necessarily the case in urban agriculture within a particular context, for example within a particular country. Livelihood systems will differ, political/economic structures will differ, and social-network dynamics will differ. These key agricultural variables of difference need to be documented in urban areas in the context of agriculture, in order to avoid prescriptive and assumptive assertions for any potential research or development interventions.

Through family and social networks in cities of many poor countries, women have been making sure that their families get food. Sometimes this is achieved by means of kitchen gardens and urban agriculture plots, sometimes by remittances of food from rural or peri-urban farms. Women try their best to sustain their families in often difficult circumstances, and that is why in a very real sense they end up being the ones who are feeding the cities. The important distinction between subsistence and commercial production of food – with planners often prioritizing the latter – has frequently rendered invisible women's role in feeding cities. Similarly within households women are often marginalized and accorded lower status than men on account of the fact that they engage in subsistence farming rather than commercial agricultural ventures .

It was often taken for granted that women stay home while men go to work, and that still is the case in many places, including rural areas of poor countries. It is the case even though women work very hard, providing the majority of agricultural labour world-wide. The social changes that came with industrialization created divisions between work and home, as large numbers of people became wage labourers in production enterprises. Nineteenth-century laws passed to prevent the exploitation of women and children meant that men became the predominant wage labourers and employees. This gendered division of labour has stayed with us, so much so that the unpaid work of the home ceased to be seen as 'work' at all until recently, even if it meant producing food for the family.

This invisibility of women in the economy happened in parallel with the industrialization of food production, along with the production of other commodities. Women's role was to maintain the household, with men bringing in cash from their earnings. In poor countries with low wages and a rural economic base, it was mainly the women who continued producing food for home consumption on small farms or in kitchen gardens. To this day, women's work on small family farms, whether rural or urban, and their work in moving foodstuffs around on their backs or on public transport is scarcely regarded as of any significance and at worst is harassed or prohibited, as is the case with some of women's food-marketing activities.

However, the idealized economic plan whereby workers in cities paid for food from commercial farms and industries that produced it in rural areas and trucked it to them soon ran into difficulties. The urban food crises of the 1970s and 1980s in poor countries were attributed to the malfunctioning of official schemes that failed to match supply and demand. In fact the remittances of food from rural families and social food networks were invisible to food and agriculture policy makers, as were the women who operated them, either as small-scale producers or as petty traders or 'market women'. As official schemes collapsed, the explosion of informal-sector trade and enterprise – mainly involved in food supply – drew attention to the importance of the informal sector – but not enough to the role of women in food production and trade (Hovorka and Lee-Smith, 2006). Urban agriculture, compared with other informal-sector activities in cities, has been especially convenient for married women with children, given that it can be practised close to home, requiring little cash investment, and combining multiple roles of urban women. In urban agriculture production, women tend to focus on saving on family cash expenditures by growing their family's food (and eventually selling some surplus production), whereas women active in other informal urban-sector activities are focused more on generating a cash income.

Women's role in feeding cities, through formal or informal means, has become more challenging recently, given the mounting global food crisis. Higher food prices are rooted in increased energy costs, rising demand resulting from economic growth in emerging economies, the growth of bio fuels, and increasing climatic shocks from droughts and floods. Food reserves are at their lowest in 25 years. Associated commodity markets are volatile, and in a bid to protect their own populations many countries have imposed export bans or restrictions on certain foodstuffs, further driving up prices as food becomes less available (World Food Programme, 2007). Millions of people are being pushed deeper into poverty and hunger, and the urban poor are no exception: in many of the world's poorest cities, people can suddenly no longer afford the food available on store shelves. This is increasing in particular the time and energy that urban women expend on producing food and/or procuring monies for foodstuffs. For many women, this means that their families will suffer not only in terms of not having adequate (let alone fresh) supplies of food on hand, but also because they will have less money to pay for school fees or health costs. Beyond women's daily struggles to secure food for their families, their own potential for empowerment is limited in the longer term, given the need to focus on the here-and-now demands of urban food production and procurement.

The case studies in this book attempt to build up a picture of the complexities of men's and women's activities in urban agriculture in three developing regions of the world. This is a subject which has become increasingly important and timely in the context of the global food crisis. The analytical framework, tools, and guidelines presented are designed to identify solutions to some of the problems of marginalization and inequality experienced by women. The

book's approach to gender mainstreaming tries to contribute to the important social goal of gender equality, not through the exclusion and marginalization of men but through careful analysis of gender circumstances and experiences, and engagement of men in the process. Ultimately, women's goals, both practical and strategic, may be addressed through increased and systematic support for urban agriculture activities around the world.

Urban agriculture

What is urban agriculture?

Urban agriculture (often differentiated as intra-urban and peri-urban agriculture) can be defined as the production of food (for example, vegetables, fruits, meat, eggs, milk, fish) and non-food items (for example, fuel, herbs, ornamental plants, tree seedlings, flowers) within the urban area and its periphery, for home consumption and/or for the urban market, and related small-scale processing and marketing activities (including street vending of fresh or prepared food and other products). In many places urban agriculture is also closely linked with recycling and use of urban organic wastes and wastewater.

Urban agriculture takes place on private, leased, or rented land in peri-urban areas, in backyards, on roof tops, on vacant public lands (such as vacant industrial or residential lots, roadsides), or on semi-public land such as school grounds, in prisons and other institutions, as well as in ponds, lakes, and



Woman watering crops in Rosario
By Hans Peter Reinders

rivers. In 1996 the United Nations Development Programme estimated that eight hundred million people were practising urban agriculture, 200 million of them market producers employing 150 million people full time (UNDP, 1996). Since then the numbers have increased.

For a long time the importance of urban agriculture was overlooked or dismissed as merely the result of traditional habits brought by rural migrants to the city, expected to fade away over time when these people integrated into the city economy. There was opposition to urban agriculture from public health and urban planning circles, which perceived urban agriculture either as a threat to public health that should be abandoned, or as a low-rent land use that would not be able to compete with other urban land uses. Such perceptions were institutionalized in restrictive by-laws and regulations at national and city levels, although these have remained largely ineffective.

During the past 15 years, studies have shown that urban agriculture should be recognized as an integral and permanent element of the urban socio-economic and ecological system (Van Veenhuizen and Danso, 2007; Mougeot, 2006). It forms an important part of the livelihood strategies of large numbers of urban poor. In many countries, rapid urbanization is accompanied by increasing urban poverty, food insecurity, and malnutrition. As a result, in many cities the number of people involved in urban agriculture tends to increase with ongoing urbanization, rather than decreasing, as had been previously assumed. Another factor is the growing urban demand for perishable products, including vegetables, meat, milk, and eggs, coupled with the comparative advantages of production close to the markets, and the availability of productive resources, including urban organic wastes, wastewater, and vacant public land.

The increasing importance of urban agriculture

About 50 per cent of the world's population now lives in cities; 77 per cent of Latin Americans live in cities, while in Asia and Africa the proportion is currently 39 per cent, climbing at a rate of 3 and 4 per cent per year respectively (UN Habitat, 2003), and the numbers of urban poor are rapidly increasing.

It is hard for most cities in developing countries to create sufficient employment for their rapidly increasing population. Meanwhile, transmissible diseases such as HIV/AIDS have eroded the income-earning capacity and assets of millions of urban households. As a consequence, the urbanization process goes hand in hand with an increase in urban poverty, dubbed the 'urbanization of poverty' (Haddad et al., 1999). According to UN-HABITAT, slum populations in urban areas of developing countries were estimated at 870 million in 2001 and are expected to increase by an average of 29 million per year up to 2020. Forty per cent of the population of Mexico City, for instance, and a third of Sao Paulo's population are subsisting at or below the poverty line.

A lack of jobs and income is leading to increasing urban poverty, as well as to growing food insecurity among the urban poor. A substantial proportion

of urban household expenditures is dedicated to food – for poor households as much as 60–80 per cent – and in the city context the lack of cash income translates more directly into food shortages and malnutrition than in the rural areas (Mougeot, 2006). On average, urban consumers spend at least 30 per cent more on food than rural consumers spend, but despite this their average calorie intake is lower and in many cases insufficient (Argenti, 2000).

Increasing food insecurity among the urban poor and increasing problems in accessing fresh nutritious food at affordable prices largely went unnoticed by municipal authorities until some years ago. This was due among other things to a middle-class bias in urban planning, a lack of attention to urban food issues, and an exclusive focus on food imports to the city; at the same time, planners paid little attention to problems of access to food and the actual and potential roles of urban food production. According to Dahlberg (1998), although during the entire history of humankind cities accorded high priority to ensuring their food supply, few cities nowadays show great concern about this or perceive that their future food safety is linked to the local food system and to the agricultural areas surrounding it. In this context, urban agriculture has belatedly been recognized as making a ‘significant contribution to food security of urban households and generation of jobs and income, self-esteem and environmental improvement’ (Report of the Ministers’ Conference on Urban and Peri-Urban Agriculture; Prospects for Food Security and Growth in Eastern and Southern Africa, MDP Harare, Zimbabwe, August 2003).

Cities are fast becoming the principal territories for intervention and planning of strategies that aim to eradicate hunger and poverty and improve livelihoods, requiring innovative ways to enhance the food security and nutrition of the urban poor and vulnerable households. Urban agriculture is one such strategy. In 2000 the UN Food and Agriculture Organization (FAO) included urban agriculture in its programme and created the Priority Area for Interdisciplinary Action ‘Food for the Cities’. The FAO is now supporting the development of national and local policies and programmes on urban agriculture. More and more cities (for example, Rosario in Argentina, Bulawayo in Zimbabwe) and countries (such as Brazil, Botswana, and China) worldwide are now promoting urban agriculture to enhance food security, stimulate local economic development, and facilitate social inclusion and poverty alleviation (Brazil Government, 2008; Hovorka and Keboneilwe, 2004).

Benefits and risks associated with urban agriculture

While urban agriculture has important positive effects – on poverty alleviation, local economic development, food security, nutrition and health of the urban poor, social inclusion, and urban ecology – it can also lead to some undesirable outcomes if certain associated risks are not taken into account and preventive measures are not taken.

Income and employment creation

Available research indicates that urban agriculture can be a profitable undertaking, especially in the case of products that are in high demand and have a comparative advantage over rural production. These include perishable products such as green leafy vegetables, eggs, milk, mushrooms, medicinal herbs, flowers, and ornamental plants (see Moustier and Danso, 2006 or Van Veenhuizen and Danso, 2007 for an overview).

Market-oriented urban agriculture generates net incomes that in most cases are equivalent to or better than the minimum urban wage. In cases where by-law barriers have been removed, urban agriculture has proved to be a highly dynamic sector, with features that include irrigated year-round production, production under cover, small-scale processing of fruits, vegetables, herbs, and mushrooms, development of certification, green or organic labelling, and shorter marketing chains for consumers and institutions (IBRD/World Bank, 2008).

Subsistence-oriented urban agriculture leads to important cash savings, since food is by far the largest component of household expenditures; as a result, a significant portion of family income becomes available for non-food expenditures. Urban farming also provides a source of employment, not only for urban farmers themselves but for hired labourers and workers in related micro-enterprises such as production of compost, herding, collection and selling of grass or manure, processing of agricultural produce, and street vending of food. In Cuba, urban agriculture generated 25,000 new jobs in the years 1994–8, with a smaller investment per job than in other sectors (Gonzalez Novo and Murphy, 2000).

Urban food security and resilience

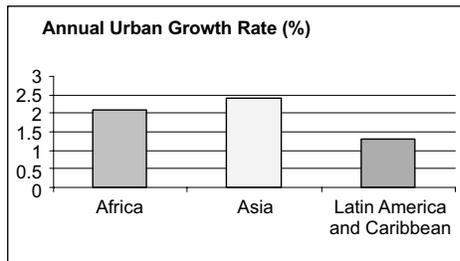
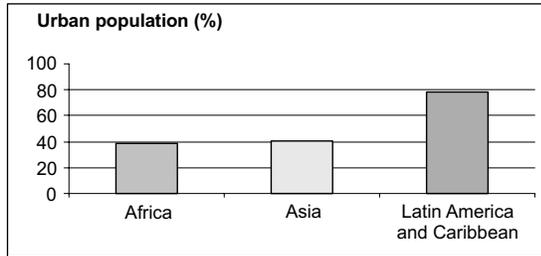
During economic or political crises – which in some cities are more often the norm than stability and economic progress – urban agriculture tends to increase rapidly, since it provides a safety net for the poor and for other households seeking to augment their dwindling incomes. It enhances their access to fresh and nutritious food by making fresh food available at prices that are lower than imported food, due to savings on transport, storage, refrigeration, and middlemen.

While cities will in future remain largely dependent upon food, especially staple crops, brought in from the rural areas and from international sources, cities can and should pursue greater food self-reliance in order to enhance their resilience and reduce vulnerability to shocks and food insecurity. This has been made clear by food riots in various cities, in response to recent sharp increase in food prices, caused in part by climate change and higher incidences of natural and human-made disasters. All of these have led to problems with food-supply chains that are dependent on imports or long-distance transport from rural areas.

To illustrate these trends, Box 1.1 presents findings taken (with permission) from a brief on urban food security and urban agriculture prepared by the FAO Regional Office for Latin America (FAO, 2008).

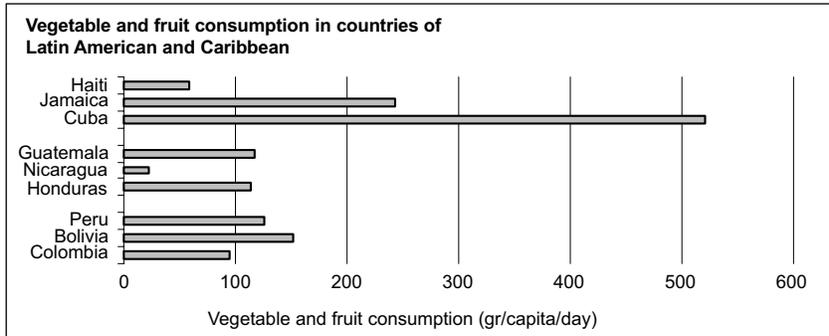
Box 1.1 Urban food consumption in Latin America and the Caribbean

For the first time in history more than half the world's population lives in cities. In 2007, 78 per cent of Latin America and the Caribbean population was defined as urban, a figure that is growing at the rate of 1.3 per cent per year.



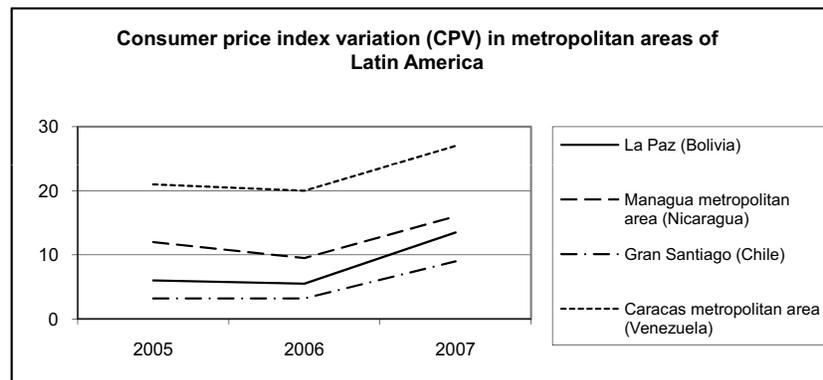
Source: UNFPA, 2007

The average daily vegetable and fruit consumption is 157 g/capita/day, well below the WHO-recommended level of 400 g/capita/day. It is interesting that the country with the highest fruit and vegetable consumption (Cuba) is also the country with greater advances in urban agriculture.



Source: FAO, 2005

Urban dwellers in poor neighbourhoods in Latin America are at risk of malnutrition and food insecurity, further aggravated by rising food prices as families have to allocate a higher share of their income to food. For example, a family in Bolivia earning \$5 (Bolivian peso) a day typically spends \$3 on food. Recent increase in prices of basic foodstuffs – some of which have risen 50 per cent or more – takes \$1.50 of their purchasing power away, affecting the quantity and types of foods purchased as well as non-food expenses such as health care. The logical consequence is increased under-nutrition.



Source: ECLAC, 2005

Nutrition and health

Some studies suggest that urban farming households have a better nutritional status (as shown by calorific and protein intake, and measures of stunting and wasting) compared with non-farming households. Further, creation of better conditions for poor urban families to produce and market items such as vegetables, livestock products, and fish would increase the access of other poor households to fresh and nutritious food at affordable prices. Medicinal plant production is increasingly explored, given that poor urban families may spend 10–20 per cent of their income on health care. Local production of medicines and medicinal herbs could contribute to improved health conditions for these people. Urban agriculture also now receives attention as part of HIV/AIDS mitigation programmes, being a strategy to enhance the nutritional condition of patients as well as reducing the negative effects of reduced working capacity or loss of adult members on household food security.

However, food produced in and around cities may be detrimental to human health if there is pathogenic contamination, potentially causing infectious disease. This is especially the case if contaminated water or fresh solid organic wastes are used to fertilize crops of foodstuffs that are eaten raw, or if hygiene is lacking in the production, processing, and marketing of food, as can happen

if market produce is 'refreshed' with contaminated water, or street vendors do not observe hygiene precautions. Cultivated areas in cities may attract or provide breeding grounds for rodents and flies, which can contribute to the spread of infectious diseases, while certain diseases can also be transmitted to humans by livestock kept in close proximity to them, if proper precautions are not taken.

Food produced in and around cities can also be detrimental to human health if there is chemical contamination which might cause chronic disease. Heavy metals and complex organic compounds released by industry and traffic in particular may pollute urban crops through deposition and absorption via air, water, and soils.

The World Health Organization (WHO, 2001) has published an 'Action Plan on Urban Food Production and Consumption' as part of its strategy to stimulate the local production and consumption of fresh nutritious food and to improve the nutrition and health of disadvantaged urban groups.

Urban environmental management

Urban agriculture has a high potential for improving the urban environment by using organic wastes – solid wastes and wastewater – as inputs, by improving the micro-climate, and by preventing erosion and flooding through replanting bare lands. It also conserves energy and food, because there are fewer food losses during transport and handling, and greater energy savings due to the smaller need for storage, processing, and packaging.

The current highly capitalized and energy-consuming 'super market' model, based on the external supply of foodstuffs, increases the urban 'ecological food print'. Urban agriculture is one aspect of a different urban food system based on local or regional fresh products, with shorter market chains from producers to consumers, offering a policy alternative to the long-distance transport of food from elsewhere.

However, urban agriculture activities can create problems. They may contaminate local water sources if high inputs of fertilizers and pesticides are used. Neighbours may complain of dust, smells, and noise. Urban farmers may use high-cost treated drinking water for irrigation purposes. Further problems can be caused by poorly managed farm wastes clogging storm drains and piling up in the streets, while farming on steep slopes or along sensitive parts of river banks may lead to erosion and siltation.

The use of fully or partly treated urban wastewater for urban agriculture is investigated and promoted by the Sustainable Cities Programme of UN-HABITAT and the UN Environmental Programme (UNEP), and WHO and FAO recently updated their guidelines for the safe use of wastewater in agriculture (WHO/ UNEP, 2006).

Enhancing civic participation in urban management

Finally, urban agriculture has proved to be an effective strategy to enhance the participation of urban communities in the management of municipal resources, including land, water, and urban wastes. The planning and implementation of urban agriculture and related projects for recycling and reuse of urban organic wastes and wastewater can have direct positive effects on people's living conditions while generating feelings of self-reliance and creating links between the urban poor and other actors. The latter include NGOs providing technical support and training, and local authorities providing access to municipal land and services.

Gender in urban agriculture – an analytical approach

The concept of gender was introduced into international thinking during the 1980s as a counterpoint to ongoing work on 'Women in Development'. It was recognized that the underlying structures of the unequal relationships between men and women required analysis. Because different societies have so many varied customs governing men's and women's roles and behaviours, the word 'gender' was adopted to distinguish things about men and women that are socially ascribed – part of culture – as opposed to physical and biological difference, which is still described as difference in 'sex'. It is important to note that gender differences (wearing a headscarf, for example) do not necessarily mean that there is lack of equality. It is discrimination and denial of equal rights and opportunities that militate against gender equality.

Facts that are differentiated according to whether they relate to men or women are referred to as 'gender-disaggregated data', which are often called for in programmes or projects that are supposed to incorporate gender considerations. Another common term used is 'gender balance', denoting the fact that a certain ratio of women to men is noted (or called for). Getting a better gender balance is a target or indicator of better gender performance in a programme or organization. This kind of measurement is a useful indicator, but it does not substitute for 'gender analysis', which provides systematic documentation and understanding of the roles of men and women in a given situation. Achieving gender balance does not necessarily bring about gender equality or the empowerment of women. Thinking about the reasons why there are more women or more men doing urban agriculture (or any other activity) can be as important for a gender analysis as merely obtaining the numbers.

For example, a study in Nepal found that women and men peri-urban farmers shared many types of agricultural task, unlike rural farmers, who exercised a stricter gender division of labour. Some taboos of gender behaviour in agriculture were thus changing in the case of peri-urban farming as it became increasingly commercial, and both women and men in these farming households were benefiting economically and in terms of social status. But

gender analysis showed that men had complete control of the marketing of the produce and controlled all commercial transactions; they also owned and controlled all land and property, while women had the additional burden of household work (Sapkota, 2004).

In another example, while almost equal numbers of women and men poultry entrepreneurs were found in Gaborone, Botswana in 2000, gender analysis revealed that the men had larger enterprises and were supplying more of the market. Even deeper investigation revealed that the women had less education and were often heads of household. The men who headed households generally had wives assisting them with extra income as well as labour – which put them at an advantage over women-headed households. Moreover, the men had larger plots, with more secure tenure. It was suggested that the women entrepreneurs were likely to be forced out of business as the market became more competitive, and that the reasons for this were mainly the structural factors of discrimination which disadvantaged them: women had less education, less land, less access to capital, and fewer property rights (Hovorka, 2005).

Several Latin American studies have shown that men may be more involved in agriculture than women, although, as in Africa, women are responsible for gardens near the house that produce food for home consumption. One of these studies demonstrated that, despite men's customary restriction of women to the home, an urban agriculture intervention designed to empower women was able to bring about some positive change. The young women with small children were also responsible for the families' food. Women's production of vegetables near their homes was at first resisted by the men, because they thought it was taking up the women's time and taking them out of the home, but as they saw the benefits they changed to supporting their wives' work (Olarite, 2004).

These examples show that only a thorough disentangling of the reasons behind some statistics can reveal the sources of gender inequalities, and thus enable us to find solutions to them.

Gender analysis helps to diagnose the issues that need to be addressed in order to bring about gender equality and women's empowerment. Another concept that is important to the process of gender analysis in order to identify strategies for change is the difference between practical and strategic gender needs. Women and men often express their need for change and improvement in terms of access to basic resources, infrastructure, or income. These are practical needs that usually bear no obvious relation to gender needs. Strategic needs are related to the gender division of labour, control over resources, legal rights, income equality, and decision-making power. While a gender analysis usually aims to understand the underlying strategic needs, dealing with practical needs can often have a transformative effect.

Gender equality is a basic societal value. Most countries have constitutions that assert people's equality, with no discrimination based on sex or other factors. The equality of men and women is also enshrined in the Universal

Declaration of Human Rights of 1948, and was developed in detail in the international Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) of 1979. But what is the situation in practice, and what does it mean in the context of real life? Some argue that since women and men have obvious biological differences – resulting in different needs and experiences – there is a need for a concept like ‘equity’ instead of ‘equality’, calling for fairness instead of sameness. But this discrimination contravenes the Universal Declaration and CEDAW. Women and men should be allowed the same opportunities, and efforts need to be made to ensure that they get them even if they differ biologically.

The extent of inequalities between men and women – with women clearly disadvantaged – is widely known and documented, in terms of their access to education, employment, and property ownership; inequalities in their incomes; and their presence in positions of leadership in just about every type of organization and institution, including governments, businesses, and community-based organizations. The correction of these inequalities necessarily involves the empowerment of women. However, to achieve this entails a long and complicated process of social learning and change that is ongoing all over the world. It can be particularly difficult for men – especially those who are themselves disempowered and marginalized – if losing their privileges and advantages over women touches on deep-rooted feelings of personal identity. Involving men in promoting gender awareness, analysis, programmes, and activities is seen as essential to meeting the social goal of gender equality.

Women feeding cities – key gender issues

This section focuses on illuminating and assessing the gender issues within urban agriculture activities that give rise to differences between men and women, and in many cases stifle women’s opportunities for self-empowerment. Such gender analysis within site-specific contexts, stemming from the case studies featured in this book, is an important step in gender mainstreaming at a broader scale. Within this analytical process, it is important to recognize that gender is not a fixed category – indeed it is continually contested, such that individuals participate in (re-)defining gender relations on a daily basis. Further, gender dynamics may differ according to the ages, the size, and the life-cycle stage of the household, and according to marital status, religion, and caste. As a consequence, gender dynamics change over time and vary widely within and between cultures.

Nevertheless, the case studies presented in this book highlight the general consistencies in women’s circumstances and experiences of urban agriculture that warrant attention, given that they reveal substantial gender differences and in some cases inequalities within cities around the world. In particular, the case studies illuminate the predominance of women in urban agriculture, numerous gender-based benefits and challenges of food production, and

differential divisions of labour, knowledge/preferences, access to and control of resources, and decision-making power. The patterns of key gender issues that emerge from the case studies are overwhelmingly similar, revealing that in most urban agriculture contexts men own land, have access to greater resources, make decisions, and reap more benefits than women.

The remainder of this section expands on these common threads, detailing the ways in which gender matters in urban agriculture activities, and what these issues specifically mean for women's participation in this urban sector.

Women's predominance in urban agriculture

There are many women involved in urban agriculture worldwide, and data from several countries show them to be in the majority among urban farmers. This is the case in East Africa in general, with 80 per cent of farming households using only female labour in Kampala in the 1980s – although in neighbouring Kenya 56 per cent of the labour was female, with more men engaged in farming in the smaller towns, and more women (62 per cent) growing food in the capital. In West Africa more men than women were sometimes found in urban agriculture, the difference generally being attributed to the fact that much of the food produced was for sale (Obuobie et al., 2004). In Yaoundé, Cameroun, however, 87 per cent of urban farmers growing vegetables were women, 95 per cent of whom were growing mainly for subsistence and 79 per cent were growing commercially (Bopda et al. forthcoming). Similarly in Kampala, women growing crops on contaminated sites were more likely to be doing it in order to feed their families than were the men, who tended to sell more of the produce (Nabulo et al., 2004). Poland, Thailand, Senegal, and Zimbabwe are other countries where women urban farmers have been noted to outnumber men (Smit et al., 1996). Statistical data on women in urban agriculture in Asian and Latin American cities are rare or even non-existent.

The predominance of women (illustrated in Box 1.2) in many contexts can be ascribed to two factors: first, women bear responsibility for household sustenance and well-being; second, women tend to have lower educational status than men, and therefore more difficulties in finding formal wage employment (Hovorka, 2001). In some contexts, men predominate in urban agriculture activities because of their access to land and resources, as well as the socio-economic status created by this activity. Box 1.3 illustrates this gender variability in urban agriculture participation.

Benefits and challenges of urban agriculture for women

Generally speaking, urban farming provides particular benefits to women as producers and/or procurers of foodstuffs in cities. Urban agriculture is a viable alternative to wage labour for women who lack access to formal employment because of their limited education and training, or socio-cultural factors that limit their freedom of movement. As a largely informal-sector

Box 1.2 Female predominance in urban agriculture in Harare, Zimbabwe

The Musikavanhu urban farmers' movement, which was originally concentrated in Budiriro and Glen View and has now spread to the other low-income suburbs of Harare, started with seven families meeting and agreeing to form a group that would work together and engage in urban farming. Currently, the movement has more than 5,000 members, of whom more than 90 per cent are women. Several factors explain the dominance of women in the group. First, generally speaking most of the urban producers in Zimbabwe's cities are women, given that putting food on the family table remains a responsibility for women. Second, until the mid-1980s in Zimbabwe, access to formal employment was a preserve of men, while women were supposed to concentrate on looking after the household, with some time available for farming activities. The third reason, and specific to Musikavanhu, was that the group emerged as a mechanism to resolve a conflict over the use of the land with people who wanted to construct houses there. The women producers felt that they needed to organize themselves in order to defend their use rights, while the male producers felt that they did not require the group to defend their land. Fourth, until the late 1990s men felt that urban agriculture was not a high-income earning activity and thus did not support their spouses when they started practising it. Women's freedom to attend training courses is still limited by their husbands, because it takes them away from home for more than a day. This severely impedes women's capacity-building opportunities and participation in leadership positions. Men finally joined in urban agriculture activities after successful harvests yielded useful profits. Further, massive retrenchments that were exercised in the late 1990s left many of the men with very little option but to engage in informal-sector employment, including urban agriculture. Currently, the engagement of men in the activity is causing conflicts, given increased demand for agricultural land, sometimes resulting in some men invading land belonging to women. (Toriro, Chapter 6 this volume)

Box 1.3 Male predominance in urban agriculture in Accra, Ghana

Men dominate urban farming in Accra as a result of the arduous nature of the farming tasks, including land preparation that is mainly manual, and vegetable production that requires regular watering, planting and transplanting, shading, tilling, and weeding. Land clearance, land preparation, and watering are considered the most difficult tasks and are designated as male activities. While men can supplement their effort by providing paid labour, half of independent women cultivators depend on paid male labourers to carry out land clearing and preparation. Women with limited financial resources cultivate relatively small plots that can easily be managed. This is illustrated in the following comments made by a typical woman producer who had been cultivating in Accra for 11 years: 'I started with five other women, but they have all left because of the difficulty of the tasks involved. Talking about land clearing and preparation, forking of beds, spraying of chemicals etc., it takes much determination to continue cultivating. I mostly use men hired labour for land clearing and preparation. When I have not got enough money to hire labour, I do the land preparation myself, but then I'm able to cultivate only part of my plot.' (Hope et al., Chapter 4 this volume)

activity, urban agriculture is in many cases especially effective and efficient for married women with children, or women heads-of-households, because it is often (but not always) performed close to the home and combines well with their household responsibilities. Urban agriculture requires little cash, given that it can be undertaken with relatively low capital, technology, and inputs.

It is thus attainable and affordable for women with limited education and resources, and often stimulates the use of indigenous practices.

By reducing household food expenditures through crop production and/or livestock keeping, women in cities can redirect such finances to non-food items. Surplus production can turn into income-generation activities, either through direct sales of foodstuffs at the marketplace or through diversification into small-scale food processing. It is not unusual to find women in urban households earning more from food production than their husbands earn from formal jobs. The ownership of animals and/or independent cash income may strengthen a woman's social position within the household and the community. Animal rearing can also fulfil an important role as an economic safety net, and plays an important part in certain socio-cultural practices such as the payment of marriage dowries. Urban agriculture not only allows women to secure their daily household needs but provides a potential stepping stone for increased independence, confidence, and opportunity to improve their quality of life. The case of María del Triunfo, Lima in Box 1.4 illustrates the advantages and potential benefits of urban agriculture for women.

At the same time, the challenges facing women who aspire to participate in urban agriculture are numerous. For example, women face severe constraints in accessing, using, and/or controlling land in cities, compared with their male counterparts. Men tend to have the first choice of any available vacant land, leaving women with low-quality or less secure plots of land, often located at a considerable distance from home. Even within households with adequate land resources, wives may be at a disadvantage in terms of access to these plots (Hovorka, 1998). Distance is a related challenge: women are often left to travel extensive distances to marginal lands, their journeys requiring considerable time, physical effort, and financial expense for transportation, if it is available.

Women also face constraints in terms of urban agriculture production itself. They often lack inputs and working capital, as well as access to knowledge and information on the use of modern inputs and technologies. The latter is partly due to women's limited exposure to commercial urban agriculture or to their limited access to training courses offered by institutions or non-government organizations. Women are less likely to benefit from research or extension services that fail to consider gender-specific differences when

Box 1.4 Benefits of urban agriculture for women in Villa María del Triunfo, Lima, Peru

Urban agriculture in María del Triunfo, Lima does not reinforce gender inequities. On the contrary, this activity is contributing to women's empowerment, improved self-esteem, leadership, capacity building, and increased independence and freedom. It is important to note that for women urban agriculture is not an overload of activities but rather a means of building their personal development and their capacity for social interaction and organization, helping them to overcome many conditions including devaluation, subordination, and exclusion. (Soto et al., Chapter 8 this volume)

Box 1.5 Gender constraints on urban agriculture in Dakar, Senegal

Within the coastal fringe commonly known as the Niayes Valley, which runs from Saint-Louis to Dakar, Senegal, a strip about 350 km wide is often referred to as the 'green lung of the region'. In Pikine, located in this valley close to the capital city of Dakar, several urban agriculture activities are carried out on an area of 60 ha, including vegetable gardening, floriculture, fishing, and fruit and vegetable processing. A gender study conducted in the area determined the constraints encountered in the practice of urban agriculture by both men and women. Most constraints were identified or prioritized differently according to gender. For male urban farmers, land insecurity was deemed the most important constraint on their activities. They believed that their efforts were being threatened because of the rapid and uncontrolled growth of urbanization, resulting in the construction of collective housing and infrastructure. Another important constraint was access to water; watering was time-consuming and physically demanding, given that most farmers used watering cans to water their farms. This proved particularly challenging for women.

Another key problem for women was access to other inputs. For example, they had limited access to operational space, so that they could not rent out a room in which to carry out processing activities. Further, women are trained in processing techniques but they rarely receive the necessary assistance (in the form of equipment, functional premises, working capital, etc.) to carry out their activities effectively. Women were also constrained by the lack of follow-up after training courses and by the difficulty of mobilizing available labour within the family, especially among the children during the academic year. This latter difficulty illustrates (in some cases) the insignificant influence that women have on their husbands' decision to allow the children to pursue their schooling. As a result, the women have additional chores to carry out in the household. (Gaye and Touré, Chapter 14 this volume)

selecting technologies and working methodologies. Further, one must take into account the limited labour time available to urban women, and the local dynamics within which their daily activities take place. Women's response to opportunities to grow more food or better-earning crops will depend on the extent to which they can influence the decisions in the household about cultivation, the use or sale of produce, and the distribution of tasks and benefits within the household. The case of Pikine, close to Dakar, Senegal in Box 1.5 illustrates the differential challenges facing men and women involved in urban agriculture.

Division of labour

Within the household, various tasks and responsibilities are divided between male and female members. This division of labour is subject to context-specific circumstances such that within different cities, even within different households, the tasks between men and women relating to urban cultivation and livestock keeping differ according to the cultural group to which they belong, the socio-economic status of the household, the crop type or livestock type, and the location of the household in the city.

Division of labour in urban agriculture is also influenced by the reasons why urban households engage in the activity. On the one hand, households

engage in urban agriculture because they have moved from rural to urban areas, bringing their agricultural practices with them. In this situation it is often the woman's task to provide food for the family through farming and gathering, but this may prove challenging, given that in the city family labour is hardly supplemented by casual labour, which increases the burden on the women in the households (Rakodi, 1988). On the other hand, households may have an urban background and are involved in agriculture by choice or by need. In this situation, there may be no recognition of traditional gender divisions of labour if the social norms brought from the countryside have lost their influence (Lee-Smith, 1994). Box 1.6 describes how changing cultural traditions in the context of urban agriculture can bring about changing gender roles within households.

As previously discussed, men's and women's involvement and predominance in urban agriculture activities may be different from one context to another. Beyond this, a number of other differences in the roles of men and women in urban agriculture can be observed. First, there is the difference in division of responsibility for certain crops. In most urban agriculture household systems, men are responsible for a few cash crops and larger livestock, and for generating cash income for the family, whereas women are responsible for a variety of food crops and small animals, and for household food security and nutrition (Hovorka, 1998). In research by Ofei-Aboagye in Ghana (1997), it was found that women are mainly responsible for crops with lower maintenance requirements, which leaves them with more time to spend on their household tasks.

Second, Ofei-Aboagye (1997) witnessed the difference between men and women in dry- and wet-season farming in Ghana. Usually, men are more actively engaged in irrigated dry-season agriculture, while women are more involved in wet-season farming. Women often lack the physical strength to clear the dry-season farmland, and their access to hired labour, oxen, or a tractor is limited. Fewer producers engage in dry-season farming, and so more money is made as a result of the relatively limited supply of foodstuffs

Box 1.6 Changing division of labour in Kisumu, Kenya

The city of Kisumu is situated on the shores of Lake Victoria. It has an area of 395 km², of which 35.5 per cent is covered by water. The cultural traditions of the Luo community that prevail in the rural areas apply differently here. For example, cases of women owning property are found, which would be impossible if the Luo tradition was completely adhered to. In Kisumu, control over property is largely determined by the identity of the household head; hence female heads of household hold absolute control over the household property. This is especially true for widows who control land, houses, and other property, including livestock. Women make independent decisions about finances, consumption, and production (even when adult sons and their families are living in the same compound). Sometimes the sons are consulted, but never the daughters. Another example of the influence of urbanization on gender roles is that women in Kisumu are inheriting livestock, even though tradition prescribes that wives and daughters do not inherit. (Ishani, Chapter 7 this volume)

Box 1.7 Gender division of labour in Kampala, Uganda

Urban agriculture in Kampala takes place predominantly on private land, in back yards, and on undeveloped public land. Due to rapid urbanization and population growth, people are increasingly utilizing hazardous places that are unsuitable for growing crops. Such places include road verges, banks of drainage channels, wetlands, and contaminated sites such as scrap yards and dump sites for solid and liquid waste. Most of the farmers in these hazardous locations produce and sell their food, with a higher proportion of women selling food directly to consumers. This may be attributed to the nature of crops grown: specifically, men grow crops on a larger scale and sell them on a wholesale basis to retailers, while women sell directly to consumers in the neighbourhood. In general, a higher proportion of the men sell some of the food that they produce from farming activities; women use the food crops to feed their families. The percentage of farmers who sell all of the food grown on contaminated sites to consumers is higher among women, who consequently use the funds to buy other foodstuffs from the market. (Nabulo et al., Chapter 5 this volume)

and unchanged levels of demand. Third, the gender division of labour at organizational and community levels is such that in some instances women participate in producer organizations, but it is quite common that they do so only as members or in supporting functions, not in key leadership roles with decision-making authority. Box 1.7 describes the different tasks of men and women involved in urban agriculture in Kampala, Uganda. Traditional divisions of labour continue to exist in urban households, such that women are responsible for reproductive (subsistence-oriented) tasks, while men are primary breadwinners, taking on formal jobs in the economy.

Differences in knowledge and preferences

Another key issue within the field of gender and urban agriculture is the differences in knowledge that exist between men and women in terms of the cultivation of certain crops and animals; the application of certain cultural practices (for example, women in the Andes know more than men about seed selection and storage, herding, processing of wool and natural medicines); the use of certain technologies (men generally have more knowledge of irrigation techniques, chemical inputs, and castration of bulls, for example); and certain social domains (men may know much more about formal marketing channels, whereas women may know more about informal barter relations). Men and women normally also differ strongly in their preferences and priorities in relation to their main roles and responsibilities (regarding, for instance, commercial or subsistence-oriented production goals); location of plots (women with young children often preferring to work close to the home, for example); mode of production (such as single versus multiple cropping); and use of the benefits (for household consumption or for sales, as an example). Differences between men's and women's preferences, priorities, and perceptions are illustrated in Box 1.8. In the urban context, men and women also come to acquire specific types of new knowledge, given their exposure and access

Box 1.8 Gendered differences in knowledge and preferences in Nakuru, Kenya

Information about the knowledge, opportunities, and constraints of men and women in respect to livelihoods and nutrition was obtained from a diagnostic study in which 85 male-headed households and 70 female-headed households were interviewed. The participation of men and women in the project has helped in tapping and exchanging their knowledge and skills in vegetable production and dairy-goat rearing. Women had a lot of experience and care in tending vegetables, including the production of traditional African vegetable seeds, while men knew more about the milking of goats, their reproductive cycle, and health issues. The knowledge and skills of both men and women in vegetable production and dairy-goat rearing have, however, been improved through training. (Njenga et al., Chapter 11 this volume)

to new crops or technologies that are conducive to urban cultivation; they negotiate new social-network patterns, given the need to establish production chains or marketing linkages that are specific to city life.

Access to and control over resources

A central issue in men's and women's differential circumstances and experiences of urban agriculture is that of access to and control over resources. This refers both to productive resources such as land, water, inputs, credit, information, and technology and to contacts, interpersonal networks, and organizations. It also refers to access to and control over one's own labour and the benefits of production, which include cash income, food, and other products for home consumption, sales, or exchange. Gendered access to and control over specifically natural resources often means that women have rights of renewable use (such as harvesting leaves from trees), while men have rights of consumption (harvesting the tree itself, for example). For female heads of household, their access to resources is often limited to those of poorer quality, and the consequence is lower agricultural production levels compared with male heads of household. Box 1.9 and Box 1.10 detail urban

Box 1.9 Accessing credit in Accra, Ghana

In general, urban farmers do not have access to formal credit schemes in Ghana. This is mainly because farmers, particularly women, cannot meet the collateral demands of the financial institutions. In addition, most of the urban female farmers have limited space for cultivation and do not own land. In spite of these problems, some have managed to create a win-win situation with the vegetable sellers in terms of access to informal credit. Sellers pre-finance farming activities by providing seeds, fertilizers, pesticides, or cash in order to obtain the vegetables subsequently produced. Sometimes sellers order the products before cultivation, through verbal agreements based on trust and confidence. The final sum of money received by the farmer may differ from the initial sum agreed on, as demand and supply might have changed during the growing period. Similar situations have been observed in Lomé, Togo, and Cotonou, Benin, in West Africa. (Hope et al., Chapter 4 this volume)

Box 1.10 Accessing education in Kampala, Uganda

In Kampala, most of the women involved in urban farming have only primary education, or none at all. Only a few have received a secondary education. This determines what kind of work they do, and it explains why poverty is a great problem among women: few of them participate in the formal sector, and many either work at home as housewives, or farm in their backyards, or trade foodstuffs at evening candlelight markets by the roadsides. (Nabulo, Chapter 5 this volume)

farmers' circumstances in relation to credit in Accra, Ghana, and education in Kampala, Uganda, respectively, in order to emphasize the implications for participation and potential success in the urban agriculture sector.

Access and control are highly influenced by structures and processes at the macro level, where socio-cultural ideas determine which roles men and women play, what responsibilities they each have, and the value placed on these roles. According to Moser (1993), external factors such as ideology, culture, and economics underlie intra-household resource allocation. Both *de facto* traditions and formal laws may prevent women from inheriting and controlling land on an equal basis with men. Traditions of patrilineal property inheritance limit women's access to a secure place to live, their ability to produce food for their families, and their ability to generate income. An example of the influence of culture and traditions on women's access to land is described in Box 1.11.

In contrast, urban areas facilitate a culture of individualist political and economic circumstances such that a 'survival of the fittest' scenario prevails. Box 1.12 illustrates this scenario in terms of land access in Ghana that is not consonant with gender traditions.

Box 1.11 Women's access to land in Hyderabad, India

The city of Hyderabad, India, is one of the fastest-growing cities in the world. Spread out over an area of 500 km², it has a population of six million. Various crops irrigated with wastewater are cultivated in the urban and peri-urban areas of the city along the Musi River, which flows through the centre of the city. Here, land is considered to be a resource for men, with legal inheritance of land equally distributed between sons and daughters. Land title, however, is usually in the name of the male head of the household, and after he dies it is inherited by the male members of the family (his sons). Indians still adhere to the dowry system, whereby a bride's father has to pay the family of the bridegroom before or during the wedding. Parents of the bride give cash and jewellery to the bridegroom and retain their land for their son, as he is the one who will support them in their old age. Women usually do not file cases against their fathers or brothers, even if they do not get their share of the land. The main reason is that a father pays a dowry to the bridegroom for the wedding of his daughter, which is supposed to compensate for the land that will go to his son. Culturally, women are taught that land is a man's property. Women get land titles only if their husbands die and their sons are too young (less than 18 years old) to work the land. Divorce is not a common phenomenon in the study area; even in the rare event of a divorce, the land remains with the husband. (Devi and Buechler, Chapter 2 this volume)

Box 1.12 Accessing land for urban agriculture in Accra, Ghana

Even though some communities disallow women from owning land, this restriction pertains mainly to communal land in peri-urban and rural areas and has little or no effect on access to land for farming in the open spaces within the cities in Ghana. Seventy per cent of the land cultivated in urban areas belongs to the government, and access to these lands is not based on gender differences. This is very interesting, as it would mean that established culture and traditions did not prevail in the urban situation, or at least that they would be less important. In a recent study, 87 per cent of the farmers in Accra indicated that men and women have equal access to government lands in urban open spaces. In essence, access to government land is based on availability and the lobbying strategies of individuals. In most cases, access is achieved via direct contact with the owner or caretaker, or through a third party working with the government institutions in the area. In some peri-urban areas of Accra, where share-cropping is used as payment for cultivating land owned by individuals, landowners or traditional leaders (such as chiefs) prefer men rather than women to cultivate larger plots, because they believe that men are likely to produce higher yields than women. (Hope et al., Chapter 4 this volume)

In many instances, men and women must compete with each other for scarce resources such as land and water for urban agriculture, given that these structures undermine traditionally established inheritance rules. In many of these scenarios, men out-compete women, given their generally elevated socio-economic status in cities. Women producers who are not landowners may demand their share of revenue derived from production, because they are the ones who are primarily responsible for the care of children (Hovorka, 1998). If they are not successful in persuading their husbands to share the earnings, women may retain part of the money from their vegetable produce sales without the knowledge or consent of their husbands (Maxwell, 1994). Box 1.13 illustrates access to and control of the benefits of urban agricultural production.

Additionally, female producers cannot always get access to transportation when distances from available plots of land may be considerable. The physical time and effort involved in such journeys is high and therefore proves to be a significant constraint for women, especially the elderly or those with young children, who aspire to become involved in food production. Lack of inputs

Box 1.13 Benefiting from urban agriculture in Kampala, Uganda

In Uganda it is the men who control the major source of household income and determine how to use it. The men purchase the farm inputs and equipment such as hoes and pangas. They have a strong hold on the household budget and allocate a certain amount of money to women, who in turn decide on household-expenditure priorities. One woman explained (focus-group discussion, Kigobe zone, Rubaga Division, Kampala, 2003): 'You grow the crops, but when it comes to selling it is your husband or male relative who sells and decides on how to spend the money. If you complain, he asks you if you are the one who owns the land. He then goes to spend the money on local brew.' (Nabulo et al., Chapter 5 this volume)



Women fetching water in Tamale
By IWMI Ghana

and working capital, as well as lack of information on the use of modern inputs and technologies, also limits women's ability to participate in urban agriculture activities. Women tend to have limited exposure to commercial urban agriculture or training courses offered by institutions or non-government organizations; they may also benefit less from research or extension services that fail to consider gender-specific differences regarding methods of plant production, crop species, and use of composts, manure, and fertilizer.

Decision-making power

There is a close relationship between access to resources and control over their use, and the power to make decisions; but they are distinguishable issues. Within the household, decisions are taken on the sale of products, land, or animals, the production process itself (what to produce, when, where, why, how), development of the infrastructure, whether to save or invest, and whether some members of the household should work on the farm or take other jobs outside the household. Productive activities can help to strengthen the position of women in the decision-making process within the household. For example, in Kampala, farming activities represent a means to economic self-reliance, as was found in the research of Maxwell (1994). For married

women in particular, urban farming offers more than the opportunity to augment their family's food supply: while still within the margins of what is culturally expected of these women, participation in urban agriculture gives them access to their own source of income and thereby strengthens their position in intra-household conflicts. Culturally, urban agriculture is seen as a marginal economic activity, and the women may have good reason to maintain this image (Hetterschijt 2001; Maxwell 1994). Box 1.14 illustrates how men's views on urban agriculture can change once it has proven to be a profitable activity.

Within the community, contacts and participation in local networks and organizations often facilitate access to and control over productive resources. Women's groups play a pivotal role in this context, such that their activities are often co-operative mechanisms through which individual women successfully pool resources, skills, information, time, and energy. Box 1.15 provides an example of this scenario. In some societies, however, women's groups depend on a male chairman to represent their interests to the rest of the community, which may not be the best possible arrangement for addressing women's strategic needs (Peters, 1998).

Given the gender-related differences in the division of labour, knowledge and preferences, resource access, and decision making, urban agriculture research and development projects can have quite different impacts on men and women. If such gender aspects are not taken into account, projects may for example have positive effects on family income and thus reduce poverty, but they may also increase the workload of women, negatively affect the nutrition

Box 1.14 Men's views on urban agriculture in Lima

Of the total number of productive family units (PFUs) in Villa María del Triunfo, a municipality in the southern part of Lima, Peru, 76 per cent are controlled by women and 24 per cent by men. Of the total number of PFUs, 82 per cent practise urban agriculture recreationally and consume what they produce, while 3 per cent (all headed by women) practise urban agriculture with the goal of supplementing their family income. Fifteen per cent (all headed by women) see urban agriculture as a strategy for the potential generation of supplementary family income. Fewer men than women participate in urban agriculture, because men generally do not see this activity as a viable strategy for the generation of direct income. They therefore dedicate little time to it and give priority to other income-generating activities. However, they are interested in taking the next step and using the products of urban agriculture to generate income, particularly through processing activities. The current purposes (recreation and self-consumption) of urban agriculture in Villa María del Triunfo avoid conflicts within families about access to and control over resources and benefits of home gardens. Women make decisions without intervention from men, since this activity does not at present generate visible economic income and is therefore not relevant to men. However, when the possibility of generating visible income through commercialization arises, men want to take part in decision making. When striving to make urban agriculture an income-generating activity, it is necessary to identify strategies to avoid conflicts and inequalities in control over the benefits arising from home gardens. (Soto et al., Chapter 8 this volume)

Box 1.15 The Kachi Women's Association in Hyderabad, India

Kachiguda is an urban neighbourhood located almost in the centre of Hyderabad. Many of its inhabitants farm along the Musi river. There are four community associations in the neighbourhood: the Hyderabad Farmers' Association, Kachi Association, Kachi Women's Association, and Yadava Sangham. The Kachi Association and Yadava Sangham are caste-based associations, and only those belonging to the Kachi and Yadava castes respectively can become members; membership is completely male. The Kachi Women's Association is exclusively a women's association, formed in 2004 to help the women belonging to the Kachi caste to solve their domestic problems. According to the Secretary of the Women's Association, Ms Madhumathi Bai: 'The Kachi Association is entirely a men's association, and women cannot talk freely about their problems in front of the men. So the chairman of the Kachi Association himself encouraged us women to form a separate women's association, where we can freely discuss our problems such as domestic violence, access to water, blocked sewage drains, lack of electricity, disputes with neighbours, etc. If the problem cannot be solved, then we take it to the men. We still do not have a savings group, but plan to start one soon. As for agriculture, it is the only source of livelihood for some of the Kachi women, as they do not have any other skills or courage to go out and search for other jobs.' (Devi and Buechler, Chapter 2 this volume)

and health of the women and children, or leave women's strategic interests unaddressed. Literature suggests that urban agriculture projects that integrate gender issues to a high degree tend to have more positive effects, not only on the position of women but also on poverty alleviation, household food security, and health. For example, according to Talukder et al. (2001), home gardening activities in Bangladesh increase the income-earning capacity of the women and thus contribute to their empowerment; such activities provide important socio-economic returns through lower health and welfare costs, lower fertility rates, and lower maternal and infant mortality rates. Maxwell and Armar-Klemesu (1998) show that female-headed households in Accra have lower mean incomes than male-headed households, but their food-budget shares and calorie availability are significantly higher than those of the male-headed households. Female-headed households spend 60 per cent of their household budgets on food, compared with 50 per cent in male-headed households.

Gender analysis, as featured in this section, helps to diagnose issues that need to be addressed in order to bring about gender equality and women's empowerment. Going one step further, the concept of 'gender mainstreaming', as featured in the following section, proposes a comprehensive approach to this aspect of social change. Gender mainstreaming can provide a means of establishing urban agriculture research and project-planning methods that facilitate appropriate, effective, and beneficial policy and planning interventions in urban centres. Ultimately the goal is to ensure that urban agriculture activities help women to feed cities through their daily activities, as well as facilitating women's self-empowerment such that it allows them to change their inequitable circumstances relative to men and determine their own paths of development.

Mainstreaming gender in urban agriculture efforts

At the Social Development Summit organized by the United Nations in Copenhagen, national governments, NGOs, and international organizations agreed that the principle of equality of all rights for all people forms the basis for social inclusion. Specifically, all human beings are born free and equal in dignity and rights, and everyone is entitled to all human rights without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other (United Nations, 1995).

A society where certain population groups are not part of the decision-making system is an unjust society. Male representatives normally do not automatically represent women's interests. Women's active participation in decision making is essential in order to ensure that women can promote and defend their specific needs and interests (for example, land rights and reproductive rights, their right not be subjected to violence, and their need for child-care services). Women can be prime actors in promoting gender-sensitive governance that addresses their needs as well as men's, thus enhancing access to and control over local resources for both. In some countries, women have succeeded in putting women's issues on the political agenda. But recognizing the need to enable the participation of all population groups in society is not enough. One also needs to know what strategies can be implemented to achieve a just and equal society, and how it can be done.

Gender mainstreaming is not only thorough in its documentation and analysis, but prescriptive in its method and comprehensive in its operation at all levels of a process or organization. It entails collecting gender-disaggregated data, identifying gaps, identifying strategies to close those gaps, investing resources in implementing the strategies, monitoring the implementation, and holding individuals and institutions accountable for the results (UNDP, 2003). For urban agriculture, it means that gender is considered in every aspect and at every step along the way in any initiative.

It is important to stress that, in empowering women and making them visible, gender mainstreaming is not aimed at excluding men, and certainly not at disempowering them. Rather it aims for the inclusion of men in the process. Set within the context of men's and women's circumstances and

Box 1.16 UN definition of gender mainstreaming

The United Nations (ECOSOC, 1997) defines gender mainstreaming as follows. 'Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.'

experiences, gender mainstreaming aims to intervene in the gender dynamics within which food production, processing, and marketing take place in urban areas, for the purpose of creating greater social equality.

Gender mainstreaming must be taken into account in each of the various phases of research and development processes, including situational diagnosis and identification of problems, potentials, and actors; in-depth analytical research; intervention action planning, implementation, and monitoring/evaluation; and policy development. To this end, the following measures are important:

- Recognize that women and men have different needs.
- Identify the mechanisms that keep women in a disadvantageous position.
- Identify the possible impacts of urban agriculture on the reproductive, productive, community, political, and cultural roles and areas of social interaction of women and men.
- Identify the practical and strategic needs of men and women and respond to both, paying particular attention to the strategic needs, given that meeting them tends to create more of a balance in gender relations.
- Define equality policies and affirmative actions that make gender equality a reality in the urban agriculture process.

Mainstreaming gender issues into development policy, planning, and decision-making mechanisms has proved challenging at all scales. As noted by UNDP (2003: 3), nowhere is the gap between stated intentions and operational reality as wide as it has been in the promotion of equality between men and women. Gender inequality is still continuously recreated by the 'mainstream', given that existing policies and practices are based on dominant and stereotyped views of the respective roles and status of men and women. While organizations and institutions continue to grapple with the incorporation of gender dynamics, the needs and priorities of one half of humankind have yet to feature on the development agenda.

As an emerging development strategy, the realm of urban agriculture is well poised to accommodate just and equitable guidelines for addressing the needs and interests of both men and women. Practitioners, planners, and policy makers can make a concerted effort to fully acknowledge and incorporate gender into the promotion and support of urban agriculture globally (Hovorka and Lee-Smith, 2006). Urban agriculture could and should be based on practices that generate more equitable social relations (Palacios, 2002: 1-2). If the data in a diagnosis are not disaggregated by gender, the project, plan, or policy will be based on an overall vision that disregards the differences between genders. It will thus suggest common answers to problems that, in practice, are different, and as a result it will risk deepening those differences and inequalities.

The urban agriculture research or development project cycle, requires consistent application of gender tools at every step. At the outset, gender analysis

allows for planning and implementation of 'people-centred' development interventions, based on exact information of who these 'people' are. 'The people' never comprise one homogeneous group, but rather consist of diverse sub-groups as a consequence of differences in age, culture, geography, socio-economic positions, and ethnicity. Without such data on the differentiations within the population with whom and for whom they are working, research and intervention projects are not as relevant as they could and should be.

The aim of gender analysis is to understand and document the differences in gender roles and relations in urban agriculture in a particular location as a basis for the design of gender-responsive research, policies, and projects that increase men's and women's participation in and benefits from development. Gender-sensitive research should be conducted during all phases of the project cycle, including diagnosis, design, planning, implementation, monitoring, and evaluation and policy development (GWA, 2003). It is a cross-cutting issue that is only truly mainstreamed if applied at every stage. If it is not included in the earliest stages of a research initiative or a project, the result may be inadequate scientific knowledge or an entirely different project with different goals, strategies, and activities.

When making policy recommendations with regard to urban agriculture, it is important to conceptualize gender as a social, political, economic, and cultural issue, and as a human-rights issue, to which different actors (local governments, institutions, and organizations) must respond. Urban agriculture policies should be based on an acknowledgement of the real value of women's contribution to production, and on a recognition of women's economic rights. Attention should be paid to trying to establish the impact of urban agriculture on the well-being, dignity, and feelings of self-respect of both women and men. Promoting increased self-respect for women should be seen in the wider context of working towards gender equality as a universal human right. Thus development programmes and policies should strive for full and free participation of women in all decision making that affects their lives; they should target both women and men as beneficiaries.

Attempts have been made to develop appropriate methods for researching and promoting gender issues in urban agriculture (for example, Hovorka, 1998; UH-RUAF methodology workshop in Nairobi 2001; and the Women Feeding Cities meeting in Accra in 2004). Yet the development and implementation of gendered guidelines and instruments specific to urban agriculture remain a challenge. The cases presented in this book reflect an attempt to further mainstream gender in the urban agriculture realm by encouraging insightful research on gender dynamics (Hovorka and Lee-Smith, 2006). Creating a foundation for gender mainstreaming in urban agriculture requires a solid research base which explores conceptual issues and provides empirical evidence of men's and women's differential and often inequitable experiences of food cultivation and livestock rearing in different cities around the world. These case studies reveal differences between men and women, identify the

mechanisms that often keep women in a disadvantaged position, and establish the significance of urban agriculture in people's everyday lives.

In turn, research on gender and urban agriculture provides a springboard for programming, planning, and policy initiatives whereby researchers can identify the practical and strategic needs of men and women in order to formulate action plans for urban agriculture activities (Hovorka and Lee-Smith 2006). The cases featured here go a long way towards making recommendations for research and development to enhance and achieve gender equity. For example, the Accra case study (Chapter 4) calls for the development of women-friendly technologies in urban vegetable farming to create a better gender balance, while in Manila (Chapter 3) action taken on health campaigns is seen as a way forward in addressing women's exposure to harmful pesticides. In Kampala (Chapter 5) land access and protected rights to ownership for women farmers are encouraged by creating gender quotas in land allocation, while in Kisumu (Chapter 7) the focus is on legislation and policies pertaining to customs, practices, inheritance, and succession to ensure women's equal rights in and out of marriage.

Additionally, calls for further research by authors of cases featured in this book draw attention to, for example, in-depth gendered studies of the marketing of vegetables in Accra, in order to understand marketing dynamics and the lack of men engaging in marketing activities. To ensure equitable division of labour and responsibilities in urban agriculture, the Kisumu case demands gender-disaggregated calculations of the contribution of urban agriculture to the overall Kenyan economy. Numerous case studies recognize the importance of acknowledging cultural norms and power relations that are fully embedded in society and have implications for men's and women's circumstances and experiences of urban agriculture. As stated in the Kampala case study, 'The methodologies used to integrate gender into urban agriculture projects need to take into consideration the cultural values that favour men and often render women inferior within the household and the larger community'.

In addition to the experiences and insights garnered through the case studies in this volume, the urban agriculture development community must look towards two key elements to further the gender-mainstreaming agenda. First, political will and commitment among key stakeholders at all scales is essential, given that gender issues become meaningful and applicable only if and when the organizations and institutions promoting them actually support them (Hovorka and Lee-Smith, 2006). Wherever possible, gender mainstreaming must be a stated developmental or organizational goal, supported by those in leadership positions. Gender mainstreaming requires a concerted effort by researchers, practitioners, and decision makers in order to strengthen links between research, programming, and policy/planning initiatives in the field of urban agriculture. This includes involvement and promotion of women's groups engaged in urban agriculture and their collective practices so that they will be recognized as social and political actors, thus converting urban

agriculture into a citizen's concern. Second, capacity building and resources must be committed and allocated to achieve gender mainstreaming; logistical support and material requirements are essential at municipal, regional, national, and international levels. Gender mainstreaming demands expertise, which in turn requires resources, and until practitioners and organizations back up their promises with money, inaction will persist.

References

- Argenti, O. (2000) 'Food for the Cities: Food Supply and Distribution Policies to Reduce Urban Food Insecurity', FAO, Rome
- Bopda, A., Nolte, C., Tchouendjou, Z., Dury, S., Temple, L., Brummett, R., Gockowski, J., Soua, N., Elong, P., Kana, C., Ngonthe, R., Kengue, J. and Foto-Menbohan, S. (forthcoming) *Urban Farming Systems in Yaoundé – An Overview* (provisional title), Urban Harvest, Lima.
- Brazil Government (2008) *The Fight Against Hunger*, Ministry of Social development, Brazil. Available from www.mds.gov.br
- Dahlberg, K.A. (1998) 'The global threat to food security', *The Urban Age* 5 (3): 24–26.
- ECOSOC (1997) *Gender Mainstreaming In the United Nations System*.
- FAO Regional Office for Latin America and the Caribbean (2008) 'Urban and Peri-urban Agriculture is an Alternative Choice for Improving Livelihood of Poor Neighbourhoods: Response to Rising Food Prices and Climate Change. Santiago, Chile'.
- Feldstein, H.S. and Jiggins, J. (eds.) (1994) *Tools for the Field: Methodologies Handbook for Gender Analysis in Agriculture*, Kumarian Press West Hartford, Connecticut.
- Gender and Water Alliance (GWA) (2003) 'Mainstreaming Gender in the Project Cycle', Training of Trainers Package on Gender Mainstreaming in Integrated Water Resources Management, GWA, Delft, The Netherlands.
- Gonzalez Novo, M. and Murphy, C. (2000) 'Urban agriculture in the city of Havana: a popular response to crisis', in N. Bakker et al. (eds.), *Growing Cities, Growing Food, Urban Agriculture on the Policy Agenda*, pp. 329–347, DSE, Feldafing.
- Haddad, L., Ruel, M., and Garrett, J. (1999) 'Are urban poverty and undernutrition growing? Some newly assembled evidence', *World Development* 27 (11).
- Hetterschijt, T. (2001) 'Our Daily Realities: A Feminist Perspective on Agro Biodiversity in Urban Organic Home Gardens in Lima, Peru', Master's thesis, Wageningen University, Wageningen.
- Hovorka, A. (1998) 'Gender resources for urban agriculture research: methodology, directory and annotated bibliography', in *Cities Feeding People Series*, Report 26, IDRC, Ottawa, Canada.
- Hovorka, A. (2001) 'Gender and Urban Agriculture: Emerging Trends and Areas for Future Research', Graduate School of Geography, Clark University, Worcester MA, USA.

- Hovorka, A. (2005) 'The (re)production of gendered positionality in Botswana's commercial urban agriculture sector', *Annals of the Association of American Geographers* 95 (2): 294–313.
- Hovorka, A., and Keboneilwe, D. (2004) 'Launching a policy initiative in Botswana', *Urban Agriculture Magazine* 13, *Trees and Cities – Growing Together*: p.46.
- Hovorka, A. and Lee-Smith, D. (2006) 'Gendering the urban agriculture agenda' in R. van Veenhuizen (ed.) *Cities Farming for the Future*, pp.125–136, International Development Research Centre & Resource Centre for Urban Agriculture and Forestry, Ottawa & Leusden..
- IBRD/World Bank (2008) *World Development Report 2008: Agriculture for Development*, World Bank, Washington.
- Jiggins, J. (1994) *Changing the Boundaries: Women-Centered Perspectives on Population and the Environment*, Island Press, Washington.
- Lee-Smith, D. (1994) *Gender, Urbanisation and Environment: A Research and Policy Agenda*, Mazingira Institute, Nairobi, Kenya.
- Maxwell, D. (1994) 'Internal Struggles over Resources, External Struggles for Survival: Urban Women and Subsistence Household Production', paper presented at the 37th Annual Meeting of the African Studies Association, Panel on Urban Provisioning and Food, The Royal York Hotel, Toronto, Canada, November 3–6 1994. Legon, Ghana: Noguchi Memorial Institute, University of Ghana.
- Maxwell, D. and Armar-Klemesu, M. (1998) 'The Impact of Urban Agriculture on Livelihoods, Food and Nutrition Security in Greater Accra', paper presented at the IDRC Cities Feeding People Workshop on Lessons Learned from Urban Agriculture Projects in African Cities. Noguchi Memorial Institute, University of Ghana, Legon, Ghana.
- Moser, C.O.N. (1993) *Gender Planning and Development: Theory, Practice and Training*, Routledge, London, UK.
- Mougeot, L. (2006) *Growing Better Cities: Urban Agriculture for Sustainable Development*, International Development Research Centre, Ottawa, Canada.
- Moustier, P. and Danso, G. (2006) 'Local economic development and marketing of urban produced food', in R. van Veenhuizen, *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*, RUAF /IDRC/IIRR, Leusden, The Netherlands.
- Nabulo, G., Nasinyama, G., Lee-Smith, D., Cole, D. (2004) 'Gender analysis of urban agriculture in Kampala, Uganda', *Urban Agriculture Magazine* 12: *Gender and Urban Agriculture*: 32–33.
- Obuobie, E., Drechsel, P., Danso, G. and Raschid-Sally, L. (2004) 'Gender in open-space irrigated urban vegetable farming in Ghana', *Urban Agricultural Magazine* 12, *Gender and Urban Agriculture*: 13–15
- Ofei-Aboagye, E. (1997) 'Memo on gender analysis of agriculture in Ghana', sent to Kathleen Clancy, Gender and Sustainable Development Unit, IDRC, 14 February 1997. Report for IDRC Project No. 96-0013 003149, IDRC, Ottawa, Canada.
- Olarte, M. de (2004) 'When the women decided to work the gardens', *Urban Agriculture Magazine* 12: *Gender and Urban Agriculture*: p.12
- Palacios, P. (2002) 'Why and how should a gender perspective be included in participatory processes in urban agriculture', in *Latin American Training*

- Course on Urban Agriculture*, Session 2, Proceedings, PGU-LAC, Quito, Ecuador.
- Peters, K. (1998) *Community-based Waste Management for Environmental Management and Income Generation in Low-income Areas: A Case Study of Nairobi, Kenya*, City Farmer, Canada, in association with Mazingira Institute, Nairobi, Kenya.
- Rakodi, C. (1988) 'Urban agriculture: research questions and Zambian evidence', *The Journal of Modern African Studies*, 26 (3): 495–515.
- Sapkota, K. (2004) 'Gender perspectives on peri-urban agriculture in Nepal', *Urban Agriculture Magazine 12*, *Gender and Urban Agriculture*: 38–39.
- Smit, J., Rattu, A., and Nasr, J. (1996) *Urban Agriculture: Food, Jobs and Sustainable Cities*, Publication Series for Habitat II, Volume One, UNDP, New York.
- Talukder et al. (2001) *Improving Food and Nutrition Security through Homestead Gardening in Rural, Urban and Peri-urban Areas in Bangladesh*, Helen Keller International, Asia-Pacific Regional Office, Indonesia.
- UNDP (1996) *Urban Agriculture: Food, Jobs and Sustainable Cities*, United Nations Development Programme, New York.
- United Nations (1995) *World Summit for Social Development Copenhagen Declaration on Social Development* [online]. Available at <http://www.un.org/esa/socdev/wssd/text-version/index.html>
- Van Veenhuizen, R. and Danso, G. (2007) *Profitability and Sustainability of Urban and Peri-urban Agriculture*, Agricultural Management, Marketing and Finance Occasional Paper, FAO, Rome, Italy.
- World Food Programme (2008) *WFP Crisis Page: High Food Prices* [online]. Available at <http://www.wfp.org/english/?ModuleID=137andKey=2853> [accessed July 28, 2008].
- WHO (2001) 'Urban and Peri-urban Food and Nutrition Action Plan, Elements for Community Action to Promote Social Cohesion and Reduce Inequalities through Local Production for Local Consumption', WHO, ETC, Denmark.
- WHO / UNEP (2006) *WHO Guidelines for the Safe Reuse of Wastewater, Excreta and Grey Material*, Geneva, Switzerland.