CHAPTER 15

Incorporating gender in urban agriculture projects

Abstract

This chapter suggests how to include gender systematically in various phases of the project cycle: from diagnosis to design, action planning, implementation, monitoring and evaluation, and going to scale. For each project phase important steps are highlighted. At the end of each section some specific tools are suggested which may be used in this particular project phase (these tools are discussed in detail in Chapter 17), in addition to questions which can be used as a checklist during that phase.

The urban agriculture project cycle

As discussed in previous chapters, the aim of gender-sensitive management of research and action projects is to enable men, women, and youth to participate in development processes on equal terms, both as agents and as beneficiaries. The case studies featured in Part I reflect this aim, and the results and experiences stemming from the cases form the foundation of this chapter. Specifically, lessons learned from original testing of guidelines have been used to adjust and improve those presented below; examples from case studies presented in Chapters 2 to 14 provide illustration of key points about gender within each specific phase of the project cycle.

Gender sensitivity and mainstreaming begins with the following:

- Acceptance of the principle of '*equal human rights for all*'.
- Acknowledgement of the real *value of women's contribution* to development: production, food security, income, etc.
- Recognition of *women as independent actors in and beneficiaries of* public policies and projects.
- Recognition that the *needs of men and women are different,* and that women's access to and control over resources and their participation in decision making are restricted by socio-cultural and institutional traditions.

- Recognition that public policies and projects, as well as economic and technological trends, can have *differential effects on men and women.*
- Recognition that *affirmative actions are needed* to ensure that women (and men) can reap equal benefits from public policies and projects.
- Recognition that advancing a gender-sensitive approach requires *cultural tact and diplomacy* if embedded constraints (such as traditional cultural norms and institutional sexism) are to be overcome and resistance minimized.

An effective framework for gender-sensitive project management, and the one chosen for the case studies and this publication, is the project cycle. A project 'encompasses a specific range of resources and activities which are brought together to generate clearly defined outputs within a given budget and a specified period of time. Compared to a programme, a project is more specific and has more defined targets and time frames' (GWA, 2003). The project cycle consists of a set of steps that provide the basis for adequate preparation and implementation of a project, as well as opportunities to learn from its results.

The outputs for urban agriculture projects will be somewhat different and the project cycle will vary, depending whether the project is more research-oriented, such as the case studies of Ghana (Chapter 4) and Carapongo (Chapter 13), or development-oriented. Even in strongly development-oriented projects, such as the case study of Villa María del Triunfo (Chapter 8), which features assessment of a multi-stakeholder action-planning process, research almost always forms at least some part of the cycle, for example in the diagnosis phase and in contributing to the design, planning, and implementation processes. In projects that are primarily research-oriented, not all phases of the project cycle will always be included; or there may be shifts in the sequence of phases. For example, projects may involve a research-design phase (hypotheses, definition of research objectives, design of research methodology), which precedes diagnosis and implementation.

For clarity, we present the broad phases of the project cycle as follows, highlighting where necessary special considerations related to research or development:

1. **Diagnostic research**. In this initial stage, local needs, problems, and opportunities are determined by reviewing the results of earlier research and undertaking additional studies (especially participatory analysis activities, applying rapid appraisal methods). Diagnosis focuses on the analysis of existing urban farming systems and broader livelihood strategies of farming households, as well as local conditions in the target areas, in order to define important problems, needs, perspectives, and opportunities.
2. **Design**. During this phase the project's goals and strategies are identified through a joint process of 'visioning' the desired development and project outcomes, and evaluating alternative strategies that might be applied to

realize those outcomes, by looking into their viability and effectiveness to produce the required outcomes. In research-oriented projects, some of the strategies identified may include further (participatory) research into, for example, technical options.

3. **Activity planning**. During this phase the goals and strategies are operationalized by identifying activities needed to implement the strategies, developing methods and tools to be applied, dividing responsibilities and tasks among the participating stakeholders, defining co-ordination and monitoring mechanisms, and developing a budget and timeframe. Also all necessary practical arrangements for the actions are made. Action planning may include action research to test alternative solutions to a given problem.

4. **Implementation**. During this phase the planned activities are implemented and, if need be, adapted to fit the specific context better.

5. **Monitoring and evaluation**. During implementation the project is monitored and periodically (auto-)evaluated in order to:
   - assess whether the project is on track with regard to the realization of planned goals, strategies and activities as set out previously;
   - solve problems that emerge during implementation;
   - enhance learning-from-actions by periodic reflection on experiences gained from implementation processes, as well as results obtained (for example, how to get more/more relevant/better-quality results; how to enhance cost-effectiveness; how to enhance participation, local ownership, and sustainability and out/up-scaling of the results, etc.).

   In larger projects, external reviewers/evaluators may be involved to realize a mid-term and/or end- of-project evaluation, to systematize results obtained, and draw lessons for uptake in policies and future action projects.

6. **Going to scale**. During this phase the focus is on planning follow-up actions, dissemination of results/information to relevant stakeholders, and influencing policy making in the same city or similar areas (out-scaling) or at the national level (up-scaling). Learning from the project is used to plan new research or development projects and to develop new policies (or revise existing policies) on urban agriculture.

It is important to note that although this chapter presents key phases of the project cycle as a linear process, the cycle is more reflective of a spiral (Figure 15.1), with the project passing several times through the phases of planning, action, observing or monitoring results, reflecting on lessons, and re-planning. This iterative process also underlines the fact that one or several phases of the cycle may appear more than once within a project cycle, or may have strong links and cross-over with several other phases. In particular, monitoring and evaluation frameworks, specifically the indicators or questions used to assess realization of goals, strategies, and activities, often become an
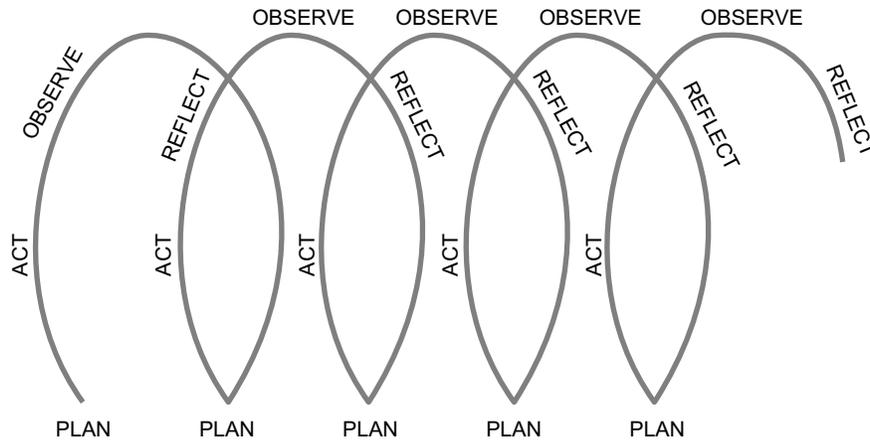
Figure 15.1 The project cycle as a spiral process
Source: Gender and Water Alliance, 2003

integral and central focus of design, planning, and implementation phases of the project cycle. As such it is important to recognize and operationalize the fact that monitoring and evaluation is not necessarily the 'fifth phase' of the project cycle but rather underlies, and becomes a foundation for, the entire project cycle. The uptake of project results into local or national policies or programmes can most effectively be managed if there is frequent communication during planning and implementation phases with relevant stakeholders to facilitate up- or out-scaling. Or further, results of research and diagnosis might be fed directly to policy makers or other planning projects; monitoring and evaluation during implementation can likewise identify new research questions and be shared with available research organizations.

Above all, the project cycle in its entirety and throughout its duration must reflect a commitment to gender sensitivity and mainstreaming. This requires, first of all, a commitment in the spirit and content of project-cycle components such that the focal point at all phases is illuminating the differences and potential inequalities between men and women in urban agriculture, and developing and operationalizing actions that may lead to more gender-sensitive planning and policy-making. Second, this requires a commitment to training and capacity building of personnel in the use of gender-sensitive tools and guidelines. Those persons adopting the tools presented in this book, for example, must learn how to lead and facilitate, for example, a focus group or one-on-one interview in a way that will build trust among project participants and encourage people to share details about the roles, expectations, and experiences of men and women within a particular context. This also means that participants must be clear on and committed to the importance of highlighting gender in urban agriculture activities: the benefits of participating in a gender-sensitive project cycle must be clearly

stated up-front. Commitment to gender training and facilitation necessarily means that project or even programme budgets must be allocated specifically to such activities.

In the remainder of this chapter we will describe the steps to be taken in each phase of the project cycle. The description of each phase ends with an overview of the tools that can be particularly useful in that specific phase. A full description of these tools and how they can be applied is provided in the Tool box in Chapter 17. While certain tools have been suggested for use in a certain phase, it is possible that they may also be relevant to other phases of the project cycle. It is also possible that guidelines or tools may need to be adapted to local contexts to address specific needs and interests. We encourage practitioners to approach both the guidelines and tools with flexibility and creativity, to ensure that they are as relevant and insightful as possible. This spirit was evident during the tools-testing phase, as described in the Preface; project partners took a mix-and-match approach to the tool box, adapted tools as needed, and even created new tools by combining elements of those presented in the text. The result was positive, with important gender dynamics highlighted at different phases of the project cycle.

Phase 1: diagnostic research

Although there are significant differences between the tool boxes used in mainly research-oriented projects and those primarily oriented towards development goals (to be further discussed below), both depend on some form of diagnostic research to make an assessment of the social, economic, political, and environmental circumstances in which people live and work, to analyse their farming systems and livelihood strategies, and to define the main problems, needs, resources, and opportunities.

The framework of gender issues presented in Chapter 1 provides a guide for a *gendered* analysis of the local situation. Gender analysis provides an examination of the respective interests, problems, and needs of men and women in the community, and their implications for urban agriculture. Starting with a gendered analysis of the local situation offers a snapshot of the project's point of departure. It recognizes that each project situation is unique: there is no other situation with the exact same combination of gender roles, resources, political circumstances, etc. Important questions to be answered in this phase focus on a community's problems and challenges, but also on its available resources, capacities, and opportunities for development. The findings of this phase provide the project team with valuable information on what kinds of intervention would be useful for whom, and on how to conduct these interventions. As the findings of this phase lay out the map for the next phases, it is very important that diagnostic research be carried out with great care, fully involving all community members, including men and women equally.

Some of the important steps to follow in this phase are (1) the identification of key themes, methods of data collection, and participants, and (2) the collection of data itself. These are detailed below.

Identification of key themes, methods of data collection, and participants

The process normally starts with a review and synthesis of available data (see Tool box on review of secondary data) on urban agriculture in the city or target location. These data may include land-use data or maps (e.g. zoning, actual use, planned use), socio-economic data (e.g. the number and location of households below poverty line or with food-security problems), data on food habits and nutrition status (e.g. presence and location of undernutrition or malnutrition in the area or within specific households, detailed purchasing and consumption patterns, farming-activity typologies, etc.).

The data review will help in the identification of important *key themes* for the participatory diagnosis of an action project, or key questions and working hypothesis for a research project. It will help to identify key informants and the different focus groups with which one will be working during participatory diagnosis, or the main categories of respondent for research activities. For example, in Rosario (Chapter 10), documenting and assessing the Urban Agriculture Programme in terms of its objectives and outcomes formed the basis of subsequent gender-data collection and analysis in the city. In Nakuru (Chapter 11), the review of secondary data and discussions with community-based organizations helped to focus attention on land, income, and food security, which became central elements of individual interviews with men and women involved with urban agriculture activities.

Also during this step the *methods* to be used to collect the required information will be selected. Different methods are available, with different strengths and weaknesses. For example, household surveys using questionnaires have the advantage of quantifying findings, but also the weakness of expense, duration, and superficiality. The disadvantages of formal surveys have been commented on at length (e.g. Pretty, 1995), but if there is a need for a baseline for measuring change, then they are very important (see Tool box section on questionnaires). In another example, more rapid and participatory appraisal techniques (e.g. seasonal calendars, decision-making matrices, etc.) have the advantage of speed, low cost, and better understanding of processes, but also the disadvantage of limited quantification and ability to generalize results.

Using both quantitative and qualitative tools can be an effective way of ensuring that data collection is comprehensive and systematic. While statistical figures are attractive to many key stakeholders, they too often lose their significance in terms of what they mean for people on the ground. Qualitative or textual accounts of people's experiences can go a long way towards establishing a compelling argument for a particular project strategy or development intervention. For example, the Pikine case study (Chapter 14) presents findings about men's and women's access to and control over resources

first in terms of percentages, and second in terms of brief explanations of what these percentages mean (see Table 14.2). While the statistical figures illuminate gender imbalance in land access (with men having access to and control over 75 per cent of this resource), qualitative details provide insight into the fact that single women are in a better position than married women in this regard; as a result, gender differences between women have been identified in this particular case study which may be important for understanding the local context and ultimately for development planning.

How to measure particular aspects of men's and women's circumstances, experiences, and perceptions, and how to communicate them to an audience through information dissemination, requires some attention to the rating or ranking system that is used in conjunction with the methods available in the Tool box and elsewhere. Researchers and project staff should pay attention during the diagnosis phase to ensure that research findings reflect the data collected. For example, by using a questionnaire survey, it may be revealed that farmers express varying degrees of satisfaction with urban agriculture extension workers from a government department. In order to measure 'degrees of satisfaction', a rating system based on five stars is developed whereby one star indicates complete dissatisfaction and five stars complete satisfaction. Standardizing such rating systems throughout the diagnosis phase will ensure that people's perceptions on the ground are adequately captured through data collection. The rating system itself must be explained in any documents or scenarios where data dissemination takes place, to ensure clarity.

In the diagnosis phase of urban agriculture projects Participatory Appraisals (PA) rather than formal surveys will normally be applied, with additional advantages of flexibility and innovation. Teams using PA should determine the best combination and sequence of techniques to be used and adapt existing techniques or invent new techniques when needed. The Tool box in Chapter 17 provides a selection of gender-sensitive PA tools. More examples of gender-sensitive PA tools and discussion of their application in the diagnosis phase of urban agriculture projects can be found in De Zeeuw and Wilbers (2004) and Martin, Oudewater, and Gündel (2002). Two guides that give attention to making PA tools more gender-sensitive are Pretty (1994) and FAO (2001).

It is preferable to select techniques that complement each other in the type of information they supply and/or the effect they have on the participatory process. Some techniques are applied in work with individual households (e.g. farm diagram, household decision-making matrix, etc.), while others are applied with a small group of informants (e.g. transect walk, resources mapping, organizational linkages diagram) or a specific category of the population, to dig deeper in the analysis of certain problems/causes (e.g. focus-group discussions) and the perspectives of informants, and to prioritise certain problems or opportunities (e.g. ranking exercises). The case studies in Part I of this publication draw on a range of techniques used in diagnosis, with many individual cases drawing on a combination of approaches to generate holistic diagnostic results that inform subsequent stages of the project cycle.

Although most experience with PA is in a rural setting, the techniques can also be applied in an urban situation. Urban Harvest partners have developed the methodology for and carried out a Participatory Urban Appraisal (PUA) in Kampala and other towns (Prain et al., forthcoming). This and other experiences underline the need to take care to adapt the PA techniques to the specific urban conditions.

Some special considerations in this respect, taken from Prain and De Zeeuw (2007), are listed below.

- Whereas in the rural context PA is normally implemented in villages where people know each other and the local social and economic fabric reasonably well, this might not be the case in the urban situation, where communities are more fragmented, more complex, and subject to more rapid changes.
- Whereas in the rural situation farming families and their resources are often easy to identify (although there are exceptions), this frequently turns out to be a fairly complex issue in the urban context, where the house of a family and the plots farmed may be far apart, plots may be illegal and so not mentioned, and number and size of plots or animals raised may vary considerably over time.
- Whereas in rural farming households most members who are present consider farming or directly related activities their major occupation (and, for many, their only occupation), in urban households livelihood strategies often are more varied, with farming often practised by one or two members only and as secondary to non-agricultural activities. Many poor urban households are broken or scattered.

Since PA techniques enable local people to express their needs, views, problems, perspectives, and priorities, they are also very useful for the analysis of gender differences in a community if the techniques are applied in a gender-sensitive way. This often implies that the PA exercises are implemented with men and women separately (often followed by discussion of results in a mixed group), as will be discussed in the next section.

It is also necessary to select the persons who will do the fieldwork and, if needed, provide them with PA and gender training (including training on key gender issues in urban agriculture, adequate communication with men and women, the adequate use of the selected data-collection techniques, 'what to do if …' situations, etc.). Authors of the Manila (Chapter 3) and Kampala (Chapter 5) case studies noted in their comments on guidelines testing that training of staff to conduct gender diagnoses is a particularly important element of mainstreaming in order to generate meaningful gender-disaggregated and gender-analysed data, and to ensure update of gender insights into subsequent stages of the project cycle. This training can be part of the participatory planning of fieldwork. Women researchers and local staff may have better access to and rapport with local women than do men. It is possible that issues related to gender dynamics may be particularly sensitive

and that people may not be willing to share details or information; this is often dependent on who is asking the questions, and whether or not they are perceived as an 'insider' or 'outsider' by the community at hand. In these instances it is particularly important that researchers and staff are properly trained to unearth local gender dynamics in a way that is seen as helpful rather than harmful to participants.

Finally, it is important for those responsible for diagnostic research to bring back their findings to the community and to engage with ongoing processes of change in order to increase the impact of research findings – as, for example, was done in the case of the Urban Harvest's research work in Kampala and Nakuru (Prain et al., forthcoming). The Nairobi case study (Chapter 9) also features dissemination of research results as a methodological strategy; feedback workshops provided an opportunity for community members to discuss results and for further information to be collected on gender circumstances and experiences.

Data collection and analysis

Men and women have different views of reality, encounter different problems, have different interests and needs, and use other criteria to judge 'solutions' or 'innovations', all based on the gender differentiation of roles, tasks, and responsibilities. Hence, in order to arrive at a thorough understanding of the local situation, and a gender-balanced identification of development problems and opportunities in urban agriculture, women and men should be equally involved in the diagnosis or research process.

Only when gender-differentiated information is available (for example on the tasks, role in decision making, access to resources, problems encountered, needs, interests, perspectives of both men and women in urban agriculture) can project planning be made more gender-responsive, as it allows one to choose the right strategies for/with the right sub-sets of the urban target group. It further allows for monitoring and evaluation of the impacts of the project on men, women, children, and other groups.

Hence, gender-disaggregation of data is an absolute requirement of getting good information for urban agriculture projects. The most important thing about collecting gender-differentiated data is asking gender-related questions in the first place, and this is something that has not always happened in the past. There are numerous examples of gender-disaggregated data within the Part I case studies, including detailed information on division of labour, access to and control over resources or benefits of resources, and gender-differentiated opportunities and constraints.

Furthermore, it is important to realize that information about what men and women *do* in urban agriculture (i.e. gender division of labour) can be gathered from anyone around who knows the situation. However, what men and women believe, prefer, and prioritize, and their perspective on the desired developments, can be stated only by themselves. This means that when

looking for more general factual information (e.g. Is there a well here? Is the group leader a man or a woman?), we may either interview a man or a woman or find the answer by making observations. However, for types of information where the answers depend on personal knowledge or preferences, we will have to interview the specific persons (men or women) who hold that personal information or those personal views.

PA techniques are the best ones to apply in many situations where information is needed about the different practices, preferences, and priorities of men and women involved in urban agriculture in a particular place. It is advisable to consult separate groups of women and men, since women often feel constrained when speaking out in public with men present. PA case studies often involve certain levels of quantification about a specific location (for example, the participants in the focus-group meeting said that about 75 per cent of the households keep chickens and that it is normally a woman who looks after them) but without making it possible to generalize to the whole population or city.

Where numbers or percentages are needed, household surveys among a representative sample of the population are usually carried out, using written questionnaires and structured interviews. These provide numerical information about those households' levels of wealth and health, and what they do as urban producers. To achieve gender-disaggregation, the results of the survey are usually divided into findings from men-headed and from women-headed households. While providing much useful data, disaggregating by the sex of the household head will not tell you everything you need to know about differences in gender behaviours. Logical steps must be applied to get really useful results. For example, a household survey in Manila, Philippines (see Table 3.2) tells us that according to both men and women, women have 90 per cent access to and control over the income from sales. Further questions reveal that 10 per cent of income is specifically allocated to men's social activities, over which the women have no say whatsoever, while women are not offered an equivalent benefit. This type of insight is important to investigate in order to get a clear picture that goes beyond numbers into actual dynamics between family or community members.

In many situations, equal involvement of men and women in the diagnosis is not easy to obtain, owing to the low participation of women in public discussions and decision making, their low level of literacy and education, cultural restrictions or isolation, etc. It is sometimes the case that elders are reluctant to name women as key informants, if tradition casts men in the role of community spokespersons; or men do not value the contribution of women, while women themselves are not always convinced about the usefulness of expressing their views and ideas. In some instances, those implementing the diagnosis phase themselves may unintentionally bias participation towards men at the expense of women. For example, if the project highlights those farmers involved in commercial urban agriculture (in many contexts dominated by men), then researchers may inadvertently miss

out on women's involvement in urban agriculture (which in many contexts is subsistence-oriented). Or if the target population to participate is identified as those who 'own' land, then more men than women (in many instances) will be selected to participate, given their greater access to landholdings. Women are often excluded from data-collection efforts when the category of 'head-of-household' is used to identify a participant; men are usually identified as household heads even if women are those predominantly involved in urban agriculture activities (and thus their insights and perspectives are neglected).

Therefore, special attention needs to be paid to involving women, by taking the following measures:

- Choose a time and place convenient for both men and women.
- Use adequate techniques that appeal to women and encourage their participation.
- Use male and female staff, since the latter establish easier contacts with urban women.
- Ensure that the agenda of interviews and focus-group discussions includes items which are of primary interest of women.
- Consider the language used, given that women often do not speak the official language. (In such a case, use translators and/or use visualization techniques)
- Combine a variety of techniques so as to get insight in each of the main gender aspects. Table 15.1 presents an overview of the main gender issues in urban agriculture (see also the framework presented in Chapter 1) with a suggested PA tool to study each issue. The tools have been suggested for their cost-effectiveness and their ease of application.
- Pay attention also to the historical perspective and trends to get more insight.
- Make sure that all data collected differentiate between men and women (but often also for age group, socio-economic status, etc., since the

Table 15.1 Overview of main gender issues in urban agriculture and recommended PA tools to be used

Main gender issues in urban agriculture	Recommended tools (see Tool box, Chapter 17)	Eventually combined with (see Tool box, Chapter 17)
Division of agriculture-related labour, tasks, and responsibilities	Gender-activity analysis chart Seasonal calendars	Direct observation Semi-structured interviews of male and female members of selected households
Decision-making power and distribution of benefits	Decision-making matrix Benefits analysis	
Access to and control overresources	Resources analysis (chart and mapping)	Group interviews with women and men
Constraints, problems, opportunities	Problem and opportunity ranking and analysis	
External factors	Analysis of institutional linkages and timeline variations	

conditions and interests of men and women are not always the same). In that light it will be required that data are collected about (or from) men and women separately: interviewing men and women in separate (individual or group) interviews (eventually followed by a discussion in a mixed group).

Analysis of the information generated in the diagnosis phase of a project will focus on the following:

- Characterization of the urban farming system(s) concerned (crops grown and animals, type and level of technologies used, resources used and their origin, main cultivation practices, degree and channels of marketing, etc.).
- Characterization of household livelihoods (resources, activities, vulnerabilities, internal and external relationships, etc.).
- Characterization of the institutional context of urban agriculture.
- The identification of key problems in the functioning of these urban farming systems (and their causes and consequences) as well as existing potentials and opportunities for their development.

It is important at this stage, or ideally earlier, to reflect on those participants featured in the diagnosis phase of the project cycle. Which social groups have been included or excluded? For example, does the diagnosis account for the circumstances, experiences, and opinions of landholders but neglect to account for those who cannot gain access to land? Or what household circumstances are left unexplained? Are only households with a male–female couple included, to the exclusion of female-only households? These sampling choices within the diagnosis phase will have a major impact on information gathered at this stage, in terms of what one can say about gender and urban agriculture dynamics, which will ultimately be used to design, plan, and implement project activities in subsequent phases. For example, in the Mexico case study (Chapter 12), women and men were interviewed separately to ensure that each social group had the freedom to speak without being interrupted or overshadowed by particular individuals; this sampling strategy aimed to account for both men's and women's opinions equally. Or in the Nairobi case study (Chapter 9), particular attention was paid to youth activities in urban agriculture as a way of diagnosing the circumstances and experiences of boys and girls, in relation to those of the community in general.

In PA-based diagnosis, the analysis of the collected information will already start during the fieldwork. In team meetings, early results of the fieldwork are reviewed in sequence, which may reveal gaps and contradictions in the collected data or questions about how to interpret certain data correctly. This will lead to complementary information collection and 'digging deeper' during farm visits, interviews, and focus-group discussions, in order to achieve a better understanding of existing problems and opportunities, causes and consequences, and related gender differences.

The analysis should be made from a gender-sensitive point of view, identifying the following factors, among others:

- The roles and responsibilities of men, women, and children.
- Who has access to and control over available productive resources.
- How men and women participate in decision making at farm, household, and community levels.
- How knowledge/skills, problems, and opportunities differ between the men and women involved in these urban farming activities.
- What the strategic and practical needs and priorities of these women and men are.
- Social, cultural, political, legal, and economic factors related to gender-based distinctions found in this local situation. Which of these factors can be expected to change in the coming period?
- What the project could/should do to incorporate gender considerations in the project design.

To achieve analytical depth, the key question to be raised continually is 'Why?' It is not enough to document 'what' the differential roles and responsibilities of men and women in a particular context are, or 'how' those affect urban agriculture activities. It is important to understand 'why' this is so. For example, limiting diagnosis to a listing of who does what in terms of urban agriculture tasks can help to set the scene so that resources from development interventions can assist those in particular tasks (e.g. if women are involved in water collection, then an appropriate intervention may target improved access to water pumps within a neighbourhood). However, as revealed in case studies from Kampala (Chapter 5) and Kisumu (Chapter 7), if one wishes to understand why it is that only women collect water then asking 'why' may reveal deeply rooted assumptions about 'women's work' and 'men's work'. In this instance, 'women's work' may be seen as that which is vital to household well-being yet is not directly paid; 'men's work' may be seen as that which is rewarded with income, so husbands might be preoccupied with cash-crop production. A development intervention aimed at increasing women's access to water may actually have the effect of providing men with closer sources of water for their production efforts, and thus the water source becomes controlled by men.

In-depth analysis of gender dynamics in urban agriculture also must involve an investigation of intra-household relations so that the 'behind the scenes' divisions of labour, decision making, resources, etc. and their impacts on men's and women's lives can be better understood. It is important in gender analysis to make distinctions between social ideals and the realities of men's and women's lives. In some instances, when asked about gender roles and responsibilities, both men and women may speak to the broader social context (in other words, what men or women *should* be doing) rather than detailing what they *actually* do. Going into analytical depth allows researchers and staff to investigate differences between perceptions and reality.

Beyond collecting in-depth gender-sensitive information regarding urban agriculture, it is important to recognize the broader context in which such

dynamics operate. For example, urban agriculture is only one livelihood strategy that urban residents engage in to generate income and provide for their families. When investigating this phenomenon specifically, one can also consider the other types of livelihood activity that an individual or a household may be engaged in, particularly to consider how these activities may be traded off or used in combination to achieve household food security or general welfare. In other words, what other activities beyond urban agriculture do urban residents participate in, and how do these activities affect – or how are they affected by – urban agriculture?

Similarly, when investigating gender specifically, it is possible that other key identifiers such as age, class, ethnicity, etc. also influence urban agriculture roles, responsibilities, and activities. In some contexts, then, it will be equally important to understand age *and* gender and to ask how these two identifying characteristics shape different roles and responsibilities for women/girls and men/boys. For example, the case study from Sonora, Mexico disaggregates the division of labour by both gender and age (Table 12.1), revealing the significant extent to which young boys and girls, as well as elderly persons, are involved in urban agriculture activities.

In other situations it may be important to consider not only a contemporary snapshot of gender dynamics but also a historical overview of how urban agriculture has developed and how gender differences have evolved; gendered histories reveal that men's and women's roles and responsibilities are deeply entrenched in socio-cultural traditions (e.g. position within the household or community) and political-economic structures (e.g. land, legal systems). For example, the rich institutional history of the Musikavanhu Project in Harare (Chapter 6) provides insights into the key stakeholders and programme structure involved, and identifies opportunities for gender mainstreaming based on these elements. The case of Mexico (Chapter 12) notes the ways in which men and women involved in urban agriculture make use of cross-border social networks and economic scenarios to purchase inputs for production or sell goods, and how that has changed over time. Thus while researchers and staff should remain focused on gender and urban agriculture specifically, it is vital to do so within the larger context of various livelihoods, identifying the characteristics, histories, and political-economic structures that shape and are shaped themselves by gender.

Preliminary analysis normally will be 'validated' by organizing feedback meetings with the target population in the locations studied, to present main findings and give informants the chance to correct the team's observations and interpretations, as well as to jointly 'dig deeper' in the analysis of the main problems and potentials identified. In this way the stakeholders themselves analyse their situation and deepen understanding of these issues. Such feedback workshops often mark the transfer to the design stage, since in the same workshop the priority of the identified problems and opportunities may be defined, as well as the acceptability of and preference for certain solutions and intervention strategies. Note that the diagnosis should focus not

only on the analysis of problems (and identification of potential solutions for such problems) but also on the identification and analysis of opportunities: local innovations that can be further developed, under-utilized resources that might be used, new market opportunities, etc.

It is important to note that all sources of data can be valid for gender analysis, even if they are not obviously gendered or gender-sensitive. For example, documenting men's circumstances, experiences, and perceptions is as valid as documenting those of women, given that gender analysis requires attention to both men and women. Or interviews with key informants who are *not* gender-sensitive can be as enlightening as interviews with gender experts, largely because of what is not said, or in order to get a sense of how gender-insensitivity operates. Similarly, secondary data (e.g. census, documents, reports, etc.) that are gender-insensitive require a 'reading between the lines' in terms of what is not said about gender and making its invisibility visible. Finally, one cannot assume that women know it all in terms of illuminating gender dynamics in a particular context, as they may not be aware of these themselves.

Box 15.1 Recommended tools for diagnostic research

- Activity-analysis chart
- Seasonal calendar
- Resources-analysis chart
- Resources mapping
- Decision-making matrix
- Benefits chart
- Problems and opportunities identification and ranking

Box 15.2 Gender-mainstreaming questions for diagnostic research

- Did men and women actively participate in identifying and analysing the local situation?
- What methods were used in the identification of the problem or situation? Did the analysis yield gender-disaggregated data on all issues investigated?
- Was the situation or problem analysed from a gender perspective? Did the analysis identify:
  - o Roles and responsibilities of men, women, and children?
  - o Who has access to and control over available productive resources?
  - o What the strategic and practical needs and priorities of women and men are, and whether these differ?
  - o Social, cultural, political, legal, and economic factors related to roles and responsibilities, and access to and control over resources?
  - o What the project could/should do to incorporate gender considerations?
  - o What changes in gender-based distinctions found in this local situation can be expected to change?
- Were women involved in decision making on the priority issues to be attended?
- Who are most affected by the problems selected as key priorities?
- Who will benefit most from the opportunities selected as key priorities?
- What is the level of preparedness of men and women to get involved in the project?

Phase 2: project design

In the design phase, the project goals are defined, as well as the strategies through which these goals will be attained, taking as a starting point the needs, problems and opportunities of the local producers (men and women) that were identified during the diagnosis phase.

It is important that female urban producers and male urban producers are consulted equally during the design of the project, so that the needs and interests of varying social groups within a particular context are identified, strategized around, and eventually addressed. This may require special efforts and creativity on the part of the institutions involved in order to ensure the required conditions; for example through the use of female staff, working in separate male and female groups, selecting appropriate times and venues for meetings, adapting particular languages, using visual aids, etc. The Rosario case study (Chapter 10) highlights steps taken to gender-mainstream project design through 'encounters' with female producers; these meetings helped to visualize the role of women in the project-design process and provided skills training to enhance leadership capacity and self-confidence.

The issue of gender training and capacity building of staff involved in the project team is important in the design phase, particularly in terms of facilitating participatory processes that encourage active collaboration during the design phase and give voice to those community members, in many instances women, who may not have had opportunities in the past to identify their concerns or state their opinions. The inclusion of gender balance in the project team is significant in this participatory process, given that women may share information more easily with other women, while men may be more likely to share with other men. Also prominent at this stage of the project cycle is the issue of group dynamics and cohesion. Facilitators well trained in recognizing and mediating gender dynamics will also be aware of how power relations among individuals can shape project design and resulting strategies. Groups that can come together in a concerted vision, acknowledging and respecting views and circumstances of both men and women, will generally be more successful in their design efforts than those who cannot diffuse internal strife and conflict.

Throughout the design phase, it is useful to take a multi-stakeholder approach to identifying problems and opportunities within a local community or context, as well as formulating objectives, results indicators, and project strategies to address issues raised. Engaging with persons, organizations, or structures beyond the locality is a step towards ensuring sustainability of the project as a whole and up-scaling particular strategies. A multi-stakeholder consultation process during the design phase, as was conducted for example in the Nakuru case study (Chapter 11), may involve producers, women's groups, food-security coalitions, city counsellors, government ministries, NGOs, etc., allowing each actor to assess the opportunities and constraints emerging from design discussions among local male and female producers. Collaboration early on in the project cycle can strengthen the possibility that

more informed, appropriate, effective, and efficient design of strategies occurs. An additional consideration here is the fact that urban agriculture activities necessarily take place within a larger urban context. Those tasked with project design should keep an eye on broader issues of, for example, land and water allocation/access, regional politics, economic trends, city planning, etc. In essence, the city influences the opportunities and constraints facing both male and female urban farmers.

Important elements in the design phase are: (1) problem and opportunity analysis and prioritization, (2) definition of project objectives and results indicators, and (3) strategy development. These are detailed below.

Problem and opportunity analysis and prioritization

In a workshop with representatives of local producers (men and women), the inventories of problems and opportunities are drawn up and analysed, using the results of the diagnosis as well as inputs from participants. Both problems and opportunities in the inventories are then prioritized.

The ranking will be conducted separately for women and men and then compared and discussed in order to agree on priorities that reflect the interests and needs of both equally. Important criteria for prioritizing may be, for example, urgency, number of people affected/who will benefit, availability of practical solutions or market demand, availability of local resources, etc.

Priority problems will be analysed for key causes and consequences in order to identify alternative strategies to solve the problem, and to discuss their acceptability and preference for certain solutions and intervention strategies. Various options in terms of what could or needs to be done to develop such potentials and use such opportunities will be explored.

Definition of project objectives and results indicators

Based on the outcomes of the above step, it will be easier to define the expected project results and to formulate the project objectives that must be realized to achieve the said results. To do so, the objectives should be formulated in a SMART way such that they are: **s**pecific, **m**easurable, **a**ppropriate, **r**ealistic, and **t**ime-bound (see also the Tool box in Chapter 17). This formulation process is also conducive to developing monitoring indicators and tools that coincide with both objectives and results within the design stage (see phase 5 for more details on monitoring and evaluation).

Once the objectives have been formulated, one should check whether the problems and opportunities prioritized by the women producers are still well represented in the project objectives. Experience shows that the needs and interests of women tend to disappear as soon as information is integrated and we move closer to concrete action planning. As an extra assurance that gender will be given sufficient attention during project implementation, an objective can be included that is specifically focused on enhanced gender equality and for which a special allocation of resources is made.

Strategy development

In this step the courses of action and related working methodologies that are expected to realize the objectives, based on the results of the two steps above, are identified.

The proposed strategies should be carefully checked for the degree to which:

- The strategy will solve the key problem or develop the identified potential/opportunity.
- Economic resources will be needed to implement the solution. Attention here should be on the expected benefits for men relative to women beneficiaries (level of benefits, number of people involved), as well as negative trade-offs and costs for men relative to women (level of benefits and negative trade-offs/individual costs, number of people involved).
- Implementing organizations have the available expertise and capacity to implement this solution adequately.
- Producers (men compared with women) have the knowledge, skills, land, water, labour, cash, and other requirements of this strategy; and the degree to which the intended beneficiaries have these available to them.
- The proposed strategy contributes to enhancing gender equality at farm-household and community levels.
- This solution makes use of local knowledge and innovation capacity (of both men and women) and the available under-utilized natural resources.
- The proposed solution meets existing/expected market demands.

The selection of strategies will depend on the type of project, but it should involve a dialogue between the project team, male and female producers, and other local stakeholders. Both women and men, including the young and the old, should be involved in the selection of strategies, since their conditions are different (e.g. responsibilities, access to resources, knowledge, etc.) and special constraints for women have to be taken into account (e.g. restricted mobility, high degree of illiteracy, inexperience with speaking in public or management functions).

In projects that are more research-oriented, strategies may include participatory evaluation of alternative technologies or practices. This requires careful assessment of whether women and/or men are the main users and main sources of innovation associated with the technologies.

Where men and women have different interests and activities, distinct men's and women's strategies may be identified and carried through to implementation. Furthermore, it should be verified whether gender-affirmative strategies are necessary to overcome existing inequalities and barriers for female participation in order to be able to realize the project objectives. During the diagnosis phase, special constraints encountered by women or other disadvantaged groups might have emerged, and factors that limit

their participation in the project or reaping the project's benefits. Affirmative actions will have to be designed to overcome such constraints.

For instance, in order to enhance participation of women in urban producers' organizations and project management, most projects create special opportunities for women to build up their self-esteem and participatory competencies, such as the establishment of women's groups to discuss their interests, and training of women leaders to enhance their capacities in management and participation in public discussions and decision making. Other examples of such affirmative actions include guaranteeing a percentage of available credit for female producers, applying differential minimum requirements for male and female project staff to ensure gender balance in the team, and/or creating a 'fast track' for further capacity building and promotion to higher levels of responsibility for women with good potential.

As was emphasized above, although these guidelines give the impression of a linear process, project design is an *iterative* process in which one often goes through the various elements more than once and not necessarily in the same order. It is useful, once the activity or project has been designed, to subject it to an evaluation to assess relevance to the critical gender issues, problems, and opportunities defined during situation analysis and for differential impacts on men and women. This could be done in a session headed by the gender specialist.

It is important to check whether the identified strategies logically lead to the desired results or whether alternative or complementary activities are needed. The preparation of an 'intervention logic map' or 'logical framework' might be very helpful at this time.

Box 15.3 Recommended tools for project design

- Problem- and opportunity-analysis chart
- Problem tree; opportunity tree
- Formulation of results-based objectives
- Group definition
- Institutional linkages analysis

Box 15.4 Gender-mainstreaming questions for project design

- Did men and women actively participate in designing the project?
- Were men and women equally involved in decision making?
- Do project objectives reflect priority problems and opportunities identified by both men and women?
- Will the project contribute to achieving strategic gender needs and greater gender equality? How so?
- Are project strategies well adapted to the practical conditions, knowledge/skills, access to resources, etc. of both men and women?
- Have distinct men's and women's strategies been identified in cases where men and women have clearly different interests?
- Have gender-affirmative actions been planned to overcome existing inequalities and barriers against female participation in the project and its benefits?

Phase 3: activity planning

In this phase of the project cycle, the strategies defined in the design phase are worked out in detailed action plans, responsibilities are divided among project partners, time schedules are defined with critical dates for the delivery of certain products, and the budget is prepared, together with identification of financial sources and other means required. Attention to gender issues already identified is required throughout this planning phase. The Villa María del Triunfo case study (Chapter 8) provides an overview of a multi-stakeholder planning process and incorporation of gender into a platform and strategic agenda focused on enhancing urban agriculture activities. In particular, it emphasizes the need to ensure gender-balanced participation in a forum organization, encourage collective efforts among producers, and build cohesive vision among various groups.

Important steps in this phase are: (1) detailed activity planning and division of labour, (2) defining the project management and co-ordination structure, (3) developing the monitoring and evaluation plan, (4) budgeting, and (5) thinking through and the final revision. These are detailed below.

Detailed activity planning and division of labour

Here the strategies formulated and selected in the design phase are worked out in detailed action plans, in terms of who (specified in terms of men and/or women) will do what when, where, how, with what means, and resulting in what outputs. Sometimes this is done in detail for the first project year and more broadly for the years thereafter.

Defining the project management and co-ordination structure

This is done by:

- Defining how the project will be internally structured and how decisions will be made and activities be co-ordinated to ensure successful, participatory, gender-sensitive, and timely implementation. There may be equal gender representation on a joint committee and/or separate men's and women's management (sub-) committees.
- Defining the roles and expected contributions of each of the project partners, including milestones (moments in the project when certain steps are concluded and new steps are prepared), deliverables (concrete outputs/products to be delivered), and deadlines. Ensure that the project's beneficiaries (men and women urban producers and disadvantaged groups/consumers) have also been assigned a role and contributions in the project. Ensure that in the description of the role and expected contributions proper attention is given to the gender aspects.

- Defining who will report when to whom, and what the contents of the reports should be. Include gender as an aspect of all main items that must be reported on (e.g. progress and results per objective) as well as a separate reporting item (e.g. progress and results regarding the specific gender-equality objective and gender mainstreaming in general).

Developing the monitoring and evaluation plan

Together with the beneficiaries, gender-specified indicators for project success will be defined for each of the project objectives (how can we measure whether the expected results have been realized?). This will be relatively easy if results-based objectives were formulated and in a SMART way. How will data regarding the indicators be gathered: by whom, with help of which methods, with what frequency? Such information can be summarized in the logical framework.

Gender-specified indicators allow differentiation between the impacts of the project on men relative to women (benefits as well as negative trade-offs/ costs) for each of the project objectives (indicating the expected results of the project). Also one or more specific indicators might be included to monitor the degree to which the combined project results contribute to enhancing gender equality and strategic gender issues.

The indicators should preferably be developed in a participatory way, including both men and women. The number of indicators should be kept to a minimum and should cover both qualitative and quantitative aspects of the objectives. Both male and female urban producers should be included in the monitoring methodology, both for the collection of monitoring data as well as in the periodic reflection on progress made/results obtained.

As indicated earlier, it is very important that the reporting guidelines oblige all partners to report on 'results obtained', disaggregated by sex, and that the reporting format includes a paragraph on gender issues and the identification of gender-related project failures and successes. It should be noted that a solid monitoring and evaluation plan (see phase 5 below for more details) requires sufficient resources in order to be implemented well.

Budgeting

Identify the means needed to implement each activity, such as people, travel, equipment, materials, and office costs. Ensure that sufficient funds are included for gender-affirmative actions and specific women's project strategies (based on their specific interests and activities). Ensure that undifferentiated project resources will be available for both men and women. Gender-specified targets and allocations may be defined (e.g. the minimum percentage (or absolute number) of the land or credit that will be allocated to women, and a minimum number of female producers involved in training activities).

Budgeting is a particularly crucial element of effective and efficient gender mainstreaming. Often, in order to be taken seriously, specific budget lines must be allocated for gender-focused activities or resources so that they are not overlooked. Monies for training manuals, capacity-building sessions, consultative meetings, data collection, facilitation, etc. must be earmarked and visible within project budgets, and even labelled as such (e.g. *gender* training rather than simply training). Minimum spending levels for women's activities may go a long way to ensuring commitment to gender equality in the entire project cycle. Further, it is important that gender-sensitive budgetary elements are flagged for all partners, in particular within multi-stakeholder contexts where organizations involved may not be as committed to gender mainstreaming as the project team itself.

Thinking through/final revision

In this step, the project team should reflect on the following issues:

- **Assumptions/risks**. These are external factors beyond the control of the project implementers. They are related to each of the intervention strategies and identify 'what if' strategies (contingency plans). Include the results of this analysis in the logical framework. Adapt the project design if certain risks are too big or certain assumptions are not realistic.
- **Continuity/sustainability.** Analyse whether/how the results of the project can be sustained after it finishes, and how the project will work towards this goal. Will both women and men be satisfied and involved? The way in which projects are financed often has implications for their sustainability and for the feasibility of increasing scale and replication later on. Adapt the project design where needed in order to make it more sustainable.
- **Dissemination/replicability.** Analyse what relevance the project results will have for wider application (beyond the direct beneficiaries of the project) and the conditions for successful replication by other organizations and in other areas. Also determine how the project will work towards dissemination of the project results and their application to potential users. Include such dissemination activities in the project design and budget.

Box 15.5 Recommended tools for the activity-planning phase

- Activity-planning matrix
- Participatory budgeting
- Scheduling the work

Box 15.6 Gender-mainstreaming questions for the activity-planning phase

- **Planned activities**
  - o Will the activities be undertaken in such a way that the special constraints that often restrict women's participation in decision making and implementation are diminished (e.g. appropriate timing and location of meetings, language used, allowing women to develop their viewpoints in homogeneous subgroups before meeting at organization or project level, use of female facilitators, etc.)?
  - o Have both men's and women's interests been addressed and gender-affirmative actions planned?

- **Management structure**
  - o Have male and female farmer representatives been included in the project management structure?
  - o Have the project implementing partners agreed on a number of measures to ensure gender-responsive implementation of the project by their organization and staff (gender policy, staff training on gender and UA, gendered Terms of Reference for staff, gender balance of project staff, gender on the agenda of project meetings, etc.)?

- **Monitoring**
  - o Are the indicators gender-specific, so that the differential impacts of the project on men and women can be determined?
  - o Have indicators for the combined effects of the project on gender equality and strategic gender issues been defined?
  - o Is the direct participation of women (and men) in the monitoring and periodic evaluation foreseen?

- **Budget**
  - o Are the relevant budget items gender-specified?
  - o Are both men's and women's priority activities funded?

Phase 4: implementation

To ensure the active participation of women and men in the implementation phase, it is helpful to consider gender mainstreaming at two levels. Through the implementation *process*, tools and approaches will be generic or common to all kinds of situation. The process involves issues such as working with existing structures, group dynamics, mutual respect, empowerment, and capacity strengthening (especially of the marginalized), and the 'rules of the game' for implementation through written agreements or a constitution (see below). At the second level, particular types of implementation are engendered through attention to *content*, for example participatory technology development for crop-production innovations, addressing marketing policy, addressing gender issues in livestock production, in agro-processing, in women's land rights, etc. These levels and elements are described in more detail below.

Examples of gender-sensitive implementation phases can be found in the Nairobi case study (Chapter 9), which highlights both the dynamics of men and women participating in day-to-day planning and budgeting of project activities (process level) and efforts to engage both in testing of energy

briquettes (content level). Similarly, the Nakuru case study (Chapter 11) details how social-cultural diversity among the beneficiaries in agricultural interventions affected participation in terms of labour distribution (process level), and how a Community Organizational Development and Institutional Strengthening (CODIS) course was used to address these challenges (content level).

Process: adapting/'deconstructing' existing structures

For community-level interventions, project members need to work with existing structures or organizations and to insert gender more strongly into them. This may involve working with urban agriculture programmes or forums, or tapping into producer organizations and informal farmer networks. An important opportunity exists to empower women in agricultural contexts through linking women's organizations to government structures or linking agricultural functions to women's organizations which are already connected to government (e.g. government-linked community kitchens run by women's groups are being supported to add individual or communal agriculture activities).

In order for existing organizations to transform themselves into engendered groups for implementation activities, there may need to be a 'deconstruction' of the group in terms of its life history, its political and economic structures, and its decision-making processes. Diagnostic tools such as timelines, calendars, bio-sketches, etc. can be used to help in this deconstruction process, in order to detail the gender dynamics.

Process: group dynamics and group governance

Whether the group already exists or is formed for the intervention, the success of action research projects is very much influenced by the stability and performance of the organizations involved. Group composition during the implementation phase should have an even mix of men and women, or there should be an effort to combine men and women from same households. The latter option can reduce the drop-out rate, which is likely to be problematic in implementation activities.

Group-dynamic issues need to be identified and addressed in preparations for and during implementation activities. Issues such as leadership, roles and benefit sharing, and participation in group meetings, project management, and financial management have been noted to cause problems among group members of mixed groups, resulting in deterioration in performance or member drop-out.

One tool for addressing such group-dynamic challenges is the clear establishment of the 'rules of the game' in the form of a group constitution to govern the behaviour of members. The constitution or by-laws should stipulate the following elements:

- self-definition of the organization: who are we?
- gendered objectives
- gender-responsive activities
- gender equity in leadership
- gender equity in participation in activities and benefit sharing.

To mainstream gender and age in leadership and decision making, for instance, the constitution may state that when the chairperson is a man, the vice chairperson should be a woman, and vice versa in mixed-sex groups, while in same-sex groups, when an adult person is the chairperson the vice chairperson should be a youth, and vice versa. This rule is applied to all executive posts, including treasurer and secretary.

Gender equity in benefit sharing based on members' participation in activities is an area that requires development of rules and norms to avoid the possibility that some members take advantage of those highly committed to the group's objectives and activities. A constitution may state, for example, how much money a participating member is making from sales of the fuel briquettes, in order to motivate other members to contribute in terms of labour.

Process: capacity development

To facilitate positive group dynamics, the implementation phase needs to consider capacity development of group members in leadership roles and benefit sharing, business and activity planning, project and financial management, and gender-responsiveness skills among others. These can be done through designing courses suitable for local organizations. Research organizations, for example, may implement these community-based organizational development and institutional strengthening courses through partnering with non-government organizations involved in development work.

Content: technology innovation, capacity development, and empowerment

Capacity building and training of women leads to empowerment and changes in gender dynamics, and to tangible benefits for women through technological innovation. Specific interventions have multiple components with gender implications, and diagnostic tools can be generally adapted for the implementation phase, with the same gender considerations. For example, a diagnostic workshop can be held to prepare a gendered curriculum addressing crop-management issues of importance to both men and women. Checklists tailored to the specific intervention can be used for a similar purpose. The development of gender indicators is similar to the elaboration of a checklist, but with greater precision and quantification, and with a time dimension.

During the implementation phase, regular monitoring according to the previously developed monitoring and evaluation plan allows one to see

whether the project is on track with regard to the realization of planned activities and the realization of achievements as set out previously, to solve problems that emerge during implementation, to keep track of the results achieved to date, to reflect on the effectiveness and efficiency of the strategies and working methods applied, and to make adaptations where needed. Such learning-from-actions is of special importance to enhance the relevance of research and development projects for women producers.

Box 15.7 Recommended tools for the implementation phase

• Implementation checklist
• Urban Producers Field Schools
• Participatory innovation development

Box 15.8 Gender-mainstreaming questions for the implementation phase

• Are representatives of men and women producers actively involved in periodic project planning and evaluation meetings and decision making on the course of the project?
• Is there active participation of both men and women of the target group in the implementation and monitoring of the project activities?
• Is there equal access for men and women to resources provided (training, credit, tools, land, seed, irrigation water, etc.) during project implementation?
• Are affirmative actions taken to counterbalance gender inequalities?
• Are activities being implemented to promote gender mainstreaming in the participating producer organizations?

Phase 5: monitoring and evaluation

As indicated earlier, the monitoring and evaluation activities begin during the design phase, during which – in relation to the project objectives – adequate monitoring and evaluation indicators are defined, as well as appropriate measurement methods selected.

When planning the project activities, it will be defined who will collect what monitoring information, when and how it will be collected, how these data will be stored and processed, at what moments the data will be used to reflect on the achievements of the project to date, and who will be involved in such meetings (monitoring and evaluation plan).

During the implementation phase, regular monitoring according to the previously developed monitoring and evaluation plan shows whether the project is on track with regard to the realization of planned activities and realization of achievements as set out previously. It helps to solve problems that emerge during implementation, keeps track of the results achieved to date, and reflects on the effectiveness and efficiency of the strategies and working methods applied, so as to make adaptations where needed.

Monitoring and evaluation should be understood and organized as 'learning-from-actions by periodic reflection on experiences gained'. Reflection on the monitoring data allows us to identify how we can get more results and of better quality, how to enhance cost-effectiveness, how to enhance participation and local ownership, and how to enhance sustainability and up-scaling of the results, etc.

Such learning-from-actions is of special importance for enhancing the relevance of research and development projects for women producers and their empowerment. It should be seen as a specific tool of both gender analysis and women's empowerment, in that it provides a forum where community members, both men and women, direct attention to and discuss these issues.

When *selecting indicators,* it is important to ensure the following:

a. All indicators are *gender-specific*. This should be reflected already in the objectives in terms of the expected results for men and women; for example, if the objective is to enhance access to credit, how many men and women have obtained a loan (and maybe what is the size of those loans) and not just the number of households that received a loan. The Nairobi case study (Chapter 9) uses the following gender-sensitive indicators to monitor project impacts: number of men and women participating in meetings and training sessions, number of issues raised by men and women during such meetings, number of men and women occupying leadership roles, involvement of men and women in production and selling activities, as well as changes in behaviour of men and women observed qualitatively (e.g. men's views on women's involvement in leadership).

b. All indicators include sufficient indicators to *monitor the effects of the project on local gender relations and the empowerment of women*. Even when all indicators are gender-specified, these do not necessarily reflect how the project influences the position of women. Therefore it is important to check this element through, for example the following indicators (the numbers refer to suggested rating scales explained below):
   - Plots allocated to women (1 or 3).
   - Women's control over the benefits (products, income) raised in urban agriculture activities (decisions on the use of the produce and income raised) (2 or 3).
   - Women in leadership positions in producers' organizations, urban agriculture committees, and/or institutions established (1 or 3).
   - Women in leadership positions in community organizations and activities (1 or 3).
   - Degree to which women experience constraints in urban agriculture not applying to men (2).
   - Degree to which conventional constraints on women's participation have been removed or altered for the better after the project (3).
   - Women's income from crop and/or livestock production (1 or 3).

- Women's income from other activities (1 or 3).
- Women's freedom of movement (3).
- Respect for women and their activities in the household (3).
- Respect for women and their activities in the community (3).
- Women producers who are regularly attended by service-providing institutions (e.g. percentage of women participating in agricultural extension groups and training events, percentage of credit disbursed to women) (1 or 3).

c. Such monitoring data should provide a reliable image not only of the project's impacts on men and women producers but also of its effects at *institutional or policy level*. In order to see the effects of the project on mainstreaming gender in the participating organizations, one needs to include indicators like the last one mentioned above. Note that this indicator is different from indicators monitoring the participation of men and women in the project activities. Have these organizations or institutions adopted a gender policy? Has their attention to strategic gender issues increased? Have their services to women producers improved in their regular programme and other projects?

Examples of *rating scales* that can be used when measuring these effects:

(1) Proportion (percentage) of women in total:
   a. 0–20%
   b. 20–40%
   c. 40–60%
   d. 60–80%
   e. 80–100%

(2) Women influence / control / decide:
   a. Not at all or only a little
   b. About the same as men
   c. It is mostly women who do so

(3) Increase compared with before the project began
   a. None or hardly none
   b. Some
   c. Very great

Many projects monitor the participation of men and women in the various project activities (e.g. in training and extension activities, distribution of inputs, distribution of loans, etc.). Such 'gender-balanced' data allow one to monitor during implementation the extent to which the project is attending to men and women. However, such data do not say much about the impacts of the project on gender relations and women's empowerment, for which one requires indicators such as those mentioned above.

Many of the tools that were used in the diagnostic phase of the project can also be used for monitoring and evaluation purposes. For example, the

tools to analyse men's and women's role in decision making or their degree of control over household resources and the benefits of productive activities can also be used to monitor changes effected in these key issues by comparing the scores before and after the project or – in projects with longer duration – to do so at certain moments during project implementation also. This allows one to monitor what changes are effected and – if needed – to adapt the project strategies.

It should be ensured that all monitoring tools applied are gender-sensitive and allow for the collection of gender-disaggregated data. Also the reporting formats should be such that monitoring data can be reported easily. In the Nakuru case study (Chapter 11), for example, project staff were involved in collecting gender-disaggregated monitoring information (e.g. number of men and women trained, number of beneficiaries by gender per household for both projects, members' involvement in farm activities by gender, time, and date), while records were maintained by households on the performance of dairy goats belonging to men and women (on feeding, weight gain/loss and health), as well as amount of vegetables, milk, and income produced per (male- or female-led) household.

A *pre-test* of the monitoring methods and indicators is often very effective in pointing out certain practical problems with the chosen monitoring methods (or operationalization of indicators) so that improvements can be made before the monitoring and evaluation system is made operational. Making changes in an on-going monitoring system often turns out to be complicated

When planning the monitoring and evaluation activities, one should not only organize the data collection and reporting but also specify at which moments (at a minimum annually) the project partners (including male and female representatives of the beneficiaries) will come together to reflect on the monitoring results and on the facilitating and hampering factors that influenced the results. Gender should be made an important item on the agenda of such meetings. The periodic reflection meetings on the basis of the monitoring results will help to identify changes that have been brought about and how the project activities are differentially affecting men and women. Especially in the field of gender, such meetings are of crucial importance. Gender awareness and gender analysis and planning skills are not created overnight, and such periodic meetings are an important means to further strengthen these. Where such periodic reflection does not take place, gender considerations often tend to fade away during implementation of the project. The reflection on the monitoring data provides an opportunity to reflect on the factors that limited or facilitated attention to women's priorities and may lead to adaptations in the working methodologies and inclusion of new ones. For example, it may be decided to take actions to enable women to overcome specific constraints that limit their possibilities to participate actively and reap the benefits of the project, to shift budget allocations, to enhance gender balance in project actions, to strengthen alliances with women's organizations, etc.

The frequency of the internal evaluations will be determined according to the needs of the stakeholders (including donors) and the situation of the project (more frequent evaluations might be needed in case of communication difficulties between participating organizations, low level of trust among beneficiary groups, etc.).

In the later stages of project implementation, attention will also be given to the *'systematization' of the experiences gained* and *drawing 'lessons learned'* regarding – in this context – gender mainstreaming in the project cycle, with a view to the dissemination and replication of project results and their uptake into local or national policies on urban agriculture. The case studies featured in Part I include sections on 'lessons learned' whereby such insights are used to formulate further research, interventions, and actions. For example, the Carapongo case study (Chapter 13) highlights the need to support social capacity building through provision of training and development of gender-sensitive producer networks based on project findings that reveal low participation and representation of women in such organizations.

For an externally mandated formal mid-term or end-of-project evaluation, additional information on the project's results and impacts might be collected, in addition to the monitoring data. In that case the team that will implement this has to be familiar with gender-sensitive data collection and analysis. Terms of reference for mid-term or end-of-project evaluations should clearly specify the questions to be addressed in the evaluation regarding the project's expected results for men and women respectively and its impact on gender equality in the project area. The evaluation team should have sufficient expertise in recognizing the gendered differences of the project's impacts (GWA, 2006).

Box 15.9 Recommended tool for the monitoring and evaluation phase

- Monitoring and evaluation checklist

Box 15.10 Gender-mainstreaming questions for the monitoring and evaluation phase

- Are monitoring data gender-disaggregated?
- Does the monitoring process capture feedback and information from both men and women beneficiaries and participants?
- Are monitoring data analysed with direct participation of both male and female representatives of the beneficiaries?
- Does the monitoring information show how the project is benefiting respectively women and men?
- Are remedial actions taken if the monitoring data show that women and men do not benefit to the same extent from the project activities?
- Do the monitoring and evaluation teams include members who are gender-sensitive and have gender expertise?

Phase 6: going to scale

In this phase, project results are used to plan follow-up actions, are disseminated to other actors and local policy makers in the same city or similar areas (out-scaling), or are disseminated to policy makers and programme managers at national level (up-scaling). The list of potential users of research findings or systematized experiences gained in a development project is extensive: urban producers in other areas, urban planners, agricultural research and extension organizations, NGOs, local authorities, national policy makers, etc.

The Nakuru case study (Chapter 7) provides details of strategies and tools used to incorporate gender in policy influencing, including holding a regional policy-intervention workshop that brought together municipal and national government representatives, farmers and livestock keepers, civic groups, community organizations, international bodies, and donors. The workshop led to the establishment of City Focal Points in each of the participating cities, as well as a Forum through which meetings are held to discuss policy-related issues regarding urban agriculture among all stakeholders.

Such efforts can ensure that the learning experience and outcomes of a gender-sensitive project are integrated into the planning of new research or action projects and the development of new (or revision of existing) policies on urban agriculture. It should be noted, however, that policy development can cut across the entire project cycle, as was noted in the section on monitoring and evaluation above and is further discussed in the section on 'early involvement' below.

It is also important to be aware of the fact that in most instances going to scale with gender findings and potential actions can be challenging and is often the stage of the project cycle that is left unrealized. The gender element tends to go missing here, because of the broader spectrum of actors that become involved in out- or up-scaling, and more specifically because many of those actors are not as focused on or in tuned to gender-sensitive research or development planning. Further, the capacity of project team members to network with policy makers and planners, or key stakeholders beyond their locality, may not be fully developed at this stage of the project cycle, thus inhibiting the uptake of gender issues.

Project teams should consider how to build capacity for gender mainstreaming beyond their own community, project, or organization, to ensure that differences and inequalities between men and women remain in the forefront of interventions when going to scale. Efforts may begin with incorporating farmer networks beyond the immediate community, as was done in the case studies from Harare (Chapter 6), Nairobi (Chapter 9), Rosario (Chapter 10), and Mexico (Chapter 12); these larger-scale organizations may facilitate opportunities for policy impact, as was the case in Villa María del Triunfo (Chapter 8), which may otherwise not be realized. More attention to gender issues when going to scale may be obtained by making reference to UN Resolutions regarding women's rights and equality (e.g. the Beijing declaration

and action programme for equality, development, and peace, 1995; see www.
un.org/womenwatch), and by ensuring that grassroots women's groups and
gender-sensitive sectors of municipal or national governments are always
directly involved at this stage of the project cycle.

Gender mainstreaming throughout the project cycle means that urban
governance and policy/planning mechanisms must necessarily pay adequate
attention to gender dynamics and issues. To that end, it is important to define
potential users of project results early on in the project cycle, getting to know
their information needs and assessing the best ways to present information so
that channels and formats for the dissemination are appropriate. The results of
the project have to be 'packaged' and transferred in the right way, producing
gendered materials that have high use value for the targeted audience
(e.g. practical manuals, guidelines for professionals, planning models and
software, policy briefs, videos, etc.) and using effective channels to convey
the key messages and the produced materials to these publics (e.g. study visits,
workshops/seminars, radio broadcasts, popular media, formal publications,
e-mail lists, websites, etc.). For example, the Harare case study (Chapter 6)
identifies common 'myths' about urban agriculture that need to be dispelled
and can be done so through municipal television and radio programming;
to this end, project results need to be pulled together in a way that helps the
public to understand the important role that urban farmers play in enhancing
local food security and income raising.

Ensuring sufficient attention to systematization and dissemination of
experiences gained, as well as facilitating uptake of gendered project results
in local or national policies and programmes, means that a specific project
objective should be formulated on achieving certain dissemination results and
improvements in the actual policies and programmes on urban agriculture.
This will spur the design of specific project activities regarding engagement
with policy makers and other institutional stakeholders and facilitating the
use of the project results in policy and programme design.

In both RUAF and Urban Harvest, special attention is given to engagement
with local and national authorities and most relevant government and non-
government organizations that play (or should play) a role in the development
of safe and sustainable urban agriculture ('institutional stakeholders'). This
facilitates adequate policy uptake and institutionalization of the project
results, thereby multiplying and sustaining the impacts of the project. This
includes gender aspects.

Few policy makers and senior officers read final project documents or
research reports. It is impossible for them to have up-to-date knowledge on all
issues relevant to public-policy making and programme development. Yet they
frequently make vital policy decisions that have widespread implications for
urban agriculture (city development plans, land-use regulations, enhancing
or reducing budget allocation to agricultural support programmes, etc.). So,
the decision makers need to be adequately briefed with selected information

regarding key issues in urban agriculture to enable them to make informed decisions.

This requires a well-planned strategy to engage with policy makers and institutional decision makers in order to achieve the following results:

- Raise their awareness on the actual and potential role of urban agriculture for sustainable urban development (and especially poverty alleviation, enhancing food security, local economic development, recycling, and social inclusion of disadvantaged categories of the urban population, including e.g. female-headed households with young children), since such awareness is generally low.
- Brief these decision makers on the main results of the implemented project in their city/country – the findings of a research project or the systematized experiences of a development project – and the relevance of these results for policy development and design of future programmes and projects on urban agriculture.
- Whenever required and possible, to contribute to processes of policy review and design of programmes on urban agriculture.

Early involvement

As indicated earlier, gender-sensitive policy influencing and development needs to be incorporated within the entire project cycle. This offers the best way to engage with policy makers and senior institutional decision makers. Such participation throughout the project process will provide the opportunity to feed them bit by bit with information regarding urban agriculture and related policy issues, to include their questions and information needs in the project design and implementation, and to gradually enhance their commitment to urban agriculture in general and gender issues in particular. This encourages active use of the project results in policy and programme design or adaptation. During this process, it is important not to let policy makers get the upper hand and 'hijack' the project; rather the project should retain its independence and innovative approach for setting out new avenues for gendered development.

The Urban Harvest research project on Health and Urban Agriculture in Kampala established an advisory 'Health Co-ordination Committee' which included the various actors that co-operated with the project in one way or another, including university departments, NGOs, Kampala County Council (KCC) Agricultural Extension Officers, the Ministry of Agriculture, Animal Industry and Fisheries, and the National Agricultural Research Organisation. Perceived policy concerns, long hampering the formal adoption of a number of ordinances on urban agriculture that were drafted in 1999, were incorporated in the project design. The presence of KCC as a major partner in the Health Co-ordination Committee ensured that policy-relevant research findings could directly feed into the policy-making process. Project results were used in a number of consultations that were held to discuss the draft

ordinances, to inform the participants on the real health risks associated with urban agriculture and effective ways to reduce and manage such risks, which led to several changes in the draft ordinances. The project also contributed by field testing the new ordinances to identify challenges faced by producers in observing the new ordinances and assessment of the impacts of these ordinances. This included a study of the gender impacts.

In the pilot cities of the RUAF programme, local authorities and various other stakeholders in urban agriculture are engaged in a process of Multi-stakeholder Policy Formulation and Action Planning (MPAP) for sustainable urban agriculture development. The MPAP involves citizens, producers, civil organizations, private-sector companies, and government organizations in the formulation of a municipal policy on urban agriculture and the joint design of action plans and the establishment of a Multi-stakeholder Forum on Urban Agriculture. This collaboration goes beyond mere consultation, where stakeholders are asked for their feedback on an already defined line of action. Instead, in MPAP, the various stakeholders participate actively in the situation analysis, the definition of problems/constraints and potentials/opportunities, the development of possible solutions and development strategies, as well as the assignment of roles and expected contributions to each actor involved in the implementation of these strategies. For sustainable urban agriculture development, such multi-stakeholder participation is particularly important, since it is a cross-sectoral issue and its development requires the participation of different disciplines and a variety of actors (Dubbeling and De Zeeuw, 2007).

The MPAP process (Ibid., 2007) not only greatly improves dialogue between local authorities and urban producer groups and other stakeholders on existing problems and the required measures to achieve the development of safe and sustainable urban agriculture, but also improves their knowledge of urban agriculture and their capacities to jointly plan, implement, and monitor urban agriculture projects and their commitment to contribute actively to the realization of such projects.

End of project engagement

If early involvement of senior decision makers is not possible, towards the end of the project various communication and lobbying strategies can be used to engage with and influence politicians and other institutional decision makers. First it is important to analyse existing policies regarding urban agriculture and the actual views of the various institutions on urban agriculture (its problems, its potentials, and how they see its future development) and to identify on what policy issues the project can provide relevant insights and recommendations. Second it is important to attempt to understand what triggers the interest/ attention of specific policy makers or other decision makers. The degree to which actual policies and programmes adequately address gender issues in

urban agriculture, or may have differential impacts on men and women, should be a key part of the review.

Once one has defined what relevant insights the project may provide to senior decision makers, what the key messages are, and how they relate to the existing policies and programmes and specific interests of the decision makers, including a gender analysis, adequate communication and lobbying strategies can be identified and prepared.

Such strategies may include the following (see for more details Dubbeling, 2004):

- Creating opportunities for direct dialogues with policy makers (oral briefings during a personal visit or meeting, a policy seminar or a site visit, etc).
- Preparing a 'fact sheet' or 'policy brief' on urban agriculture and the results of the project. This is a short and concise document that synthesizes relevant information on selected key issues of a certain policy area, and lessons learned from action and research projects, and suggests how a municipal or national government or another institution may (further) develop their policy and programmes in this area, often illustrated by concrete city cases ('building theory based on practice'). Briefing papers are less likely to be misquoted and can more easily be shared with third persons than oral presentations, but they offer fewer opportunities for interaction and dialogue.
- Mobilizing others to communicate the message (briefing of accessible policy advisers and like-minded staff inside those institutions, linking up with the media and briefing of interested journalists, letting influential people present the story in public debates, etc.).

Often a combination of the above-mentioned strategies needs to be implemented. Because senior staff are often replaced after elections when political parties change, it is wise to diversify relations and policy approaches and to recognize that building relationships is an iterative process, with reversals as well as advances.

When preparing policy briefs and engaging in policy dialogue, the gender dimensions of urban agriculture should be given proper attention, stressing the following:

- Recognition of *women as independent actors and beneficiaries* in/of urban agriculture public policies and projects.
- Acknowledgement of the real *value of women's contribution* to the development of urban agriculture: production, food security, income, etc.
- Recognition that the *needs of men and women are different* and that women's access to and control over resources and participation in decision making are restricted by socio-cultural and institutional traditions.

- Recognition that public policies and projects, as well as economic and technological trends, can have *differential effects for men and women.*
- Recognition that *affirmative actions are needed* to ensure that women (and men) can reap equal benefits from urban agriculture policies and projects.

Gender should be included as one of the 'key issues' for the development of sustainable urban agriculture discussed in policy briefs or fact sheets on urban agriculture. Gender dimensions of other key issues should be outlined carefully (e.g. women's access to land and credit, technical and entrepreneurial training, etc.). Suggestions have to be made for measures to be addressed in a new policy or programme so that the gender dimension is included. The consequences of not including such measures might also be sketched.

Finally, project team members at this stage of the project cycle should consider the potential unintended consequences of suggesting and even accomplishing up- or out-scaling of particular gendered actions. It is possible that what is considered a positive policy or planning initiative, as advocated by the project team based on their research and development planning, may have negative implications for men or women in the community. For example, the formalization of urban agriculture, which has been urged by lobby and producer groups globally, may not necessarily be a positive change for women, given that their access to this activity and its benefits often depends on its informal nature. In another instance, gendered measures may actually end up reproducing particular ideas about women that are not ideal (e.g. enhancing women's capacity to do urban agriculture for subsistence purposes reinforces their place or position as food producers for the household only). It is important then to consider consistently and regularly the positive and negative implications of going to scale with gender issues.

Box 15.11 Recommended tools for out-scaling and up-scaling gender-responsive interventions

- Scoping of gender issues for policy and planning
- Policy brief
- Policy-action matrix

Box 15.12 Questions for gender mainstreaming in out-scaling and up-scaling interventions

- Have the gender dimensions of urban agriculture been given proper attention when preparing publications, fact sheets, manuals, and policy briefs?
- Have gender-research findings been incorporated in policy discussions and dissemination activities?
- Have the project impacts on men and women urban producers been presented to policy makers?

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CHAPTER 16

Beyond the project cycle: institutionalizing gender mainstreaming

Abstract

In this chapter the emphasis shifts from integrating gender in the project cycle to mainstreaming gender in organizations and institutions. Different ways to promote the integration of gender into organizations (their organizational culture, their policies, etc.) will be discussed. Thereafter, by way of example, we present the process that was applied by the RUAF Foundation and Urban Harvest to promote gender mainstreaming in the organizations taking part in these networks.

Institutionalizing gender mainstreaming

Up to this point, we have focused on the identification and analysis of critical gender issues in urban agriculture and the measures that can be taken in every phase of the project cycle to ensure that gender differences are taken into account in research and development projects. However, merely integrating gender into the project cycle is not enough. Gender responsiveness should also be integrated in the organizations that execute such projects, which will greatly facilitate gender mainstreaming at the project and activity levels and will also enhance its effectiveness. The current chapter focuses on how gender can be institutionalized and mainstreamed at the organizational level.

Possible measures to stimulate gender mainstreaming in urban agriculture organizations will be discussed, followed by examples of the process applied in the organizations participating in the RUAF network and the Urban Harvest programme when attempting institutional gender mainstreaming.

Why is gender mainstreaming in organizations important?

There are three main reasons for giving attention to gender mainstreaming in organizations (e.g. our own and our partner organizations). Firstly, focusing on projects to improve gender equality at local level may have little impact on changing the wider social position of women, youth, and other disadvantaged groups. Secondly, it is recognized that gender inequality is continuously recreated by the 'mainstream', with existing dominant views and stereotyped

roles for men and women informing gender-unbalanced policies and biased institutional practices. Hence, thirdly, we need to influence policies and institutions to achieve greater impact.

We also should seek to bring about changes in the institutional policies, programmes, legislation, and resource allocations of our own organization and our partner organizations in order to enhance the impact on gender equality of our and their development programmes.

The most important changes we seek to bring about are the following:

- Recognition by decision makers that gender equality is a strategic objective of development rather than a 'women's issue'. It should be pursued by leading institutions and reflected in major policies, programmes, and institutional practices.
- Women as well as men are enabled to influence the policy agenda, decision making, and resource allocation, and are fully recognized as agents and beneficiaries of change.
- Institutions develop analytical, planning, and management skills to identify and respond to gender issues relevant to their mandate.
- Design of policies and programmes is based on data regarding existing gender differences and focused on enhancing gender equality.

What can be done to promote gender mainstreaming in organizations?

When gender mainstreaming an organization, institutional commitment and political will are indispensable. The first stage will be to ensure that all stakeholders are familiar with the basic concept of 'gender' and what 'gender-sensitive planning' means. Conducting a gender audit to assess staff knowledge and awareness of gender responsiveness can be helpful at this stage. (A guideline for such a gender audit is provided by the Commission on the Advancement of Women, 2003.) Commitment at the management level needs to be sought, and a simple action/time plan for development of a gender policy made.

Gender expertise should also be made available in the organization, such as by including a gender specialist in an advisory role. However, it should be ensured that a project team itself or an organization's staff in general are responsible for integrating gender throughout the project cycle. The gender specialist should just assist and support staff in their work and should not be made the only one responsible for 'integrating gender' in project work.

Equally important is the organization of staff gender training and the diffusion of gender guidelines. Enhanced capacity of staff on gender responsiveness in an organization will enable the formation of gender committees or task forces with effective representation across divisions, themes, units, and other organs of the organization through which institutional accountability on gender mainstreaming can be achieved. Sensitivity to gender issues and gender balance have to be taken into account when selecting the staff members who will be

involved in project planning and management, and they have to be trained in gender analysis and gender-sensitive project planning and management.

Other important measures are the following:

- Facilitate development of a gender statement and ensure that promotion of gender equality is made an explicit aim of the organization.
- Help to ensure that gender integration becomes a routine concern of all units and all staff members.
- Facilitate changes in the organizational culture.
- Promote incorporation of gender analysis and gender planning in standard procedures for project design and facilitate gender specification of institutional reporting and monitoring systems.
- Promote the engendering of staff recruitment and enumeration policies.
- Evaluate whether budget allocations reflect the gender policy of the organization.
- Promote the inclusion of indicators for impacts on gender equality in the institutional monitoring system as well as periodic discussion of the results (self-learning).
- Stimulate exchange with other organizations regarding gender issues in urban agriculture and related subjects.

Gender mainstreaming in the RUAF network

About RUAF

The International Network of Resource Centres on Urban Agriculture and Food Security (RUAF Foundation) consists of eight partner organizations spread across the globe. The RUAF partners are of two kinds:

a. Regional RUAF partners:
   - IAGU, Dakar – regional co-ordination for Francophone West Africa
   - IWMI–Ghana, Accra – regional co-ordination for Anglophone West Africa
   - MDP, Harare – regional co-ordination for Eastern and Southern Africa
   - IWMI–India, Hyderabad – regional co-ordination for South and South-East Asia
   - IPES, Lima – regional co-ordination for Latin America
   - IGSNRR, Beijing – regional co-ordination for China
   - AUB, Beirut – regional co-ordination for the Middle East and Northern Africa
b. International partner:
   - ETC–Urban Agriculture – programme co-ordination, strategy development, and international linkages

The RUAF Foundation has the following mission statement:

The RUAF Foundation contributes to reduction of urban poverty and food insecurity and stimulates participatory city governance and improved urban environmental management, by creating enabling conditions for empowerment of male and female urban and peri-urban producers and by facilitating the integration of urban agriculture in policies and action programmes of local governments, NGO's and private enterprises.

The RUAF Foundation currently is implementing the 'Cities Farming for the Future' (RUAF–CFF) programme (2005–8) in 20 cities in 15 countries. The regional RUAF partners closely co-operate with multi-sectoral teams of local partners, including municipalities, NGOs, producer organizations, research and training institutions, and government organizations.

The main strategies of the RUAF–CFF programme are the following:

- **Capacity development on urban agriculture**: training of trainers, development of training modules, organization of policy workshops and training courses, organization of study and exchange visits, design of an internet-based self-learning package
- **Policy development and action planning on urban agriculture**: establishment of multi-stakeholder forums and interdisciplinary working group in each city, joint situation diagnosis, policy formulation and action planning, implementation, and monitoring of pilot projects
- **Knowledge management on urban agriculture**: preparation and publication of policy papers, production of guidelines and manuals, publication of the Urban Agriculture Magazine in four languages; dissemination of experiences to another 30 cities
- **Learning from urban agriculture experiences**: introduction of participatory impact-monitoring systems at all levels, systematization of experiences, participatory evaluation of pilot projects, regional partner consultations
- **Gender mainstreaming in urban agriculture**: (the activities undertaken in this strategy are elaborated below).

Gender mainstreaming efforts undertaken by the RUAF network

At the global level, gender mainstreaming in the RUAF network was stimulated by:

a. Integrating a gender statement (see Box 16.1) in the statutes of the RUAF Foundation which stipulates how the RUAF partners view gender in relation to their work in urban agriculture, why they think it is important to take gender into account, and how this will be made concrete in the work. The gender statement is included in the co-operation agreements with the regional and local organizations that are participating in the programmes of the RUAF Foundation.

b. Establishment of an Advisory Group on Gender and Urban Agriculture, consisting of a small group of people who have expertise and hands-on experience in gender issues and agriculture in an urban setting, and who advise and guide the RUAF partners regarding the integration of gender issues in their activities and how to 'gender mainstream' urban agriculture.

c. Training of all international and regional RUAF staff by the following means:

- The organization of specific training on gender in Johannesburg (2003) for the international team and regional RUAF co-ordinators regarding 'Gender Issues in Urban Agriculture Research and Development Projects', in order to enhance their capacity to take gender issues into account when planning, implementing, or monitoring their RUAF and other urban agriculture activities.

- The development of six case studies on gender and urban agriculture in the RUAF pilot cities.

- The organization of a 'Workshop on Gender and Urban Agriculture' in Accra in September 2004, together with Urban Harvest and with financial support of the International Development and Research Centre (IDRC) and the CGIAR System-wide Programme on Participatory Research and Gender Analysis (PRGA). The workshop resulted in important lessons and recommendations for dealing with gender issues in urban agriculture projects (differentiated for capacity development, research, policy development, action planning, implementation, and monitoring).

- Production of three RUAF working papers on gender and urban agriculture: (a) on main gender issues in urban agriculture, (b) on gender mainstreaming, and (c) on gender-sensitive tools for participatory situation analysis.

d. Making gender equality a separate objective in the CFF programme, which also ensures that the topic is discussed in every progress report and annual work plan and during the yearly co-ordination meetings. During these meetings, the partners apply the Checklist for the Gender Mainstreaming Activities in the CFF Programme, which indicates for each objective of the RUAF–CFF programme how gender is to be integrated (see also Table 17.15 of the Tool box).

At the regional level, the following efforts to integrate gender in RUAF–CFF and to mainstream gender in the organization and that of the local partners, are developed:

- A gender adviser was appointed in each region to provide support to the regional RUAF team regarding the integration of gender when drafting Terms of Reference of sub-contracts, developing training materials, preparing guidelines, etc.

Box 16.1 The RUAF gender statement

RUAF applies the following definition of gender, taken from IDRC–Cities Feeding People, which reads as follows:

The term gender refers to the culturally-specific roles, rights and obligations of women and men, and the relationships between women and men. These roles, obligations and rights are not fixed; they are contested and vary widely within and between cultures. They also vary according to other social factors such as class, race, ethnicity, age and marital status. Women and men continually participate in defining gender relations. It is therefore essential to explore the multiple meanings given to gender roles, obligations and relationships in historically and spatially-specific contexts.

The partners in the RUAF network promote the exchange of experiences and the generation of knowledge regarding gender issues in urban agriculture. We continue to educate ourselves on this topic and are committed to keeping our knowledge up-to-date about new developments. We share this knowledge with our local partners so that they are enabled to adequately address gender issues in their activities.

The RUAF partners work towards the goal of gender equity in partner countries by both specific initiatives and by ensuring that all of their activities support gender equity objectives. This means that gender differences relevant to urban agriculture projects and policies will be identified in order to improve the relevance and impacts of such projects and policies for both women and men. RUAF partners acknowledge that in all their initiatives, the participation of both women and men – both quantitatively and qualitatively – needs to be ensured. They also promote equal access to and control over productive resources for urban agriculture for men and women and the development of participatory mechanisms that enable women, as well as men, to participate in decision making processes and to influence the policy agenda and the priority setting for development projects in the areas where they live.

In concrete terms, this means that the RUAF partners are committed to integrating gender into their strategies and their methods; showing the importance of gender differences by developing case studies; using gender analysis in their research activities; integrating gender in their training and communications activities; applying gender-sensitive project and policy planning and implementation; using gender-specific monitoring and evaluation methods; and building the capacity of local partner organizations in gender analysis and planning.

- The appointment of gender-sensitive staff in the regional RUAF teams and the creation of a gender balance in these teams.
- Promoting the development of a gender policy in their own organizations.
- Networking with gender-sensitive organizations and interest groups to reinforce their own gender capacities.

At the local level the following strategies were applied:

- Training of the local (multi-stakeholder) teams in major gender issues in urban agriculture and gender-sensitive diagnosis, policy formulation, action planning, and monitoring.
- Inclusion of the RUAF gender statement in all co-operation agreements with local partners and stimulating them to adopt a similar gender statement in their organization.

- Promoting gender balance in the composition of the local teams and among the participants in the Multi-stakeholder Forums in each pilot city.
- Implementation of specific gender case studies in the RUAF pilot studies in order to strengthen the gender perspective.
- Promoting gender-balanced participation in all events organized by RUAF at local level, such as the training sessions, policy seminars, and meetings of the Multi Stakeholder Forum, inclusion of gender as a topic on its agenda and the use of gender-sensitive discussion methods.
- Assisting the staff of local partner organizations involved in RUAF–CFF in the integration of gender issues when drafting a Municipal Policy or Strategic Action Plan on urban agriculture and designing urban agriculture projects and inclusion of gender-affirmative actions.
- Promoting the use of gender-sensitive tools and gender-disaggregated indicators for the monitoring of project results.
- Production and/or distribution of specific materials like the case studies and RUAF working papers on gender and urban agriculture mentioned above, a specific issue of the Urban Agriculture Magazine on this topic, a chapter on gender mainstreaming in the RUAF publication 'Cities Farming for the Future: Urban Agriculture for Green and Productive Cities', and creating a specific page on gender and urban agriculture on the RUAF website that is regularly updated with newly published materials.
- In each region a regional gender workshop will be conducted to facilitate sharing and analysis of the experiences gained in each of the cities regarding gender mainstreaming of urban agriculture.

Results and experiences

The experiences gained and results achieved with the above vary from region to region, reflecting the prior exposure and experience of the regional and local staff involved in RUAF, the degree of gender sensitivity of the organizations involved, as well as the socio-cultural context in which these operate.

One lesson learned is that applying a gender approach (rather than a 'Women in Development' approach) has yielded positive results. Equally, placing the discussion on gender issues in the broader framework of 'social inclusion' also enhances acceptability and commitment.

When reviewing the results of the efforts made to mainstream gender into the RUAF–CFF programme, it is observed that gender is well integrated in the training activities at all levels and is having positive effects on the participants. The training has changed their attitudes to gender, and most of them report that they know how to apply the gender concepts and tools in the planning and implementation of urban agriculture projects. Some of the participants also feel able to facilitate the integration of gender into their own institutions and their activities.

However, when reviewing the various activities undertaken by the trained participants, we observe that the integration of gender in diagnostic research activities advances relatively well but that its integration in subsequent policy formulation and action planning is much less strong and needs more attention.

Factors that seem to play a role here are that the diagnosis stage is still much more controlled by the core partners in each RUAF pilot city, whereas in the action planning and implementation stages many other actors also take part, including large sectoral institutions that may have less gender sensitivity than the core partners. It is also observed that equal participation of men and women in RUAF-organized training events and workshops and in the Multi-Stakeholder Forum is close to equal when it concerns field staff and producers, but when it comes to higher-level officers and politicians, men are still strongly over-represented.

The application of the gender checklist has proved to be very useful to facilitate the integration of gender in the different components of the RUAF–CFF programme and at different levels and helps to quickly identify areas that need to be strengthened.

Local partners indicate that a further refinement of the methods and tools used for gender-sensitive diagnosis, planning, and monitoring and evaluation is needed as well as looking for ways to reduce the costs involved in collecting gender-disaggregated data.

In some regions the functionality of the regional gender adviser has been low, due to difficulties in really involving the adviser in the planning and realization of the RUAF activities in this region (often the role of the gender adviser focused on participation in regional training events and development of training materials and much less so on advice regarding integration of gender into (draft) policies and action plans on urban agriculture).

The efforts made to mainstream gender into the organization of the regional RUAF partners are progressing well. All regional RUAF partners have developed a gender statement and policy if they did not have one yet. Stimulated by the experiences gained in the RUAF project (among other influences), most regional RUAF partners now also are applying a gender-sensitive approach in their other projects.

The gender-mainstreaming effect in the local partner organizations in the pilot cities is less clear. Often the RUAF gender statement is adopted by the local partner organizations (or they had such a statement or policy already). But *living up* to such a statement and its active implementation still requires in most organizations (especially the larger institutions) an internal process of awareness raising, changes in the organizational culture, and further training that might be lengthy (and beyond the possibilities of the RUAF programme).

However, many local partner organizations in the RUAF programme have found that the application of gender-sensitive tools in the diagnosis phase generates valuable information and a better understanding of the actual

situation, its problems and potentials when taking women's and men's specific roles and interests into account, and that such information is vital for the design of effective development strategies.

In conclusion: gender mainstreaming in RUAF staff training and diagnostic research activities is progressing well. But effective use of the insights gained on gender and urban agriculture in the policy formulation and strategic action planning in the Multi Stakeholder Forum activities needs to be further strengthened. The regional and local RUAF partners have an important role to play here, as they can provide technical assistance on gender during formulation of the policies and action plans, and provide examples of gender specific strategies and gender-affirmative actions.

Gender mainstreaming in CIP–Urban Harvest

About Urban Harvest

Urban Harvest is a system-wide initiative on urban and peri-urban agriculture of the Consultative Group on International Agricultural Research (CGIAR, the network of 15 international agricultural centres; see www.cgiar.org for an overview of participating institutions and their activities). Urban Harvest aims to mainstream urban-agriculture issues in all centres. Since its inception, it has developed activities with five of the centres so far (CIP, CIAT, ICRAF, ILRI, IITA, and IWMI).

Hosted by International Potato Centre (CIP), Urban Harvest was formally launched in late 1999 to focus the CGIAR issues relevant to urban and peri-urban agriculture. Working through CIP, it has regional co-ordination offices in Kenya, Vietnam, Philippines, and Peru.

Urban Harvest aims to enhance food and nutrition security, increase incomes, and reduce negative environmental and health effects among urban populations via agriculture. These three goals are closely related to the differences in the role of agriculture rural, peri-urban, and urban conditions. Evidence of micronutrient deficiencies among poor urban children underlines the need for a sustainable means to increase the availability of micronutrient-rich foods for this group. The highly unstable employment conditions of developing world cities highlight the need for flexible, alternative employment opportunities that can provide access to supplementary income. Finally, while agriculture offers opportunities to make a positive impact on urban ecosystems under tremendous strain from high populations and poor infrastructure, it can also have negative repercussions through the unsafe use of urban organic wastes and the indiscriminate use of pesticides. Because agriculture in urban and peri-urban areas has both great potential and also certain risks, Urban Harvest recognizes a further goal: through engagement with the particular policy and planning institutions of urban areas to integrate agriculture into urban systems as a safe, accepted component of sustainable cities.

The main research themes of Urban Harvest are:

- the livelihoods context (urban livelihoods and markets)
- the environmental context (urban ecosystems health)
- the urban political–institutional context (stakeholder and policy analysis and dialogue)
- knowledge networking (knowledge exchange, sensitization, capacity development).

Urban Harvest undertakes collaborative research for development projects with various international research centres, government ministries, local municipal departments and authorities, civil-society organizations, and private-sector companies active in urban agriculture in nine cities, as well as national research institutions and universities and government parastatals such as national environment-protection agencies, and water and sewerage companies in six countries.

Gender-mainstreaming efforts undertaken by Urban Harvest

Since its inception in 2000, Urban Harvest has undertaken the following gender-mainstreaming activities targeted at the programme and project activities level and among boundary partners:

- Urban Harvest Sub-Saharan Africa participated in the 2003 RUAF training on gender to upgrade the knowledge, skills, and commitment of staff regarding 'Gender Issues in Urban Agriculture Research and Development Projects', and to enhance its capacity to take gender issues into account when planning, implementing, monitoring, and evaluating urban agriculture research and development activities.
- Urban Harvest (in partnership with IDRC–Cities Feeding People, the RUAF partners ETC–Urban Agriculture in the Netherlands, Municipal Development Partnership in Zimbabwe and International Water Management Institute in Ghana, the Urban Management Programme (UMP) and the Research Development Department of Kenya Government) organized the 'Anglophone Africa Training Course on Urban Agriculture; Concepts and Methods for Research and Management' held in Nairobi Kenya from 8 to 26 March 2004 (the training materials of this course are available on-line as part of a web-based course: http://etraining. cip.cgiar.org). The participants were three-member City Teams, a researcher, a local government official, and a third member involved in project implementation – usually someone from an NGO or CBO. A section on gender issues related to the subject matter of each module was incorporated in each of the seven modules that were prepared and delivered by teams from different countries. In addition, a half-day session specifically on gender was organized involving role-plays, presentations and debate, facilitated by a gender specialist.

- Urban Harvest participated in the organization of the workshop on 'Women Feeding Cities' in Accra in September 2004. Urban Harvest and its partners prepared some of the case studies, based on previous research, and identified a strategy for gender mainstreaming in the Urban Harvest programme, project activities, and boundary partners.
- As a follow-up to the 2004 Ghana workshop, two projects in Kenya (namely 'Positive Selection of Potato Seeds' and 'Assessment of Benefits and Risks in Wastewater Reuse for Agriculture in Urban and Peri-urban Areas of Nairobi') were chosen for the implementation of a project on gender mainstreaming in the research process of the International Potato Centre (CIP) between March 2006 and March 2007, supported by the Participatory Research and Gender Analysis (PRGA) programme (which aims to mainstream gender analysis and equitable participatory research in CGIAR centres and national agricultural research systems). The PRGA programme assesses, develops, and promotes methods and organizational innovations for gender-sensitive participatory research, and works to mainstream their use in plant breeding and in crop and natural-resource management. A staff member of Urban Harvest sits on the Advisory Board of the Participatory Research and Gender Analysis (PRGA) Programme of the CGIAR. The gender mainstreaming in the research process of the CIP project was led by Urban Harvest and implemented in collaboration with CIP and the University of Nairobi, Jomo Kenyatta University of Agriculture and Technology, Kenya Agricultural Research Institute, Ministry of Agriculture, and Kenya Green Towns Partnership Association. The project involved selection of appropriate gender-analysis tools from existing literature (such as the RUAF working paper on gender-sensitive participatory appraisal tools for studying gender in urban agriculture), capacity building of all partners in participatory research and gender-analysis tools and approaches, field application of the tools in the collection of qualitative and quantitative gender-disaggregated data and development of draft guidelines for gender-responsive research in CIP.
- Urban Harvest has been engendering its projects and those of CIP through deliberate incorporation of gender-mainstreaming activities into the projects' background information, objectives, methodology, activities, monitoring and evaluation, budgets, feedback/publications, and community capacity building. Some of the results of these research projects are to be published in *Urban Agriculture in Sub-Saharan Africa – 20 Years On: Case Studies and Perspectives*, edited by Gordon Prain, Nancy Karanja, and Diana Lee-Smith (forthcoming). In the project 'Understanding how to Achieve Impact-at-scale through Nutrition-focused Marketing of African Indigenous Vegetables and Orange-Fleshed Sweet Potatoes', led by CIP between 2007 and 2009, Urban Harvest worked with Farm Concern International in engendering the former's community capacity-building modules.

- Promoting the development of a gender statement (see Box 16.2) was another strategy for enhancing gender mainstreaming in organizations that was applied by Urban Harvest for its programme partners and its parent research centre.

Results and experiences

The efforts of Urban Harvest to mainstream gender analysis in its research for development process have resulted in capacity building of its boundary partners in the use of gender tools and approaches. What these experiences revealed was that if gender mainstreaming in research for development projects was to be effective, the gender-analysis skills of the research teams themselves needed to be enhanced. Sometimes this can be done through identifying existing gender-analysis skills among the partners. The aim is to ensure gender mainstreaming in the whole project cycle.

The experiences with gender mainstreaming in urban agriculture gained by Urban Harvest have indicated the need to adapt some of the available gender-analysis tools to the urban situation. For example, in the urban setting the education status of male and female participants in a participatory appraisal may be highly variable. The bias created by differences in literacy levels of men and women respectively can be limited by the use of visual methods e.g.

Box 16.2 Urban Harvest–International Potato Center (CIP) gender statement

Despite increased attention to gender in the international development arena since the rise of feminism during the 1970s, few international or national agricultural research organisations have yet integrated gender as a central element of problem diagnosis and technology development. The stakeholder needs have not always been taken into account in research, technology development and transfer processes. This may contribute to the prevailing low adoption of innovations.

The concept of gender analysis and diversity is not new in CIP, and there exists a Gender and Diversity Committee which works very closely with Gender and Diversity Programme of the CGIAR and advises the Director General on human resource issues. However, engendering the research agenda still remains a challenge. For this to happen there needs to be political will, technical capacity, organisational culture and accountability for gender integration in CIP's research in all divisions.

Recognising this, Urban Harvest led the drafting of guidelines for ensuring gender responsiveness in CIP's research process, with the support of the CGIAR system-wide programme on Participatory Research and Gender Analysis (PRGA).

Urban Harvest and CIP are committed to integrating gender responsiveness in their research and development activities with partners. Urban Harvest and CIP ensure that the experiences, aspirations, knowledge, opportunities, needs, concerns and constraints of females and males of all ages are integrated in project planning, budgeting, implementation, monitoring and evaluation, reporting and publications. This approach ensures that gender disaggregated data is available for pro-poor policy formulation processes. To achieve gender sensitive research teams and consequently gender responsiveness in the research process, CIP has set gender and diversity staffing, practice and policy goals targeting human resources.

the use of different counters for men and women (like different types of grain or pebbles of different colours) when doing a ranking exercise to prioritize certain issues.

Another lesson learned is that inclusion of gender issues in research proposals is necessary but not sufficient. Achieving this does not avert the danger that gender issues are being completely ignored during implementation and monitoring and evaluation of the project. There is a strong need for aggressive championing of gender issues in all steps of the project cycle, and opposition by some team members (e.g. by asking for evidence of the added value of gender mainstreaming) should be expected. We also learned that budget allocation is necessary to achieve gender-mainstreaming activities in projects.

Some lessons learned from the organization of the Anglophone Africa training course on urban agriculture are the following:

a. The special session by the gender specialist generated great controversy among participants and some heated debate and even conflict. There was likewise difference of opinion in the evaluation process about whether this indicated success or failure, and disagreements about the causes of the conflict. Some participants stated that the gender material should have been presented in a more 'diplomatic' way, given the cultural leanings of the participants. However, discussion among the evaluator and members of the management team suggested that the problem lay in not ascertaining whether all participants had had any previous exposure to gender concepts, as first exposures to the subject tend to generate strong emotions in men and women alike who have not had to examine gender issues previously.

b. The integration of gender in all modules in direct relation to the subject matter of each module went well. However, since the learning modules were delivered by teams with members from various countries, the integration of gender in each module presented a co-ordination challenge for each team, and for the course management.

Also the experiences gained in engendering training materials for community capacity building indicate that incorporating gender perspectives in all modules is more effective than having a separate module on gender. Enhancing gender perspectives in already existing training materials encounters the challenge of property rights and ownership that needs to be addressed through proper acknowledgement of the contribution of each party.

Urban Harvest, through its pioneering role in gender mainstreaming in the research process of the two above-mentioned CIP projects in Nairobi, is currently taking the lead in enhancing the gender responsiveness of research and development activities in CIP as a whole. The CIP project on gender mainstreaming in the research process implemented by Urban Harvest has resulted in the development of guidelines for gender-responsive research that target the institutional set up, the organizational culture, and the research

project cycle; these guidelines are being applied now in the Center as a whole and can be found on the PRGA website http://www.pragaprogram.org. This could be another way of getting gender analysis on the research agenda.

There are challenges involved in getting gender mainstreaming on to the agenda of research and development organizations. These challenges could be addressed by forming gender and diversity committees with a wide representation across divisions, themes, programmes, regions, and men and women in an organization. The CIP Gender and Diversity Committee (G&D) provides services and resources to the CGIAR centres in order to raise the gender-and-diversity awareness of all CIP research staff. The committee hopes that this will lead to improved attitudes among staff and greater incorporation of gender analysis into research projects.

The experiences of the CIP Gender and Diversity Committee indicate that in order to influence institutional policy and culture it is important to win the support of the management. Awareness among all staff can be created through e-debate and round-table meetings. Equal importance should be given to presentation of gender-mainstreaming work during organizations' general meetings where other scientific findings are also discussed, in order to enhance the importance which people attach to the former as a cross-cutting issue in research and development.

Urban Harvest has benefited from the system-wide gender programmes of the CGIAR and has also contributed substantively to both of them through its active participation. In this it has been assisted by its partnership with RUAF, both in the form of training and in terms of collaboration on the substantive development of the field of gender in urban agriculture, which has become the focus of starting gender mainstreaming in its parent research centre.

References

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CHAPTER 17

Tool box for gender-sensitive urban agriculture projects

Abstract

In this chapter the tools suggested in Chapter 15 will be discussed in more detail. First, we consider how some general diagnostic research methods can be used in a gender-sensitive way. Subsequently, we will present more specific tools that are of special value to integrate gender in a particular phase of the project cycle, and we will provide some suggestions how to use each tool.

Introduction

In this section we present a range of tools that have been suggested for each phase of the project cycle in Chapter 15 of the publication. We begin by providing an overview of gender-sensitive main diagnostic research methods, followed by details of specific tools that can be applied as part of a main method (e.g. a problem tree or ranking exercise during a focus-group meeting; an activity-analysis checklist during a semi-structured household interview, etc.) or on their own.

Specific tools, after certain adaptations, can often be used in project phases other than the one for which they are mentioned in Chapter 15. For example, diagnosis tools may be appropriate and useful in condition monitoring and evaluation tasks later in the project cycle. It is recommended that main or specific tools be adjusted according to local circumstances, interests, and needs; in some cases flexibility and creativity can lead to innovative 'new' tools that are a result of mixing and matching the ones presented here. To this end, the tool box is a starting point from which to begin gender mainstreaming in urban agriculture research and development projects; practitioners should feel enabled rather than constrained by the tools and approaches outlined below.

Main diagnostic research methods

Review of secondary data

Reviewing secondary data involves the collection and review of existing published or unpublished data and information relevant to the area or topic,

including reports, census data, research findings, municipal and hospital statistics, and aerial photographs (for example on land use patterns). This method is useful to get an initial picture of the situation of the target group and socio-economic and institutional context, as well as to determine gaps and possible contradictions in the available data. This will help to formulate alternative working hypotheses for the field study and to design the fieldwork. With regards to gender, it is important to critically review secondary data for gender bias, seek out gender-disaggregated data, and ensure that data are sourced from as wide a range of research or development areas as possible, especially including those, like household food security, nutrition, and child health, which are sometimes negatively characterized as 'home economics' or 'household studies'. The data review is usually done by team members visiting libraries, government offices, universities, research centres, marketing bodies, etc. Secondary information can be processed in two stages: first, the identification and compilation of the material, and second, the analysis of the collected information. Analysis often begins by grouping the information gathered according to the main themes of the study, followed by the analysis, and finally formulation of the working hypotheses for the field study during which collected secondary data will be cross-checked and gaps will be filled in (Groverman, 1992; Lingen, 1997).

Direct observation

Direct observation involves collecting information by noting down the things one sees happening at the time that they happen (e.g. objects, conditions, events, processes, relationships of people). In most cases a list is used of key items or indicators related to the issue under investigation (e.g. how women participate in community discussions, the activities that men and women perform, decision making on use of the resources, etc.). If it is difficult to take notes at the time of observation, they can be written down later. Observations are analysed afterwards for patterns and trends. This research tool has been adapted from anthropology for problem diagnosis in projects. The hypotheses arising from direct observation should be cross-checked (e.g. with key informants or group interviews), and direct observation can be used to check information gathered from secondary data or interviews/focus groups. Direct observation is useful for gaining a better understanding of a situation, specifically those things that are difficult to verbalize or often go unnoticed because they are grounded in internalized social norms. Observation can enrich insight into various gender aspects of urban agriculture (e.g. the activities that women and men perform, the daily workload of women and men, women's role in decision making in the household, women's participation in community meetings, the self-confidence of women, the behaviour of men vis-à-vis women, etc.). This tool can be used in any phase of the project cycle (Groverman, 1992; Lingen, 1997).

Semi-structured interviews

Semi-structured interviews are informal discussions and conversations structured by using a list of key issues prepared in advance. They can be useful to obtain information in general or about a specific topic, to analyse problems and opportunities, to discuss plans, or elicit perceptions (e.g. on gender relations). It is advisable to take not more than one hour for an individual interview, and not more than two hours for a focus-group interview; timing, venues, and language should be considered in terms of the circumstances of the respondents (e.g. women who work on agricultural plots during the day may not be able to meet for interview during these hours; women may be more comfortable in a particular local language). Interviews are often conducted by a team of two or three people of different backgrounds. Semi-structured interviews can be used in combination with other specific tools (e.g. mapping, ranking, making calendars or timelines, etc.).

How to conduct semi-structured interviews

- Prepare an interview guideline in advance. This is not a questionnaire but a list of topics to discuss with respondents (grouped in such a way that the sequence of the discussion will be easy to manage for those involved). For each topic, prepare initial questions (to introduce the topic and make the respondent think and talk about it) and probing questions (to dig deeper, to get more details: what, why, who, when, how, how do you mean, anything else, why, etc.).
- Select one person to lead the interview. A second person records the questions, answers, and discussion, making notes discreetly to avoid distracting the respondents.
- Deal with topics one by one. Begin questioning by referring to something or someone visible. Ask questions in an open-ended and probing way. Intersperse with probing questions and discussions; ask for concrete information or examples. Ask new questions arising from the answers given. Allow the interviewed person also to raise her/his questions and discuss these too. Involve other people in the discussion, if present. Pay attention to group dynamics.
- With regard to gender, it is important to include women as respondents, to encourage women to participate, and to look for situations and places where women can express themselves freely. Depending on the purpose of the interview and the degree to which women can express themselves freely in the presence of men, group interviews may or may not be carried out with mixed groups. Interviews with small homogeneous groups of women can provide valuable information on their position in that society or on sensitive issues.

Semi-structured interviews can be conducted at any stage of the project cycle (Groverman, 1992; Lingen, 1997) and can be conducted at the individual,

household, or community level. A brief description of the content and the use of these specific interview forms is given below; which interview format to select depends on the issues studied and the level on which these issues take place.

Key-informant interviews

Key-informant interviews are conducted with specially selected individuals who have long experience in a certain community or specialized knowledge or skills in a certain topic. Key informants should be carefully selected, on the basis of the issues and themes relevant to the project. One should be aware of possible biases of the persons interviewed, including gender bias; it is important in gender diagnosis to interview not only those key informants who are gender sensitive, but also those who are not, in order to gain understanding of a full range of perspectives. Information should be cross-checked with information from other sources. Key informants may include members of the target group, for example, local leaders or staff of support organizations and development programmes in the sector concerned (male and female), or they may be external to the project (e.g. municipal officials, NGO staff, local historians, academic researchers, etc.) (Groverman, 1992; Lingen,1997).

Semi-structured household interviews

These are interviews with specially selected households to get a view on the differences between different types of household (e.g. various socio-economic categories or farming-system types) in the community regarding the gender-differentiated management of resources, division of labour, specific problems and potentials, etc.

One technique of identifying the criteria to select the households to be interviewed is as follows:

- Bring together a small group of locally well-informed people (e.g. the local health officer, a school teacher, and the leader of a local women's group).
- Ask them to draw a picture of a poor farming household, an intermediate farming household, and a wealthier farming household. The drawing should reflect the main characteristics of such a family: composition and size, resources available (e.g. land, water, animals), farming activities, their non-farming activities, location, position in the community, origin, etc.
- Discuss the drawings with the respondents in order to detect the main differences between the three types of household (e.g. recent migrant/ not recent migrant, land-holding/not land-holding, with cattle/without cattle, family with older children/family with young children, male-

headed/female-headed, ethnicity/class, type of job in addition to farming).

• Select households based on factors identified through this process.

When interviewing a household, one will preferably interview adult male and female members separately, eventually followed by a discussion on certain issues with the whole household. Sometimes it is also interesting to interview older and younger women separately, since this might indicate on-going changes in the position of women. If possible, let a male member of the team interview the male member of the household and the female team member the female in the household (De Zeeuw and Dubbeling, 2004).

(Focus) group interviews

These are interviews with a specially selected (focus) group of six to ten people who have certain factors in common. In such sessions, specific topics are discussed under the guidance of a moderator in order to get their views and perspectives on a certain issue, to gain insights on the position and problems of this specific (sub-)category of the population, or to tap their specialist knowledge of a certain topic or problem. This might be specific gender or age groups, households with similar wealth status, owners of specific resources, people with a specific problem or disadvantage, people involved in a specific role or activity (e.g. women leaders, people involved in marketing of a certain product), etc. (Groverman, 1992).

Focus groups are often a good follow-up to household interviews in order to get more insight in certain topics and to check whether patterns found in the households are validated in the whole group. Focus-group meetings are also very suitable to analyse a certain situation or problem in more detail and to identify and evaluate potential solutions to these problems. Organize group interviews (four to six persons), preferably with men and women in separate sub-groups (each with a team member as facilitator; a female interviewing the women, a male interviewing the men) (Lingen, 1997: De Zeeuw and Dubbeling, 2004). It is important to note that when single-sex focus groups are brought together in a mixed plenary session, voices may be silenced, or people may not be so willing to share sensitive views or insights. It may be useful to ask a representative from each single-sex group to present a summary of the discussion to the mixed-sex group in a way that ensures privacy and at the same time ensures that all voices are heard.

Preferably, focus-group discussions should be followed by quantification of the results of the group discussions for each issue discussed. This can be done with the help of a ranking technique. For example, when discussing the effects of a project on food availability in the household, one first invites some people to indicate by what percentage food availability has increased in their household and then use the variation in the answers to establish a scale (see the example in Table 17.1) and invite all participants to score (men

Table 17.1 Example of quantification of one topic in a focus-group discussion

Availability of home-grown food for consumption	No increase	Less than 10% increase	10-25% increase	25-50% increase	Over 50% increase	Total
Male respondents	0	1	1	3	1	6
Female respondents	0	3	2	1	0	6
Total score	0	4	3	4	1	12

and women separately, for example, by giving women and men stickers of different colours or sticks of different lengths).

Questionnaires

Questionnaires (or surveys) are extensively used in gathering quantitative data on various topics related to urban agriculture. They are applied mainly to collect baseline data and quantitative data on production levels, economic costs and benefits, certain characteristics of the producers, etc. Questionnaires can be costly and time-consuming (collection and processing of the data) so it may be necessary to reduce the number of questions as much as possible by focusing on those questions for which quantification is essential and which cannot be answered in another way (one page 'sondeos').

Questionnaires are applied to a representative of the household, who is often the head of household or at least someone who is old enough to know the answers to the questions. Researchers may decide that they can ask either the man or woman of the household, and may prefer one or the other depending on who is around and easier to get hold of, or who knows the most about urban farming. A weakness of formal surveys is that they assume that the interviewee is knowledgeable about all aspects of agriculture and household livelihoods, whereas in many households there is gender specialization, so that surveys need often to be complemented with more detailed group or household documentation methods. A question on who is the head of the household should always be asked, and then the answer used to classify the data as coming from a man- or woman-headed household for calculations of the answers to all the other questions.

It is good to include questions about who is responsible for specific agricultural tasks in the household, or whether hired help is used. Following the procedures of structured interviews, the answers can be classified as male or female (or adult man, adult woman, girl, boy, or hired labourer). When calculating the results, this will then give tables with numbers and percentages engaging in different tasks. Useful questions to differentiate by gender include those about exposure to training, membership of groups and participation in other livelihood activities, where there may well be significant differences in gender patterns, and thus an opportunity to provide good statistics.

Not all questions need to be gender-disaggregated in a structured survey. Those asked about age and education levels can be made questions about

the head of the household, with the answers classified under the sex of the head of household. Similarly, questions about other livelihood activities or sources of income can be asked about the household as a totality. Where these questions are asked about both men and women (usually the husband and wife) in a household, calculating and presenting the results gets more complicated, because of having to process the data from women-headed households differently from those from men-headed households. Most such surveys do not do this, although some ask for the information about all household members and then present these as separate sets of tables, grouped by males and females. It is not advised in most structured surveys, as various complications arise such as the survey time becoming very long and data from children distorting the results (e.g. high proportions of people may be reported as not attending school – and thus classified as lacking education – when in fact a large percentage of the population is under school age).

The interviewers (often junior students are recruited to carry out the interviews) should be properly trained in interview techniques and gender awareness, and the interviews must be implemented under the supervision of experienced research staff. It is important that interviewers take thorough notes, keep a research notebook, and are aware of any qualitative information that may supplement numerical or statistical data gathered through the formal survey method.

The numerical information derived from questionnaires tells us about behaviours of the people we are interested in (namely, men and women urban producers in a particular place) and it may be accurate for that location, yet the numbers may be of limited value if we want to know what proportion of people in the city's population are farming or what role they play in the city's economy. Wider statistical surveys interview both producers and non-producers, mostly in order to determine the proportion of producers in the general population and to allow generalization of findings at city level. In this case, the proper drawing of samples of the population being analysed is essential.

Although survey questions may focus on the behaviour of household members in relation to urban farming, questions about men's and women's interests and preferences are not appropriate for this kind of data-collection method. Focus groups or semi-structured interviews or other participatory techniques are better suited for that. The latter are better suited also for building understanding of main constraints and opportunities, and exploring the causes and effects of certain problems.

Diagnostic tools

Activity-analysis chart

The activity-analysis chart (adapted from Hovorka, 1998: 17-19) is a tool that helps to explore how tasks and responsibilities in urban agriculture are distributed according to gender at the household and local levels.

It is important to accurately understand and document the activities of male and female urban producers in order to assess why an urban agriculture system functions as it does, and the implications of the division of labour for men's and women's roles, responsibilities, and obligations in a particular context. Eventually, gender analysis of activities can inform potential technology and policy options that will benefit both men and women urban producers.

The gender activity-analysis chart may be used to draft interview questions for individuals or focus-group discussions where participants can identify those activities they are actively or partially involved in (indicating the percentage of time involvement of women/girls and men/boys in each activity). Additionally, one may use this tool as a checklist for participant observation in a local neighbourhood or community, as well as when accompanying a producer on his/her 'typical' daily routine.

This tool may also be used in the following participatory exercise: line up three large drawings of (a) a man, (b) a woman, (c) a man and woman. Below these drawings are scattered smaller cards depicting various types of urban agriculture activity. Include some blank cards so that participants can add activities. Ask participants to sort the cards by categorizing them under the three drawings in columns, according to whether the task is generally performed by a man, or a woman, or both. Facilitate the discussion among participants about why they made the choices they did, and why particular tasks are delineated in this way.

Regardless of whether the activity analysis-checklist (Table 17.2) is used in interviews, direct observation, or a participatory exercise, it is important to consider whether respondents are focusing on gender stereotypes (the ways in which activities are divided by gender in society at large) or on the reality of men's and women's lives (the ways in which activities are actually divided up on a daily basis). Further, as noted earlier in this chapter, it may be useful to separate men and women to gather this information, and then bring respondents together to discuss people's activities in a plenary group session.

Seasonal calendar

The gender analysis chart discussed is more apt for getting an overview of gender division of labour in a household, but might be more difficult to answer by the respondents for the cropping activities, since division of labour might differ from product to product, or at different times of the year. This might also apply to certain types of livestock keeping (e.g. division of labour in dairy might be quite different from that in poultry keeping). In such cases the production of a seasonal calendar for the main crops or animals produced might yield a better understanding.

The seasonal calendar helps to explore issues including the following:

- division of urban agriculture tasks/labour among men and women (especially cropping activities) undertaken by the household (and related problems and possibilities);

Table 17.2 Gender-activity analysis checklist

	Activity	*Women/girls*	*Men/boys*
Horticulture (this section may be further disaggregated by crop-type)	Finding plot Securing plot (e.g. building fence) Clearing/levelling plot Guarding plot Land preparation (ploughing, hoeing, etc.) Finding/buying seeds Preparing seeds Sowing Transplanting Weeding Finding water source Irrigating Fertilizing Pest control Harvesting Threshing Cleaning Other processing Storing Packing Transporting produce to market Selling produce from home/at market Maintenance (e.g. irrigation system, shed) Composting Interaction with extension workers/municipal officers Sharing information with other producers		
Animal husbandry (this section may be further disaggregated by livestock-type)	Finding plot Clearing plot Building/maintenance of enclosure/stable/fishpond Cleaning of stable, etc. Finding/buying feed Feeding Watering Milking Vaccinations Other animal health care Slaughtering Selling/purchasing animals Processing animal products Selling processed animal products Disposal/reuse of manure Interaction with veterinary services/municipal officers Sharing information with other producers		
Other	Collecting firewood Collecting water Collecting wild fruits/vegetables, nuts, herbs Processing fibres, dyes (arts and crafts) Cooking Cleaning, sweeping Washing, laundry Disposing of household water Child care, care for elderly and infirm Paying land rent House repair Household garbage disposal Assisting neighbours Attending meetings of producers' organization(s) Attending other community meetings		

Source: Hovorka, 1998: 17–19

- which activities are undertaken in what periods of the year (and in what periods there are labour shortages or surpluses);
- in what periods of the year the households receive more benefits from the garden (food, income) and in what periods they experience food and income shortages.

This tool may be used as follows: first, participants list the main crops grown and animals kept by the household (or community group) interviewed. Second, they are asked which are the most important ones (for food and income); these are then selected for further analysis with the help of the seasonal calendar. A matrix is established, putting along the horizontal line the months of the year and along the vertical line the main crops / animals that were selected for further analysis. Respondents are asked to identify when the growing season for product X starts, and which activity they normally will undertake first, how long that activity will take, and who normally will perform it. Indicate the answers by drawing a line in the weeks concerned and give codes for the type of activity (e.g. s.p. = soil preparation, m= manuring, etc.) and the persons implementing it (for example **o**= female adult, **<** = male adult; ***** is girl and + is boy). One can include the estimated amount of time involved in each activity by using blocks /week for each activity instead of drawing a line. Once you have finished with product X, continue with product Y.

Thereafter, discussions take place on other vital issues, for example in which months they (specifying men and women where relevant) experience food shortages or lack of income, labour peaks, periods with water shortages or high incidence of pests/diseases, high market demand, etc. and what might be done to reduce such problems, or how to make better use of periods with labour surpluses, high market demand, etc. The answers are included in the calendar.

In Figure 17.1 a (rural) example of a seasonal calendar is presented.

Key questions to consider

- How exactly are men/women/children involved in specific urban agriculture activities?
- How do men's/boy's workloads compare with women's/girl's workloads?
- How does the task distribution of urban agriculture differ in men-/women-headed households? Which are the most burdensome tasks? Who is responsible for these tasks?
- Who is responsible for reproductive tasks in the household? And for productive tasks?
- What urban agriculture activities face particular financial or time constraints? Who is responsible for these activities?
- How much flexibility is there in changing the workloads of men/women? Sharing tasks?

Climate Pattern → Month ↓ / Activity	Hot/dry				Warm/wet				Cool/dry			
	Sept	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*June*	*July*	*Aug*
Food shortages					xxxxxxxxxxxxxxxxxxx							
Stumping					□	SP		□				
Hybrid maize	▣◉ LP ◉▣		▣◉		W	F······◉▣			□ ST □	FH PK		□
			▣◉ P ◉▣						▣◉ H	◉▣		
											□ TR □	
Traditional maize	□ LP P □				□ H	□						
Sorghum			□ LP BP □		◉▣ BS ▣◉							
				Q TW Q		Q ST H Q						
Beer brewing	Q											Q
Finger millet			Q PS Q			Q BS Q H Q						
Beans	Q·····R·····Q·····R·····Q H Q											
				Q H Q								
Groundnuts	Q R Q P Q Q L H Q											
Sweet potatoes	Q·····R·····Q P Q CH·····Q											
Collecting Firewood	◉▣											▣◉
Carrying water	◉▣											▣◉
Feeding small Livestock	◉▣											▣◉
Coaching	Q											Q
Childcare	▣											▣
Fence and house Construction and repair	▣·····▣								▣			▣
Cattle herding	▣											▣

Legend			
O	Female adult	SP	Stumping (pulling/digging of trees out of fields)
◉	Female child	LP	Lane preparation
		R	Ridging
□	Male adult	P	Planting
▣	Male child	PB	Planting by broadcast
–	Continuous activity	F	Fertilizing
…	Intermittent activity	W	Welding
T	Transplanting		
TR	Transporting		

BS	Bird scaring
ST	Staking (cutting and staking teepee style)
L	Lifting
H	Harvesting
CH	Continuous Harvesting
S	Shelling
PK	Packing

Figure 17.1 Example of a seasonal calendar
Source: Sims Feldstein and Poats (1989)

- Do men/women engage in or rely on social networks to share burdens and workloads (e.g. sharing of equipment/tools, sharing of child-rearing responsibilities)?
- What are the busiest periods of the year for men/women? Boys/girls?
- What is the relationship between surplus/shortages of resources and men's/women's responsibilities?

The following scenario illustrates how activity analysis may be applied in a particular context.

Urban Agriculture Scenario: household production of urban agriculture crops

An initial survey of production of urban agriculture crops reveals that households are producing cassava, corn, watermelons, peppers, and okra. Gender-disaggregated data further reveal that men produce okra, while women are responsible for the production of all other crops. Interpretation and analysis of this division of labour reveals that women produce cassava, corn, watermelons, and peppers largely for home consumption. Women cultivate peppers, for example, because they require little maintenance and produce over a long period. The household division of urban agriculture crops is such that in being responsible for lower-maintenance crops, women have more time to spend on their household tasks, such as cooking and cleaning, in addition to their urban agriculture tasks. Women are not likely to become involved with okra cultivation, due to the greater time constraints and activity conflicts that this high-maintenance crop generates. Men, because they are not responsible for household tasks, grow okra, which requires more work than some of the women's crops but pays better on the urban market. In this household urban agriculture system, men are responsible for urban agriculture crops for income generation and, in turn, the money generated through this activity. Women contribute to household food security and nutrition due to the variety of crops they produce. Technology and/or policy interventions stemming from this research should consider both profitability and nutrition as measures of food security. Interventions that encourage both men and women to participate in okra cultivation may, in fact, lead to a decrease in nutritional well-being among household members.

Resources-analysis chart

The resources-analysis chart (adapted from Hovorka, 1998: 20-23) may be used to draft interview questions for individuals or focus-group discussions where participants can identify those activities in which they are actively or partially involved. Participants can identify those resources they are knowledgeable about and have access to, when these resources are available, who controls or owns the resource, where it is located, the quality of the resource, how often the resource is used, and the amount of time spent on each resource.

This tool may also be used in the following participatory exercise: place the three large drawings of (a) a man, (b) a woman, (c) a man and woman in a row. Underneath these drawings scatter the smaller cards, each picturing a different urban agriculture resource. Include some blank cards so that participants can add resources. Ask the participants to sort the cards by placing them under the three large drawings, depending on *who uses* the resource (has access to this resource). Facilitate the discussion among the participants about why they made the choices they did, and why resources are delineated this way.

Table 17.3 Example of a resources-analysis chart

Resources (distinguish between individual, household, community, organizational, etc. resources)	*ACCESS* (who normally are using this resource)		*CONTROL* (who decides on who can use the resource)	
	Women/ Girls	*Men/ Boys*	*Women/ Girls*	*Men/ Boys*

Land
 o arable land
   – of good fertility/nearby/flat/ well-drained
   – of lower fertility/farther away/slope/water logging
 o urban forest (fuel wood, grazing)
 o livestock grazing areas
 Water
 o river, stream, drain
 o piped (municipal) water
 o well/pump
 o irrigation and/or drainage systems
 o aquaculture ponds
 o household wastewater
 o trickling filters
 Inputs
 o seeds
 o livestock
 o bought fertilizers
 o composted farm and household wastes
 o institutional credit
 o informal loans (friends, neighbours)
 o tools (shovels, hoes, etc.)
 o building materials (for animal pens, fences, etc.)
 Infrastructure
 o on farm
   • shed
   • stable, pen
   • threshing & drying floors
   • storage facilities
   • latrine, septic tank, waste-treatment pond
 o off farm
   • mill
   • packing station
   • store/shop
   • co-operative
   • trading areas
   • composting site
   • sites of in-kind exchange
 Transportation
 o public buses
 o hired transport
 o bicycle
 o feet
 Information, training, and knowledge
 o government extension services
 o private enterprises
 o veterinary services
 o informal social networks; community groups
 o co-operatives
 o information centres
 o non-government organizations
 o social services (municipal)				

Source: Hovorka, 1998: 20–23

Then put the second set of drawings and cards on the ground, close to the first set. Repeat the exercise but this time focus on *who has control*, ownership, or decision-making power concerning each resource. Again, facilitate the discussion among the participants about why they made the choices they did, and why resources are delineated this way. Ask the participants to compare the ways in which they have arranged the two sets of Resources Picture Cards.

One may also use this tool as a checklist for participant observation in a local neighbourhood or community, as well as when accompanying a producer on his/her 'typical' daily routine. Transect walks can complement the resources-analysis chart, during which one visually notes resource availability and location, as well as people's access to, use of, and control over (where possible) this resource across the landscape. This information can be discussed with local people to gain in-depth understanding of what one sees during the walk.

Resources mapping

The resources-mapping tool can be used to explore what resources the household are using in their urban agriculture activities and who in the household has access to each of these resources and who is controlling them (owning, deciding on who can use it and for what purpose).

Start by asking the participant(s) to identify the main resources they use in their agricultural activities, starting with the land and water resources and on-farm infrastructure available to them, and note this on a map. A good way of doing this is to go around the garden or farm with the household members and make a sketch of the farm/garden layout, indicating:

- boundaries of the plot and approx. length/width; in some cases the household or group may use several plots, for each of which a sketch will be made;
- on-plot and access roads, with fences and gates;
- water sources, pump, irrigation equipment;
- tool sheds, storage facilities, plastic tunnels, greenhouses, shading nets, nurseries, paddocks, pens, etc.;
- locations of raised beds, manure heaps, grazing areas.

Then ask the participant(s) to draw on the map other resources that they use in their particular urban agriculture system. The resources chart might be used to give them some hints of types of resources they may think about (e.g. what inputs do you use and where do you get them?).

Once all resources used have been identified and drawn on the resource map, one will ask the participants to identify for each resource included in the map the individuals who are using this resource (have access to it); the answer will be indicated on the map with the help of simple codes (e.g.: m, f, m/f).
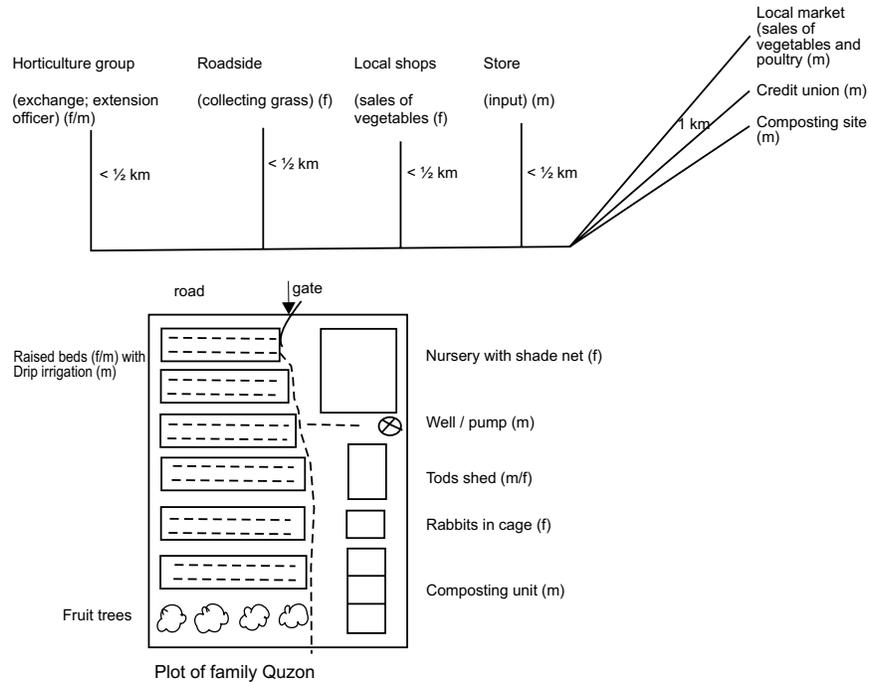
Figure 17.2 Example of a resource-mapping tool
Source: RUAF workshop, Situation Analysis Urban Agriculture, Cape Town, October 2007

This may be repeated for the question about who controls these resources (use the same symbols but in another colour to put this on the map). The flow of resources is a fundamental concept within an urban agriculture system.

Key questions to consider

- What are the main land and water sources? Who makes decisions about who can use these resources? Who owns the land? Who controls water access?
- Which other resources do men and women respectively have access to? Are the rights of access to resources different for men/women or for people from different ethnic or socio-economic groups? For male-/ female-headed households?
- What is the quality of these resources? How does this influence the labour time they have to spend and the benefits they derive from it?
- What resources are underutilized? Which of these are degrading or improving?
- What are the linkages between men's/women's labour input and their use and control of resources?

- How does increased/decreased availability of one resource alter men's/women's use of and control over the other resources? Is men's/women's workload increased/decreased as a result?
- Is it men/women who use credit? Who makes the decisions on credit use? What are men's/women's experiences with credit?
- What is the resource-use and decision-making pattern in female-headed households compared with male headed-households?

The following urban agriculture scenarios illustrate how resource analysis may be applied in various contexts.

Urban Agriculture Scenario: the effects of environmental degradation on urban agriculture practitioners (adapted from Haile, 1991: summary)

Researchers are interested in exploring the effects of environmental degradation on urban agriculture practitioners. A survey of men and women reveals that there is a decreasing amount of fuel wood, which is becoming an obstacle for food processing. Women are identified as those persons responsible for fuel-wood collection: women and girls carry loads of branch wood and leaves from surrounding areas into the city. Analysis reveals that while drought is a significant factor in the decreasing supply of fuel wood, women's use of this resource is exacerbating the problem of depletion. This has created specific problems for women, in that they now must travel farther distances in order to gather adequate fuel-wood supplies. In turn, women have less time to spend in actually processing food for household consumption. Not only is the household receiving less nutritious food, the household budget is used to supplement foodstuff bought from street vendors. As a coping strategy, women have attempted to use cheaper, lower-quality, quick-burning biomass fuels. Unfortunately, the fuel generates more indoor pollution than fuel wood; thus it compromises women's health, and is more time-consuming because it must be continually tended due to its quick-burning nature. Another coping strategy involves the removal of girl children from school to help their mothers with fuel-wood collection. This impedes the ability of young women to gain a solid education. By identifying the primary users of a particular resource, and the implications of this, researchers can better assess what solutions may be appropriate and sustainable.

Urban Agriculture Scenario: dry-season and wet-season urban farming (adapted from Ofei-Aboagye, 1997: 5)

During fieldwork, it is observed that mainly men are involved in dry-season farming. Women operating as individual urban agriculture producers engage in wet-season farming. Those women working with husbands in dry-season farming do mainly in terms of weeding and harvesting. Further investigation reveals that in addition to women having less physical strength to clear the dry-

season farmland, their access to hired labour or a tractor is hindered because it is too expensive (most women heads-of-household are in lower income brackets). Fertilizers and irrigation pumps are also not affordable for them. Because fewer producers (mainly men) engage in dry-season farming, there is more money made due to relatively lower supply of foodstuffs and unchanged levels of demand in this period of the year. Women producers have recently started to organize a dry-season farming co-operative and intend to share resources and farm a single plot of land for income-generating purposes.

Tools for the analysis of decision making and distribution of benefits

The decision-making and benefits-analysis tools presented below help to examine how decision-making powers about urban agriculture activities and resources and who benefits from them are distributed among the various members of a household and among group members.

Understanding the gender division of decision making and the distribution of benefits (including cash and goods) generated through the urban agriculture activities is important, since it provides insight into power relations between male and female household members or in producer groups, and thus the effects that may be expected of certain projects if such relations remain unchanged.

Decision-making matrix

This tool can be used as a participatory exercise to assess decision-making power either in individual household interviews or in focus-group discussions (through which participants can further expand on their views and perceptions of household and external dynamics).

A decision-making matrix is created by listing vertically the various issues on which decisions have to be taken, and by listing the decision makers horizontally. Table 17.4 is an example of this kind of matrix.

One may go through the decision issues in the matrix one by one with the households or group members. Alternatively, one brings together community members and asks the people to divide into sub-groups by gender and to reflect on the following key questions:

- On what aspects of the households' agricultural activities do you make the decisions (as a result of your gender and your particular responsibilities)?
- What decisions are you not allowed to make?
- Are there aspects of the urban agriculture activities that you are responsible for but on which you do not make decisions?
- What decisions are taken jointly?

The groups are brought together, and their answers to each of the questions might be compared and discussed (and filled into the matrix; either the consensus reached or both male and female perspectives).

Table 17.4 Example of a decision-making matrix

Decisions	Man only	Man and woman jointly			Woman only	Comments/ Explanation
		Man dominates	Equal influence	Woman dominates		
Labour Who decide(s) how the available family labour will be used? Who decide(s) whether to hire additional labour? Etc.						
Inputs Who decide(s) what seeds to buy? Who decide(s) what fertilizers to buy? Etc.						
Production Who decide(s) which food crops to grow? Who decide(s) which cash crops to grow? Who decide(s) where to plant what? Who decide(s) when to harvest? Who decide(s) whether certain products will be processed or stored?						
Marketing Who decide(s) what part of the harvest is sold and how? Who decide(s) what animals or animal products are sold and how? Etc.						
Investments Who decide(s) to buy equipment and tools? Who decide(s) to take a loan? Who decide(s) to buy or rent additional land? Who decide(s) to buy more animals? Etc.						
Reproduction Who decide(s) whether a child goes to school or not? Who decide(s) on going to a doctor? Who decide(s) whether or not to apply birth control? Etc.						

Source: De Zeeuw and Wilbers (2004)

Benefits chart

This technique is applied to analyse the distribution of benefits derived from the products and by-products produced by a household, and the making of decisions on the use of the income raised. The exercise can be done with the members of selected households or in a focus group. One can work with a mixed group, which may lead to lively discussion on household decision making. But if women do not speak up in a mixed group, one may choose to conduct separate focus groups for male and female household members.

The procedure for the benefits analysis is as follows:

- Products and by-products derived from the resources of the household are written down on index cards (one card for each product or by-product). In the example given in Table 17.5, the following tree by-products were identified: fruit, fodder, fuel wood, lumber, bark, and poles. Written words can be replaced by pictures or drawings of the (by)products, to accommodate the participation of illiterate members of the household.
- Cards are discussed one by one, looking into the following questions: how the product is used, who uses the product, who decides how it should be used, and who controls the money if sold. Additional input is sought from other household members. The information obtained in this way is summarized in Table 17.5.

Table 17.5 Example of a benefits chart: palm-tree products

(By-) Product	How used?	Who decides on its use (f/m)?	Who carries out the activity (f/m)?	How is cash used if sold?	Who decides on cash use? (f/m)
Leaf	Leaf veins made into brooms	f	f		
	Leaves wrapped around boiled rice	f	f		
	Sticks	anybody	anybody		
Fruit	Eaten at home	f + m	f + m		
	Sold at market	f	f + children	To buy food + other basic necessities	
	Dried and sold for production of coconut oil	f	f + children		
Husk	Made into charcoal for home use or sale	m	m		
	Fibre used to stuff pillows and mattresses	m	m		
Trunk	Used as fuel wood	m	f + m		
Tree	Shade	f + m	f + m		
	Ornamental use	f + m	f + m		

Source: Lingen (1997)

The following urban agriculture scenario illustrates how gender-benefit analysis may be applied in various contexts:

Urban Agriculture Scenario: decision making and benefits of urban vegetable production (adapted from Ofei-Aboagye, 1997: 8 and Mianda, 1996: 99)

Benefits from vegetable production in a local urban agriculture system, as defined by urban agriculture practitioners, are considered to be earnings and decision-making power over these earnings. Researchers found that on the whole men earn more from vegetable production because of their larger holdings and ability to do two farming seasons, both wet and dry. Men who farm with their wives save on labour costs, produce greater crop yields, and have complete control over how profits are allocated. Those crops produced by men fetch more per acre at the local market, as compared with women's crops that are more fragile and perishable. In those households where only the wives produced vegetables, women have more decision-making control over income generated than women who farmed with their husbands. Interviews with the wives revealed that, in some cases, husbands not involved in vegetable production may impinge on women's benefits (i.e. cash) from this activity. Rather than give the profits to their husbands, women vegetable producers use strategies based on their social role as mothers to keep cash to purchase household needs. Researchers found that women producers who are not landowners demand their share of revenue derived from production, because they are the ones who are primarily responsible for the care of children. However, when they are not successful in convincing their husbands of the need to share earnings, women retain part of the money from their vegetable-produce sales without the knowledge or consent of their husbands. While still in the marketplace, women entrust their earnings to money managers (e.g. floating banks), women friends, or their own children, or will simply deposit the cash in a hiding place where men are not likely to search (e.g. in a kitchen pot or pan, culturally associated with women's domain). They do so to establish decision-making power in their own right.

Identification and ranking of main problems and opportunities

For a gender-sensitive identification of major problems and opportunities, one invites the participants in two separate groups: one of women and another of men. Eventually, these groups may be further divided along the lines of age, ethnicity, class, and so on.

Ask the participants first to think about the main *problems or constraints* that they encounter in the implementation and development of their agricultural activities (which might be technical, financial, organizational, political, or other problems).

Subsequently prioritize the problems according to their importance (in the view of men and women respectively) with help of a *ranking* method. Set up a matrix (on a black board or sheet of wall paper or on the floor) listing all problems identified (by men and women) on the vertical axis (see column 1 in Table 17.6) and add a symbol to each of them (for any illiterate members of the group). Subsequently all participants are asked to vote on which problem(s) they consider the most important ones. Each participant may be given several votes, which can be distributed over the various items in the list according to individual preference.

The voting might be done with help of small stickers (e.g. in two colours for men and women respectively) or pebbles or sticks (if the matrix is on a table or the floor). In the example, six male participants and six female participants each received five stones, which they distributed among the five impacts mentioned according to their own preferences. The example clearly indicates the importance of gender differentiation when doing the listing and ranking. If we had not done so, we would not have discovered that the key problems and priorities of female producers are (partly) different from those of the male producers.

One may also conduct an inventory what of *local potentials, opportunities, recent innovations, plans, ideas, and challenges* the urban producers are identifying. Starting from opportunities normally creates a positive climate and is very stimulating for the participants. In this case the participants may be asked to think about questions such as the following:

- What things have you been trying out/experimenting with recently? What innovations have you observed in other urban farms/gardens that might be of interest for other urban farmers/gardeners too? (Think of technology as well as innovations in the way they process, store, and market their products and in the way they organize themselves.)

Table 17.6 Example of a ranking exercise

Problems encountered	Male producers	Female producers	Total score	Ranking		
				M	F	T
Pests	8	3	11	3-4	6	5-7
Lack of irrigation equipment	15	1	16	1	9	1
Theft/no fence	4	7	11	6-7	4	5-7
Poor sales of surpluses	8	2	10	3-4	7-8	8
Insecure land tenure	4	4	8	6-7	5	9
Harassment by police officers/ illegal status of UA	6	9	15	5	2	2
Lack of technical support	10	2	12	2	7-8	4
Plots are too far away; difficult to combine with tasks in the home	2	12	14	9	1	3
Low quality of irrigation water (contaminated)	3	8	11	8	3	5-7
Total score	20 x 3 votes = 60	16 x 3 = 48	36 x 3 = 108			

- What market opportunities/niches exist that we may utilize? Are some products in high demand during specific periods of the year? Are consumers asking for new products or specific qualities (e.g. organic or certified products) or other ways of presenting produce (small units, dried, etc.)?
- What ideas/plans do you have for the development of your garden/farm and your group/organization?
- What resources are available in the city that are under-utilized and might be accessed and applied by you?

The potentials and opportunities are listed and prioritized by men and women participants respectively by applying the ranking method explained above.

Design tools

Problem and opportunity analysis

The problem and opportunity analysis tool helps to explore the causes of priority problems identified by male and female urban producers, to identify possible solutions to such problems, to further analyse the prioritized (most promising) opportunities for further development of that urban system, and to identify the steps needed to realize such an opportunity.

Applying gender analysis to the identified problems and opportunities is a fundamental step in making recommendations for appropriate, sustainable, and equitable interventions. A solution for a problem or an opportunity initially may be identified by one sex but may have implications for other household members or other households in a neighbourhood.

Problem and opportunity analysis charts

To conduct participatory analysis of the *priority problems* identified in the diagnosis stage, a problem-analysis chart may be used. See Table 17.7. In the first column you list the priority problems identified, making sure that both men's and women's key priorities are included. Then you discuss for each of the *priority problems*:

- What are the causes of this problem? The answers are entered in column 2.
- What do men and women respectively do currently to cope with this problem? List the coping strategies in column 3.
- How is this problem (negatively) affecting men and women? List the consequences for men and women in column 4.

Similarly, an analysis chart (see Table 17.8) can be made for the *priority opportunities* that have been identified, by discussing for each the following:

Table 17.7 Example of a problem-analysis chart

Priority problem	Causes	Actual coping strategies	Consequences of the problem and related coping strategies for		
			All	Men	Women
1 2 3 4	a. b. c. n. etc.	a. b. c. n.			

- What steps/activities should be undertaken in order to realize this opportunity or potential or to further develop this innovation?
- What would be the positive and/or negative effects on men and women when this opportunity was realized? How would these potentials, plans, and opportunities change existing division of men's and women's activities, access to and control over resources, distribution of benefits, etc.?

Table 17.8 Opportunity-analysis chart

Priority opportunities identified	Steps needed to realize the potential	Expected effects of realizing this potential for		
		All	Especially men	Especially women

Urban Agriculture Scenario: gender-sensitive problem analysis (adapted from Slocum et al., 1995: 172–180)

By analysing the problems identified by men and women of a particular urban area, researchers find gender-differentiated impacts of problems, coping strategies, and potential solutions. (See Table 17.9.) For example, the lack of land poses a specific problem for women producers. While both men and women face constraints due to the illegal nature of urban agriculture in this city, women are further disadvantaged because they traditionally have few rights to land tenure, as such men tend to have first choice of any available vacant land suitable for urban agriculture. This often leaves women with low-quality plots of land that are located at a considerable distance from the homestead.

Table 17.9 A combined problem-and-opportunity analysis chart

Problem	Causes	Coping strategies	Resulting problems	Solutions and opportunities
Not enough land for UA	Urban agriculture is considered illegal. Women have no rights to land tenure. Rapid urban expansion; vacant land used for construction of buildings etc.	Men and women using land in the peri-urban areas	Long distances to vacant plots for women. Only marginal land available for women (resulting in lower yields). Men and women still subject to harassment by municipal authorities	Lobby municipality to legalize and support urban agriculture.
Inadequate water supply	Drought (rationing of water). Local pump with poor water quality. Staggered supply of water by municipality	Women buying water from market vendors	More household cash is spent on water; women in charge of budget. Not enough water for crop irrigation; men's activity.	Increased use of grey water for irrigation (technology to be managed by women and applied by men)
Cattle too expensive	Shortage of cattle on urban market	Men travel to rural areas to purchase cows. Goats used for milk production by women	Men away from household for long period; thus less income brought in by men Livestock activities (once done by men) now women's responsibility (in charge of small animals)	Men to form co-operative in order to share available cattle and resulting milk production for household consumption and sale

The solution for increasing access, as identified by the group, may improve access to land for urban agriculture in general. However, it will not address the issue of inequitable access to land between male and female urban producers. The problem of expensive livestock may initially be considered a problem for men. Yet women are also burdened by a lack of cattle, for when goats are substitutes as milk producers it is women who now tend to this activity. An appropriate solution identified by the women in this group calls for the men to form a co-operative and share in urban dairy-farming activities.

Problem (or opportunity) tree

The problem tree is a useful tool to analyse the causes and consequences of a central problem that has been identified and – by doing so – to identify possible solutions to the problem (tackling the problems) and potential effects of solving the problem (taking away the consequences).

If you have implemented the analysis exercise discussed above, then making a problem tree is quite easy since the causes and consequences have already been identified for each core problem and can be inserted in the problem tree after discussing their causal linkages (see the explanation below).

One may develop a problem tree directly after having identified the priority problems (and without making a chart analysis first). In that case it is recommended to subdivide the list of problems into 'clouds' or 'clusters' of problems that are strongly interrelated. One may do this by writing each problem on a card and then making the clouds, while discussing their relationships. Finally one chooses the core problem in each cloud (the problem that creates many other problems and has the most important effects on the lives of the participants).

Take one core problem and place in the middle of a sheet of paper or blackboard (the trunk of the problem tree). Discuss now for each other problem within the same 'cloud' how it is related to the core problem: a cause (a root of the problem tree) or an effect (or consequence) of the core problem (branch of the problem tree). Also the relation between the various causes and respective effects are discussed (is this one causing the other?). Additional causes or effects may be identified during the discussion and added by writing additional cards. The exercise will result in a diagram such as the one featured in Figure 17.3.
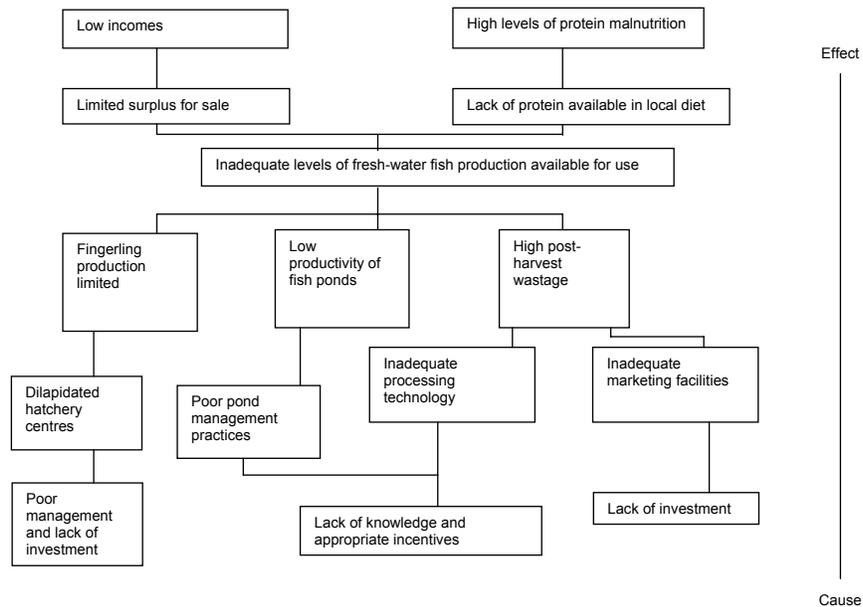

Figure 17.3 Example of a problem tree
Source: AusAid (2000)

This procedure is repeated for all 'problem clouds' (with a maximum of three or four).

When the causes and consequences of each of the core problems have been identified, one proceeds with the identification of possible ways to solve the core problem, by systematically analysing the different possibilities to influence each of the problem causes included in the problem tree. Some causes might be more difficult to change at the local level than others.

Once you have identified potential solutions to each core problem, you will enter into an assessment of these alternative problem-solving strategies. To do so you first need to establish the criteria needed to assess and choose certain solutions/problem-solving strategies. Ask participants which criteria they want to use to assess and select certain solutions. Provide (additional) suggestions where needed. For example, if participants have not considered how equitable a particular solution is for both men and women, encourage them to reflect on this issue: how might this solution affect gender division of labour, their role in decision making, distribution of benefits, etc? Also encourage participants to consider how much will it cost compared with the benefit it will bring? What human and financial resources are needed, and which of these are locally available and which are not? Will this solution have negative ecological or social effects? How long will the solution last?

Once the criteria have been established, ask participants to rank each solution according to these key criteria (see the example in Table 17.10). If not enough information is available to assess certain options, ask participants how they plan to obtain more information.

Table 17.10 Example of an assessment of proposed solutions

Proposed solutions for the irrigation problem	Suggested evaluation criteria						Votes	Rank
	Low investment cost	Low price of water (incl. maintenance)	Easy to manage (esp. by women)	Optimal use of locally available means	Providing enough water	Low health risks		
Collection of storm water	10	10	4	12	–	2	38	2/3
Use of household waste water	14	14	10	12	–	–	50	1
Digging a shallow well plus hand pump	6	6	6	6	6	6	36	4
Digging a deep well plus electrical pump	–	–	–	–	10	8	18	5
Use of municipal piped water	–	–	10	–	14	14	38	2/3
Total	30	30	30	30	30	30	180	

Similarly one can draw a tree to analyse the main opportunities (under-utilized resources, local innovations that can be further developed, market demand/niches) that have been identified. The highest-ranking opportunity is selected for further analysis (the trunk). In this case the roots will represent the activities that will have to be implemented in order to realize that opportunity, and the branches represent the effects or results that one expects to obtain by realization of that opportunity. These opportunities can be assessed in the same way as indicated above for the assessment of problem solutions.

Formulation of results-based objectives

Once key problems and opportunities have been analysed, it becomes possible to formulate the project objectives. But before doing so it might be the right moment to consider whether key interests in the group are homogeneous enough to have one group/one project, or whether it might better to have more groups with more homogeneous interests, each with a separate project, or to have a number of (co-ordinated) sub-projects (e.g. a specific women's sub-project next to other sub-projects for both sexes). See also the group-definition tool.

The formulation of project objectives starts by reviewing the results of the problem-and-opportunity analysis: which problems and opportunities will be tackled? Include these in the first column of the chart in Table 17.11.

Subsequently discuss for each of these key problems/opportunities:

- How can the actual situation be described in measurable terms? (column 2);
- What results can realistically be expected from the selected problem-solving or opportunities- realizing strategies? (column 3).

Finally, formulate the results-based project objectives (column 4), which should:

- clearly reflect the changes in the situation that are expected to be realized as a result of the project;
- be formulated in measurable terms so that the results can be monitored (both the magnitude of the effects that will be realized as well as the number of beneficiaries that will be affected);
- be achievable in the given local conditions, with the people and means available (or that realistically can be expected to be generated) and within the project period.

Group definition (adapted from Slocum et al. 1995: 120–123)

The group-definition tool helps a project group or producers' group to clarify the limits and resources of their own group. Urban agriculture projects may fail either because they excluded certain members of the community, or

Table 17.11 Example of a chart with results-based objectives

Selected key problems or opportunities	Actual situation	Realistic achievable results at the end of the project	Results-based objectives
Severe water shortages in dry season	Only 20% of the producing households have access to irrigation water during the dry season. Water costs per acre are on average $ X	60% of the households will have access to water for irrigation during the dry season. Water costs involved will have been reduced by 30% (excl. inflation).	Access of the urban producers to irrigation water during the dry season will have been enhanced from 20 to 60% of the producing households. Costs of irrigation water during dry season will have been reduced from $ X to $ (X-30%).
High incidence of pests in dry season	Average yield per acre in dry season is only about 70% of the average yield in the wet season	Average yield per acre in dry season is about 90% of average wet-season yield	By reducing losses due to pests, the average yields during dry season have risen from 70 to 90% of average wet-season yields
Weak producers' organization	All decisions are taken by the group leader and an informal clique of friends. No clear development plans. Functionality of the organization is low, due to poor internal structuring and low involvement of the members. No maintenance of equipment, due to lack of funds.	Decision making is taking place in a management committee. A strategic five-year development plan has been made which orients planning and decision making. Annual action plans and budgets are being made. Functional sub-committees are operating (buying/ selling inputs, marketing, savings scheme).	At the end of the project the producer organization is led by a management committee according to five-year strategic and annual plans; functional sub-committees and a savings scheme are operational

because they were too heterogeneous in terms of the priority interests of the group members, or because they were too small or too big to realize the set objectives.

Discussion of the following questions might help to clarify the group's definition, and eventually in rearrangements (inclusion or exclusion of new members, creation of more groups or sub-groups with more homogeneous key interests, etc.):

- Who is in this group as presently formed? How can the membership be characterized (e.g. main interests, socio-economic status, position in local community, gender, ethnicity, age)?
- Who are at present excluded from or barely included in this group as presently formed in terms of gender, ethnicity, class, age, etc.? Are there others with the same or similar key interests that should be included?

Would any of those currently excluded from the group have resources to offer in terms of valuable knowledge or skills, tools or materials? Will we recruit others to join our group or limit participation? If we want to include others, what should be done to realize that?

- What would be the optimal group size for the things we want to do; can all voices be heard? If the group is large, how can we use small groups to do some of the work?
- How are decisions made at the present time? Who can make what kinds of decision? What decisions can best be made by the group as a whole? What other decisions can be made by sub-groups or functionaries?
- What other groups and organizations should we interact with? Why? What interests do they represent? How we should interact with them? Report to those outside? Hide certain information from those outside? Seek regular or occasional support and inputs from those outside? Form alliances or networks?

It is recommended to summarize the outcomes of the discussions in a clear group definition: who we are, how we make decisions, our potential allies, etc.

Mapping institutional linkages

The institutional networking tool helps a project group or producers' group to identify key actors, explore their roles, and establish the perceptions that people have about these institutions. It clarifies which institutions are the most important, which have the respect and confidence of men and women, and who participates in and is represented by which ones. This tool is also a visioning exercise whereby participants can identify key institutions that they would like to engage in an urban agriculture project, and the ways in which linkages will be forged.

A (non-exhaustive) listing of institutions that might be of significance in a particular urban agriculture context is as follows:

- Co-operative
- Producers' association
- Marketing association
- Garden club
- Composting group
- Community kitchen
- Other community-based organizations (e.g. youth league, parents' association, churches, community centres, etc.)
- Schools, local clinics, local churches
- NGOs
- Municipal authorities (e.g. Department of Housing, Land Affairs, Health, Local Economic Development, Social Affairs and Community Development, Parks and Forests and/or Agriculture, etc.)

- Government agricultural extension and veterinary services
- Credit services (e.g. bank, lending centre)
- Private enterprises (e.g. inputs, processing, marketing, services)

As a participatory exercise, participants in a group meeting are divided into two sub-groups: one representing women, one representing men. Each group is given four sets of different-sized circles made of coloured paper (at least six each of very large, large, medium, and small sizes). Participants of each group list the groups, organizations, or institutions with which they co-operate in their urban agriculture activities in one way or another. Subsequently they write the name of each organization in a circle (size of circle corresponding to the importance they give to the said organization for the development of their agricultural activities). Finally, the participants lay the circles in a configuration which indicates the relationship between and among the different groups and organizations, with their own group in the middle, groups/organizations based in their own community close to their own group, and external institutions further to the outside.

Participants then discuss:

- Why is this organization more or less important for our urban agriculture activities? What is its actual role? What services does it provides?
- What might be the potential value of this organization for the realization of our plans and solving our problems? What limits the actual value of their services for us? How they might improve, and what can we do to promote that?
- What relations do we want to maintain with each of them? How will we do that?

The sub-groups then share and compare their results and jointly draw their conclusions. Participants may decide to also invite to a meeting a representative of one or more organizations that have been identified as important, to establish the appropriateness and potential of collaborating with such institutions. Next to questions about their mandate, programmes they implement, services they provide, how to apply for support or come to an agreement to collaborate, it will be important to look into their degree of gender sensitivity, the availability of female staff, the degree of attention to female producers, and integration of gender issues in their activities.

The following urban agriculture scenario illustrates the type of information garnered from this exercise:

Urban Agriculture Scenario: assessing the effectiveness of extension services for urban agriculture practitioners (adapted from Hovorka, 1998: 24-25 and Slocum, 1995: 127-131)

The Venn diagram (see Figure 17.4) shows a relatively small circle, representing local extension service, compared with a larger circle indicating the greater
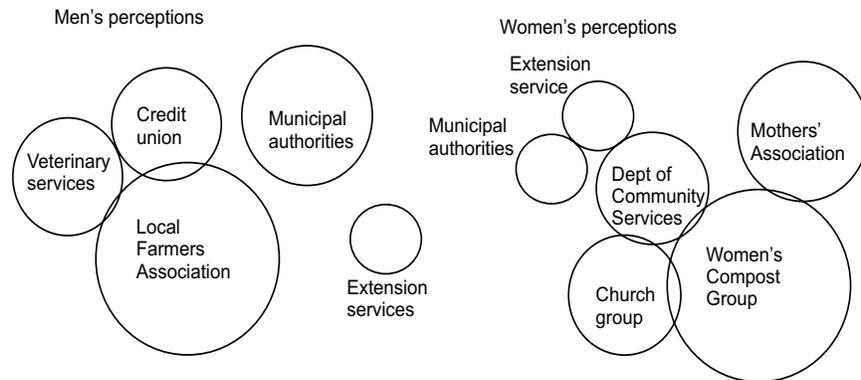
Figure 17.4 Men's and women's assessment of the importance of various organizations

importance of the local farmers' association (men's diagram) and the compost group (women's diagram). During a focus-group discussion men and women participants voice their concerns regarding female extension workers' unwillingness to do field visits in a 'dirty environment', and their inability to handle larger livestock such as cattle. Further gender analysis, through individual interviews with men and women, reveals that while all persons share the former concern, women producers are satisfied with female extension workers' support in gardening and poultry activities, for which women are largely responsible in this urban agriculture system. It is the men who are frustrated with extension services related to larger livestock. This distinction is a key element in improving extension services so that it is of benefit to both men and women producers.

Activity-planning tools

Activity-planning matrix

The activity-planning matrix is a tool that helps to establish concrete and realistic plans for implementation of priority development activities. To produce the activity-planning matrix, all urban producers who share certain development priorities are brought together. Interested support organizations and other potential partners might also be invited to participate in the planning activities.

The activity-planning matrix (see the example in Table 17.12) starts with entering the results of the design phase. In the first column the group's 'priority problems or opportunities' are stated; in the second column, are entered 'Solutions/Steps', the most effective solutions to solve a problem (or steps to realize the opportunity) that have been previously identified. Subsequently the participants are asked to review all the concrete activities necessary to achieve each of the solutions (or steps), which are filled in the third column,

'Activities'. For the fourth column, 'Actors' (Who will do it?), ask participants to review what they can do themselves and what kinds of support they need from other organizations. For the fifth column, 'Resources needed', ask the participants first to identify what they can contribute themselves or what can be obtained from other local sources, and second to identify what external resources may be required. To identify the organizations that might be able and willing to provide such support and resources, the participants will review the results of the institutional linkages exercise (see above).

It is important to ensure that women can participate equally in this exercise. In case there is a risk that men will dominate the planning, it might be good to do all steps of the planning exercise with two homogeneous subgroups, each of which gives its input to each step. One should also ensure that the gender-

Table 17.12 Example of a project-planning matrix

Priority problems or opportunity	Selected solutions (steps to realize the opportunity)	Activities to be undertaken	Actors (Who will do it?)	Resources needed (Who will contribute what?)
Water shortage	1.Collection of storm water	1.1 Acquire and deliver the required materials. 1.2 Instruct group members in (a) how to connect collection pipes to tin roofs and link to water tank and (b) how to maintain the system. 1.3 Install the system.	1.1 Project committee 1.2 Water Dept 1.3 Producers guided by Water Dept staff	1.1/1.2 200m pipes, 40 water tanks, transport, and 2 instructors x 1 month by Water Dept. 1.3 Labour, nails, wood for platforms, hammers, etc. by producers
	2. Re-use of household wastewater	2.1 Instruct the group members on safe reuse of household waste water	To be completed	To be completed
	3. Link community gardens to municipal piped water system (back-up system for dry periods)	3.1 Apply to the Municipal Water Department. 3.2 Organize a savings account in order to be able to pay the water charges in dry season		
High pest incidence in dry period	1. Capacity development on identification and integrated pest management	1.1 Prepare an Urban Farmer Field School on IPM. 1.2 Implement the UFFS		
	2. Change to resistant varieties in dry season	2.1 Identify potential resistant varieties. 2.2 Participatory design implementation and evaluation of local trials		

differentiated results gained from previous diagnosis and design activities are fully used and that both men's and women's priority problems and preferred solutions are taken into account.

Participatory budgeting

The objective of this tool is to facilitate preparation of a budget estimate for projects. The exercise can be prepared by listing basic budget components and by preparing a template to guide group work (see Table 17.13).

First, ask participants if they have ever participated in preparing a budget for a project. Ask them to identify the types of thing that they included in the budget. As participants respond, sort items into the major categories such as:

- **Investments** (purchase of animals, equipment, and construction materials, and costs of construction – including local labour – of infrastructure like cowsheds, poultry pens, composting units, etc.).
- **Costs of training**, **research**, **and extension activities** (other than personnel): production of educational and instructional materials and audio-visuals; costs of workshops, training courses, exchange visits, demonstrations, extension meetings (including related travel costs and meals of participants, allowances, costs of trainers/instructors and required training materials).
- **Costs of co-ordination**, **planning**, **monitoring**, **and evaluation activities** (other than personnel): costs of planning and evaluation meetings, data gathering and processing, etc..
- **Personnel costs** (salaries, fees, wages (plus related costs like social security and taxes) of persons from the producers' organizations who will play a role in the project (e.g. co-operative manager, store keeper, secretary) and others who will be specially hired for this project either on a more continuous basis (e.g. project co-ordinator) or for the realization of specific activities (e.g. trainers, specialists, etc.).
- **Travel expenses** incurred by such personnel (transportation, lodging/ meals or DSA).
- **Related office and communication costs** (office supplies, photocopying, fax/telephone/mailing costs, office expenses (rent/water/electricity/etc.), computer supplies, banking costs, etc. as far as directly related to the project; if that is difficult to define, one might also opt for including a certain percentage (e.g. 10%) of the personnel costs as 'overhead costs'.
- **Unforeseen:** (5%).

Explain that in most projects, costs can be broken down into these categories. Subsequently, one will use the information included in the 'Resources needed' column of the activity-planning matrix that was developed earlier to formulate the budget, translating person months and materials into monetary terms, as is illustrated in Table 17.13.

It is good custom to add a number of columns to the right of the column '(total) amount', to specify who will contribute what (e.g. own contributions of the producers, Water Department, Ministry of Agriculture, an NGO) and to indicate what will be contributed in kind and what will be made available in cash.

The 'participatory' in the title of this tool refers to (a) the participation of male and female producers in preparing the budget so that it is fully 'owned' by them; and (b) the involvement of other actors/stakeholders who commit part of their institutional resources to this local project in accordance with their own mandate and programmes.

Finally check the following:

- Have certain budget items been gender-specified where required?
- Are both men's and women's priority activities funded?
- Have gender-affirmative actions been funded?
- Are all means that are required to implement the proposed activities included in the budget? Are cost estimates realistic (take into account inflation and salary increases over time)?

Table 17.13 Example of participatory budgeting

Activity set	Personnel	Unit price	# of units	Amount
1. Activity #1	Personnel	Rupees		Rupees
	1. Project Manager	2,000	11	22,000
Example. Establish	2. Research Officer	1,500	20	30,000
and support gender	3. Short-term Adviser	1,500	26	39,000
committees to work	4. Committee Clerical Support	500	50	25,000
with local government	Total personnel activity #1		46	116,000
officials to bring more				
women into the local	Travel			
planning and decision-	1. Trips between A and B via C	200	10	2,000
making process.	2. Accommodation		Nil	
	3. Meals while travelling	200	10	2,000
	Other (list specifics)			
	Meeting expenses	5000	5	25,000
	Supplies			3,000
	Communication			3,000
	Total activity #1			151,000
Activity #2 (specify)	As above			
Activity #3 (specify)	As above			
Etc.				
Activity #X: Project Management	As above			

Source: CNGO, 2003: 31; 58

- Could the same activities be implemented more efficiently if other methodologies were applied or the project was organized in another way?
- Are resources that will be contributed by the producers themselves well specified? Can such contributions realistically be expected?
- Can the planned contributions of other actors realistically be expected?

It should be pointed out to the participants that different funding organizations have different formats for preparing their budgets. So if the budget is prepared to apply for funding to a certain organization, they should first enquire what budget format is preferred.

Scheduling the work

The objective of this tool is to teach the participants how to formulate a work plan to implement the project and how to schedule planned activities. A work-plan template can be prepared to guide group work (see Table 17.14 for an example). The format of the work plan can be changed according to the needs of the project, so facilitators should give examples of how and when this can be done.

First, discuss and highlight the importance of a schedule that specifies what will be done, when, and by whom. Then explain the format of the work plan you have prepared. Following this, form specific groups for sub-projects or specific activities and have participants begin to prepare a schedule for the activities they have identified in their activity-planning matrix: estimate for each activity and sub-activity the time that will be required to realize that activity, the sequence required, and the best moment to start/end it. Allow about one hour for group work, then assemble in plenary for presentation and discussion.

When scheduling the work, it is important to take into account the seasonal calendar and division of labour, for example by asking the following:

- What are very busy times for men and women (what might prevent them from participating)?
- What are the best periods of the year to discuss and tackle certain issues (when men and women can be involved in planning or implementing that activity or that problem can be observed in the field)?

Implementation tools

Implementation checklist

During preparation for the implementation, a checklist can be developed which includes the various ways in which gender will be integrated into project activities. This checklist can easily be shared with others and is a quick reminder of key things to consider when implementing a specific activity. The

Table 17.14 Example of scheduling the work

Name of Project	Gender in Local Planning and Decision-Making														
Implementing Agency	Nepal NGO														
Time Period (Year)	January 2004 to December 2004, One Year														
Intended result	Main and sub-activities	Person responsible	Months of the Year 2004												Remarks
			J	F	M	A	M	J	J	A	S	O	N	D	T	
Increased and more effective participation of women in local planning and decision-making	Main:															
	Conduct baseline study and gender analysis	Research officer/ monitor	15												15	
	Network with local officials and agree on strategy for creating committees	Project Manager		3										2	5	
	Create joint committees of local government, NGOs and other community organizations	Project Manager			3										3	
	Support and assist committees to develop practical strategies and methods for increasing the involvement of women	Short-term technical adviser				10	2	2	2	2	2	2	2	2	26
		Clerical support for committees				10	5	5	5	5	5	5	5	5	50
	Monitor extent to which participation increases	Research officer/ monitor							2					3	5
	Adjust strategies and plans, as required	Project manager												3	3

Source: Adapted from CNGO, 2003: 31; 58

same checklist also can help in monitoring the implementation of gender-mainstreaming initiatives. To that effect a column might be added in which one can indicate the percentage of completion of each planned gender-mainstreaming activity (progress thermometer).

The checklist that was developed by partners for use in the RUAF–CFF programme is shown in Table 17.15 as an example. The checklist can be reviewed by the project staff when preparing new activities and during meetings with other team members and/or with producers and other stakeholders in the project.

The Urban Producer Field School (UPFS)

The Urban Producer Field School (UPFS) method applies adult-education thinking and experience and group-based learning processes to agricultural capacity building. UPFS originated as Farmer Field Schools (FFS), initially developed to facilitate farmer understanding and application of integrated pest-management principles in rice farming, for which conventional technology-transfer training approaches were found to be inadequate (Röling and Van de Fliert, 1998). The approach has subsequently been expanded for use with other crops and to address a wider range of issues than integrated pest management (Röling, 2003; Züger, 2005).

FFSs provide the setting and the materials for producers to explore and discover for themselves new knowledge about agricultural production. They are based on the presumption that knowledge actively and repeatedly obtained in this way will be more easily internalized, retained, and applied after completion of the training. Repetition is important for retention, which is one reason why FFSs are repeated, usually on a weekly or fortnightly basis, with the same structure throughout the growing season. FFS was developed in rural settings, and the urban situation has required some adjustments in the tool, especially in the major time commitment required by FFS participants, which can be problematic in urban conditions where agriculture may be only one of several livelihoods activities.

The participation of both men and women in urban field schools is extremely important, in order to capture fully the different experiences and expertise present in the local population, and also the different needs that men and women may have. For example, evidence from field schools in Lima, Peru indicates that women are more time-constrained than men, because of domestic obligations in addition to income-earning activities like petty trading or the provision of services. This limited their participation in horticulture-based field schools, in which both men and women have an interest. It is advisable to consider ways to limit the total duration of the field school so as to better accommodate women. Since women are almost exclusively involved in raising small animals, it is especially important that livestock field schools adjust themselves to women's schedules.

Table 17.15 RUAF–CFF checklist: implementation of gender-mainstreaming activities

o **Integration of gender in the situation analysis**
  - local team trained in gender issues of urban agriculture
  - gender-sensitive and disaggregated data collection; use of gender-sensitive PRA tools
  - external gender adviser assists the team in preparing the activities and comments on draft results
  - policy review to be done with attention to gender
  - implementation of gender case studies on all aspects of the gender framework
  - gender-sensitive analysis of results
  - attention to gender in report on the situation analysis (facts and recommendations)

o **Integration of gender in all training activities**
  - gender-sensitive trainers
  - specific module on gender and UA
  - gender aspects in every other module highlighted
  - gender balance in participants
  - gender adviser advises on contents training modules

o **Integration of gender in policy seminars**
  - gender balance in participants
  - gender-sensitive facilitator; use of gender-sensitive discussion methods
  - gender issues are included as a separate topic on the agenda of the meeting
  - gender aspects are highlighted when dealing with other topics

o **Integration of gender in knowledge materials**
  - specific working material and/or Urban Agriculture Magazine issue on gender and UA
  - gender aspects highlighted in each of the other knowledge materials

o **Integration of gender in the City Strategic Action Plan or Municipal Policy on Urban Agriculture**
  - members of the working group(s) are trained in gender-sensitive planning
  - gender adviser comments on the draft proposals of the working groups
  - gender-sensitive facilitator of the Multi-Stakeholder Forum on urban agriculture (MSF)
  - gender balance among participants of working groups and forum participants
  - gender capacity of each forum member is enhanced
  - gender issues on the agenda of the MSF
  - gender-positive actions are taken and special funds earmarked
  - MSF statement on gender

o **Integration of gender in M&E of RUAF**
  - use of gender-sensitive indicators
  - use of gender-sensitive tools and methods for data collection
  - gender-sensitive analysis of results
  - gender-aware researchers and facilitator

o **Gender mainstreaming in own organization**
  - promote adoption of a gender statement
  - promote development of a gender policy
  - ensure gender balance among the employees of the organization (starting with the RUAF team)
  - announce that the RUAF gender adviser will be appointed to advise the whole organization

Each field school session, both in its 'classical', rural version and in the adapted urban field school, is structured into different parts, which – with their facilitation – are described in different methodological sources (see for example Arce et al., 2006a; 2006b) and are not discussed in detail here. It is important to incorporate a gender dimension in all parts of the session structure, and not simply add a special topic on gender in one field school session. The typical structure for an urban producer's field school is included in Table 17.16.

Table 17.16 Session structure of an (*engendered*) Urban Producers Field School

1. Welcome (*during first meeting: self-introductions of men and women participants*).
2. Review of last week's session (*gender-related issues that arose are highlighted*); clarification and distribution of the tasks for this session (*equal participation of men and women is ensured*)
3. Sub-groups: diagnosis of a specific problem and identification of possible solutions
4. Presentation and discussion of results (*gender-linked aspects of the identified problems and solutions are identified*)
5. Key theme of the session (*gender is incorporated into each key theme*)
6. Agreements on next session (*the suggestions of both men and women are taken into account*)
7. Evaluation of group process; strengthening group dynamics (*attention is given to the contributions of men and women to the session and related gender dimensions*)

Participatory innovation development (PID)

A local or farmer innovation can be described as a 'new and better way of managing resources' that is discovered through learning from own experiences, local experimentation, sharing with other farmers, and creative use of their local knowledge (including knowledge originally stemming from external sources that is fully internalized within local ways of thinking and doing) (Waters Bayer and Van Veldhuizen, 2004). A local innovator then is a person or group who – on their own initiative – is developing a new technology or a new way of doing things, using basically their own knowledge and experience and locally available resources.

Participatory innovation development (PID) is a process that seeks to stimulate and strengthen local innovation by taking farmers' own experiences, knowledge, and capacities as a starting point, enhancing local innovation capacity and facilitating further development of local innovations by linking local innovators to other experiences, information, and ideas coming from other actors (e.g. farmers, researchers, development agents). Inspiring experiences with the PID approach are presented by Critchley (1999), Waters-Bayer and Van Veldhuizen (2004), and Wettasinha (2007). See also www. prolinnova.net.

Participatory innovation development includes participatory technology development (PTD) but is more comprehensive, since it goes beyond

technological innovation to include also innovations in the way people are gaining access to – or regulating the use of – natural resources, organizational innovations, innovations in marketing the products, and in institutional linkages and policies, etc. See Van Veenhuizen, Waters-Bayer and De Zeeuw (1997) for detailed methodological explanations of PTD.

The PID process is usually developed through the following six stages: partnership building, identifying local innovation and innovators, documentation, local action planning, implementing local innovation activities, and institutionalization.

Partnership building; multi-stakeholder steering group for PID

This involves bringing together different stakeholders who have an interest in starting a PID process in a certain locality or region (e.g. farmer organizations, NGOs and government agencies involved in agricultural and natural-resource management research and development, and educational institutes) and/or are already promoting local innovation.

It also involves the implementation of training-cum-planning workshops to familiarize the staff of these organizations with the PID approach and tools and to enhance their capacities regarding:

- identification of local innovators and innovations
- documentation and sharing of local innovations and innovation processes
- provision of support to local design and implementation of PID processes
- participatory monitoring and evaluation of joint activities, outcomes, and impacts
- facilitation of learning from on-the-ground experiences and dissemination of results
- raising institutional awareness on PID and engaging in policy dialogue.

Identifying local innovations and innovators

For stimulating local innovation, a positive approach is needed. Focusing on problems and weaknesses will increase the negative image of the situation and will increase the feeling that outside intervention is necessary and consequently farmers will likely remain passive.

The first step in this process is therefore to start from the strengths and capacities of the producers, to identify and recognize local innovations and to regard farmers as equal partners in the process of the further development and dissemination of these innovations. Local innovations and innovators can be identified by the following means:

- Through observation (what efforts are people undertaking to solve existing problems or grasp opportunities they have already identified,

who are the people that do things differently, that do 'strange' things, that are experimenting with something on their own initiative?).

- Through identification by key informants (ask extension agents, farmer leaders, teachers to identify local innovations and innovators with the help of the questions above).
- Through chain or 'snowball' interviews: ask farmers to identify innovative farmers (with the help of questions like the ones above); when interviewing these farmers, ask them to identify other innovators.
- Reconstructing innovation: ask a group of farmers to list one or more agricultural innovations that have been made in the last ten years and are relevant for most of the families in the area; ask them to identify the farmers who played an important role in introducing, adapting, or developing these innovations, and go and talk with these farmers (Wettasinha et al., 2007: 10).

There is often a male bias in identifying innovation or innovators. The reason for this is often a gender bias in the interviewers (male interviewers tend to focus on male respondents), and among the respondents (male producers who are used to talking on behalf of the female members of the household, women who lack confidence or have not been brought up to think of themselves as innovators).

Some ways to identify women innovators are listed below:

- Analyse the gender division of responsibilities and labour and focus in interviews (when asking for innovators and innovations) on the activities that are mainly the responsibility of women (since those will be the areas they know most about and will probably seek to improve themselves).
- Let the female team members interview women, to make them feel more at ease and to encourage them to talk freely about their local innovative activities.
- Identify local innovations by broadcasting a radio programme in which women speak about their innovations and respond to phone-in questions from listeners. This stimulates still more women to phone in about their own innovations or ask their children to write on their behalf to the radio station.

Documentation and sharing of innovations and giving recognition to innovators

Subsequently, the local people involved will be inspired and assisted to document these innovations (and the innovation process followed) so that these can be shared and discussed with others. There are various means of documenting and sharing information between farmers in an informal way, including for example posters, farmers' magazines, community radio, participatory video, exchange visits and study tours, farmer trainers, farmer competitions, etc. It is important to give recognition to local innovations

and innovators. One way to do so is to periodically celebrate innovations and reward innovators (through invitations to workshops, media attention, awards, certificates) in ways that stimulate all actors involved.

Group building and local action planning

Once recognized as valuable partners, local innovators will be motivated to collaborate with each other and with outsiders, combining local and outside knowledge. The identified local innovations/innovators become the foci for community groups to examine opportunities, to plan joint experiments, to explore the ideas further, and to evaluate the results together. Special attention should be given to strengthening the capacities of weaker stakeholders (especially women and poorer farmers) to make them equal partners in the PID process, starting with their active involvement in the action planning.

Where the innovation has a technological character, existing manuals on participatory technology development (see for example: Van Veldhuizen et al., 1997) may be of help in the participatory design of the local experiments. The joint design (and implementation and monitoring) of the innovation activities is enhancing the innovative capacity of the local community. In addition their knowledge of specific aspects of the innovation can be enhanced though training activities, demonstrations, visits to other innovative farmers and research centres.

Implementing local innovation activities; capacity development; organizational strengthening; dissemination

In this stage the farmer groups develop their innovations further, with the active support of the supporting organizations, and monitor and evaluate the results. This process, involving concrete joint activities, also helps to strengthen community organization for development. The innovators' groups are places where farmers regularly meet and analyse and discuss existing and new practices, where they learn and share experiences, and enhance collaboration and collective action. Results of the experiments will be documented (as well as the processes applied) and shared with other groups of innovators, as well as with other producers. That can be done in many ways: posters and picture guides, participatory video, farmer-to-farmer training, storytelling in radio programmes, etc. The shared experiences of local innovations will inspire other groups. Phases 3 to 5 will be reiterated.

Institutionalization; policy influencing; up-scaling

As a parallel process, the partners in the process should seek to create better institutional and policy conditions for local PID, by engaging in policy dialogue and facilitating integration of the approach into the programmes of relevant institutions.

Monitoring and evaluation tools

A large number of monitoring and evaluation tools may be applied to assess the effects of a project on practical and strategic gender issues. In fact most of the participatory appraisal tools described in earlier chapters might be used also for monitoring. To prevent overlap, we will not discuss such tools here; rather we will present a checklist (Table 17.17) that provides main points for attention when evaluating the impacts on gender of a particular urban agriculture project.

Table 17.17 Monitoring and evaluation checklist

Capacity development (project staff)
- Was the gender sensitivity of the project staff enhanced and their skills in gender analysis planning and monitoring improved prior to the start of the project? When training them on other topics, were the gender dimensions of that topic reviewed? Was the gender training effective? What gaps were identified later on?
- Have team members responded favourably to the inclusion or expansion of gender analysis within the project? What difficulties and/or successes have there been?
- Was a gender resource person consulted throughout the process? In what form(s) did this take place? How effective was their involvement?

Project design and planning
- Was the project design based on a gender-sensitive situation analysis yielding gender-disaggregated data on all issues investigated, and insight into the roles and responsibilities of men and women in urban agriculture, access to and control over available productive resources, decision making and distribution of benefits, etc? What proved to be very important? What improvements are needed?
- What were the main specific gender issues coming out of the analysis? Have these been properly incorporated in the project design? Which of these issues have been properly addressed by the project and which less so?
- Were women involved in decision making on the priority issues to be attended by the project and in the selection of the activities to be undertaken? How is this reflected in the project objectives and strategies and related budget? What could have been done to further strengthen women's participation in the project design?

Project implementation
- Were representatives of men and women producers actively involved in periodic project management/co-ordination meetings and decision making on the course of the project? Were gender issues regularly discussed during those meetings? How did they influence the decision-making?
- Was there equal and active participation of both male and female staff and producers in the implementation of the project activities (training, experimentation, improvement of infrastructure, playing certain roles in the project, etc.) and the distribution of resources provided by the project (information/knowledge, credit, tools, land, equipment, seed, irrigation water, etc.) during project implementation? What hampered the full participation of women producers in such activities and resources? With what effects?
- Which gender-affirmative actions have been undertaken to overcome existing inequalities and barriers for female participation in the project? With what effects? What else could have been done?
- Which activities have been implemented to promote gender mainstreaming in the participating producer organizations? With what effects?

Monitoring and evaluation

- Have the monitoring data been collected in a gender-disaggregated way? What data were more difficult to collect in a gender-disaggregated way; which others were collected in that way but proved to be less useful?
- Have the monitoring data been collected and analysed with direct participation of both male and female representatives of the beneficiaries? How did this influence the quality of the monitoring information and the use that was made of such information?
- What does the monitoring information show regarding the distribution of project benefits (enhanced income, improved nutrition, knowledge and status gained, control over resources, etc.) among respectively women and men? Which are and which not? Due to what factors?
- Which remedial actions were taken when monitoring data showed that women and men were not benefiting equally from the project activities? With what effects?
- What is the combined effect of the project on gender equality and strategic gender issues? Due to what factors mainly?

Going to scale; institutionalization

- What has been undertaken to facilitate gender mainstreaming in the organizations that participate in the project? With what effects? Which mainstreaming strategies worked well and which did not or less so?
- Have project findings regarding gender dimensions of urban agriculture (and how to attend these in urban agriculture research and development projects) been given proper attention when preparing publications and other dissemination activities (website, seminars, etc.)? With whom these findings have been shared (newspapers, NGOs, farmer organizations, municipal departments, etc.)? With what effects?
- Have efforts been made to influence policy makers to apply project findings regarding gender and urban agriculture? How exactly? How? With what effects?

Going to scale (planning follow-up actions, dissemination, policy influencing)

Scoping of gender issues for policy and planning (adapted from FAO, 2003: 186–187)

This tool helps to scope out the possibilities for integrating gender issues into urban agriculture planning and policy realms. Participants should represent both community and institutional actors if at all possible.

In small groups, have a discussion about the implications of what you have learned about gender and urban agriculture during the project, and its relevance and use for policy and planning. The following questions may guide the discussion:

- What has been learned about gender and urban agriculture in this project? e.g. regarding the roles of and contributions of men and women to household and community food security, differential needs and priorities of male and female producers, experiences gained with specific strategies and affirmative actions to develop urban agriculture in a gender-sensitive and equitable way.

- What might be some of the implications for policy and planning of what has been learned about gender and urban agriculture in this project? What policy measures would you like to recommend?
- What needs to be done or can be done to bring about such policy changes? Who should participate?
- What might be the implications of the lessons learned for your own organization (activities, working methods, staffing, training, budget allocation, etc.)?
- What needs to be done to effect such change? With whom would you like to partner to make such changes occur?
- What might be the implications of such policy and planning changes on the practical and/or strategic interests of men and women?

Policy briefing paper

Since policy makers are busy people who have little time to read lengthy project documents or research reports, the preparation of a short and concise document that is specially designed to inform a policy maker on the main policy issues involved is often crucial for impact on policy development and planning.

A policy briefing paper synthesizes data on key issues most relevant for a certain policy area and lessons learned from the recent research or development project(s). It provides recommendations (i.e. suggested policy measures, changes needed in existing regulations, recommended actions) on how a municipal or national government or other institution may (further) develop its policy and programmes regarding the area of gender and urban agriculture, often illustrated by concrete city cases ('building theory based on practice').

Below we present the process as applied in the Urban Management Programme for Latin America and the Caribbean (UNDP–Habitat) to develop a series of seven policy briefs on various aspects of urban agriculture, including one on 'Urban Agriculture and Gender' (UMP–LAC, 2004).

- Scoping exercise with topics discussed in the policy briefs defined by representatives of various partners in the project during a workshop in Quito–Ecuador in 2000, based on review of the results of the research and development activities that they had implemented to date.
- Elaboration of short 'synthesis' papers on each of these topics included in the priority list by one of the project partners, analysing the available information and experiences gained regarding this topic, illustrated with clear cases/examples.
- Design and drafting of a four-page policy brief on each topic with assistance of a professional designer/social communicator.
- Discussion and 'validation' of the draft policy briefs with the project partners and elaboration of final versions of the Briefs.

- Presentation of the set of policy briefs to each of the municipal authorities participating in the programme, plus dissemination to other cities and actors.
- Monitoring of the use of policy briefs by these municipalities (in development of policies, norms and regulations, action plans, project development, training, etc.) and results of such activities.

When preparing a policy brief and engaging in policy dialogue, special attention should be given to the following elements.

- Recognition of *women as independent actors and beneficiaries* in/of urban agriculture public policies and projects
- Acknowledgement of the real *value of women's contribution* to the development of urban agriculture: production, food security, income, etc.
- Recognition that the *needs of men and women are different* and that women's access to and control over resources and participation in decision making is restricted by socio-cultural and institutional traditions
- Recognition that public policies and projects, as well as economic and technological trends, can have *differential effects for men and women*
- Recognition that *affirmative actions are needed* to ensure that women (and men) can reap equal benefits from urban agriculture policies and projects.

Policy-action matrix (adapted from FAO, 2005: 48)

The policy-action matrix helps to relate policy objectives to specific policy actions, responsibility for execution, costs, and time frames. It works well to establish interactions among national, regional, and local stakeholders to make decisions on policy objectives, actions, costs, and time lines. NGOs, community-based organizations, producers, and private-sector service providers can make significant inputs and decide on their roles in policy planning and implementation. With minimal guidance, all stakeholders can participate effectively in the construction of this action matrix.

The project team starts the process by organizing a stakeholder workshop with the following steps:

- Specify the policy objectives (and related policy measures) that are recommended by the project, and select one objective for further analysis.
- Review the recommended measures to achieve this objective and identify additional or alternative recommendations; select the most important recommendations for possible action.
- Define at what level (local, regional, or national) each recommendation would be implemented.
- Determine who is responsible for deciding on each recommendation, and who is responsible for executing the recommendation (these are normally different people or institutions).
- Determine a strategy to implement each recommendation.

- Cost each recommendation, taking into account staffing, operational, and infrastructure requirements for the next three to five years.
- Suggest the time frame for execution.

Repeat the same procedure for each policy recommendation. Fill in the form shown in Table 17.18 as the proposed plan of action is developed for the policy objective(s):

Table 17.18 Example of a policy-action matrix

Strategic objective 1:			
	Specific objective 1		
	Recommendation 1	*Recommendation 2*	*Recommendation 3*
Achievement targeted			
Execution level • Local • Regional • National			
Responsible stakeholder for: • Decision making • Execution			
Strategy to implement recommendations			
Cost • 2006 • 2007 • 2008 +			
Timeframe for execution • Short (1–2 yrs) • Medium (3–5 yrs) • Long (5+ yrs)			

Source: FAO, 2005

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CHAPTER 18
Resources

Abstract

This chapter offers a variety of selected resources on gender and urban agriculture, grouped as follows:
- *literature dealing with* conceptual frameworks *regarding gender in agriculture*
- field studies *on gender and urban agriculture*
- *literature providing* gender-sensitive methods and tools *for gender mainstreaming*
- *relevant* websites.

Annotated bibliography

Gender and urban agriculture: concepts

Cummings, S., H. Van Dam, and M. Valk (2002) *Natural Resources Management and Gender: A Global Source Book*, **KIT, Amsterdam.**
Various ways in which women's and gender perspectives and considerations have been incorporated in natural-resources management are documented in the case studies from Mesoamerica, India, Pakistan, Uganda, and West Africa. An introduction discusses the history of and contemporary thinking on women, gender, and environment; the country studies illustrate the relationship between women and land rights, gender approaches to the management of water and wetlands, mainstreaming gender in environmental policy, and the need for a gender-differentiated participatory approach. An annotated bibliography of printed and on-line publications, and web links complement the case studies. A co-production with Oxfam GB.

De Zeeuw, H., G. Prain, and J. Wilbers (2004) *Women Feeding cities. Gender Mainstreaming in Urban Food Production and Food Security*, **Proceedings of the workshop: Women Feeding Cities, 20–23 September 2004, Accra, Ghana. RUAF, Leusden, The Netherlands; CIP, Lima. Available from www.ruaf.org.**
During this workshop, participants presented 15 cases, which were critically reviewed in order to identify key issues in gender and urban agriculture. Also a priority agenda was developed with important aspects and actions that will need attention when integrating gender in future urban agriculture research activities, training activities, policy development, and action planning and

implementation. The workshop presented the concept of mainstreaming gender and identified effective strategies for mainstreaming gender in the projects of the workshop's organizers: RUAF and Urban Harvest. Participants recognized that the differentiation of the roles played by urban men and women in urban food production, processing, and marketing, and the documentation of their specific interests, knowledge, constraints, and opportunities, as well as the mechanisms of disadvantage (especially in existing values, policies, and institutional practices) are critical to the design of effective policies and interventions aiming at urban food security (as well as human and socio-economic development).

FAO (2002) 'Gender and access to land', *FAO Land Tenure Studies* **no. 4.**
Women, elderly people, minorities, and other sometimes marginalized groups can be at risk in land reform and land administration projects. Very often, when land values increase as a result of external investments, women become marginalized in the process and risk losing former benefits. Women may be at risk even if it is intended that they share the benefits. For example, improving irrigation on women's fields may have the unintended effect that these newly valuable fields are reclaimed by men in the community. Enhancing housing in a community or peri-urban area may have similar unintended results when the units become more marketable. Children and elderly people may also suffer, although the original intention was to include them in the intervention. The purpose of these guidelines is thus to provide background information for land administrators and other land professionals on why gender issues matter in land projects; and to provide guidelines to assist development specialists and land-administration agencies to ensure that land administration enhances and protects the rights of all stakeholders.

FAO (2005) *Building on Gender, Agro-biodiversity and Local Knowledge: A Training Manual*, **FAO, Rome.**
This training manual focuses specifically on the links between local knowledge systems, gender roles and relationships, the conservation and management of agro-biodiversity, plant and animal genetic resources, and food security. Its aim is to promote a holistic understanding of these components. The training objective is to strengthen the institutional capacity in the agricultural sector and to recognize and foster these links in the relevant programmes and policies. Other manuals may cover these same topics, but there is an obvious lack of integrated training materials that address all three topics. Moreover, FAO's local partner organizations have requested specific training materials that focus on these cross-cutting issues. We strongly believe that a better understanding of the key concepts, and their linkages, will lead to improved project planning and implementation. This manual therefore aims to explore the links between agro-biodiversity, gender, and local knowledge, and to show the relevance of doing so, within the context of research and development. This manual will not equip you with the skills needed to conduct participatory or action research at the field level, or provide guidance for research tools

and methods. However, it is meant to complement existing manuals covering tools, methods, and approaches, such as the FAO/SEAGA handbook material for socio-economic and gender analysis (www.fao.org/sd/seaga).

Hahn, N. (1991) 'Backyard gardening: a food security system managed by women', *Entwicklung + Laendlicher Raum* **1, pp. 24–27.**
This article highlights the important contribution of home gardening to food security, and, particularly, the role that women play in it. The author suggests various directions for further research and innovation. Interestingly, homestead production of spices receives special attention.

Hovorka, A. J. (2006) 'Urban agriculture: addressing practical and strategic gender needs', *Development in Practice***, (16, no 1).**
This paper considers the role of urban agriculture in addressing the practical and strategic needs of African women and assesses the gender implications of embracing urban agriculture as a development-intervention strategy. Empirical evidence from Botswana and Zimbabwe points to the multi-faceted role of urban agriculture, an activity used by some women to support their households on a daily basis, and by others as an avenue for social and economic empowerment over the longer term. In order to benefit rather than burden women, the promotion and support of urban agriculture must take on an emancipatory agenda which supports individual, practical, and strategic goals, and ultimately challenges the structural conditions that give rise to women's involvement in the activity in the first place.

Hovorka, A. J. (undated) 'Gender and Urban Agriculture: Emerging Trends and Areas for Future Research', Graduate School of Geography, Clark University, Worcester MA, USA.
Over the past decade, literature on women and urban agriculture has emerged, revealing significant insights that arguably can change the future focus of the field at large. This overview presents a synthesis of lessons learned from recent studies that have begun to recognize and assess women as farmers in urban areas. The extent, nature, and role of urban agriculture vary considerably between and within countries, as well as throughout the urban hierarchy. Moreover, evidence tends to be scattered or speculative, with little supportive data to substantiate general statements. As such, it is difficult to formulate a synthesis of trends that hold for every context, or even the majority of contexts.

Nevertheless, there are several broadly identifiable trends in recent literature on women and urban agriculture which warrant recognition and further explanation. First, studies now recognize women as urban farmers. Indeed, women play significant roles in urban food production and contribute to both household and market economies. Second, women benefit from urban agricultural activities that allow them to successfully combine their multiple roles in subsistence, production, and environmental management sectors. Third, researchers document the constraints hindering women's participation

in urban agriculture activities. Obstacles exist at both sectoral and household levels. Fourth, studies identify women farmers' survival strategies and social activism in response to structural constraints and urban food issues. Together these trends have enriched the understanding of urban agriculture. Yet gaps persist in the literature, and a discussion of future trends and considerations for urban agriculture research in general is required.

Kabeer, N. and R. Subrahmanian (eds.) (1999) *Institutions, Relations and Outcomes; Framework and Case Studies for Gender-Aware Planning*, **Kali for Women, New Delhi; Zed Books, London & New York.**
This study develops an analytical framework and a set of tools for planners and trainers to integrate gender systematically into different aspects of their work. It offers an inventory of the kinds of assumption which lead to gender-blind policy. A selection of case studies from the Indian context illustrates the different aspects of the framework and its applications.

Kabeer, N. (2003) *Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: A Handbook for Policy-makers and Other Stakeholders,* **Ashford Colour Press, London.**
In this book, Naila Kabeer brings together a set of arguments, findings, and lessons from the development literature which help to explain why gender equality merits specific attention from policy makers, practitioners, researchers, and other stakeholders committed to the pursuit of pro-poor and human-centred development. Neglect of gender inequalities in the distribution of resources, responsibilities, and power in the processes of economic accumulation and social reproduction has a high cost, not only for women themselves but also for their children and other dependants and for the development of society as a whole. This book highlights the interconnections between production and reproduction within different societies, and women's critical role in bridging both, and points to the various synergies, trade-offs, and externalities which these generate. All over the world, women from poor households play a more critical role in the income-earning and expenditure-saving activities of their households than women from better-off households, and they are concentrated in the informal economy. The relationship between household poverty and women's paid activity has, if anything, become stronger over recent decades, partly in response to economic crisis and the 'push' into the labour market and partly in response to new opportunities generated by globalization. Improving women's access to economic opportunities, and enhancing returns to their efforts, will be central to the goal of poverty eradication and the achievement of the MDGs.

Kanji, N. (2003) *Mind the Gap: Mainstreaming Gender and Participation in Development*, **International Institute for Environment and Development (IIED), London and Institute for Development Studies (IDS), Brighton.**
This publication, the fourth in a series on institutionalizing participation, highlights lessons from gender-mainstreaming work for those who seek to

institutionalize participation. After a discussion of conceptual frameworks and strategies, and the suggestion that there has been a shift from participation to governance (along with the shift from women in development to gender in development), the tensions between gender mainstreaming and participatory development are explored. Suggestions are made to overcome this tension.

Koenraadt, C. (2001) 'Household resource management and urban horticulture in relation to the action plan for women in development', in ***Proceedings on the Sub-Regional Expert Consultation on the Use of Low Cost and Simple Technologies for Crop Diversification by Small Scale Farmers in Urban and Peri-Urban Areas of Southern Africa*, Stellenbosch, South Africa, 15–18 January 2001.**
This presentation discusses the key areas of development efforts in which FAO's Women in Development Service concentrates its efforts and how this is linked to gender and urban agriculture mostly through the Household Resources Management issue. It further introduces the Socio-Economic and Gender Analysis Programme (SEAGA) methodology, being a possible suitable tool to support research in urban agriculture as well as to programme, monitor and evaluate UA programmes where women play a critical role.

Lee-Smith, D. (1994) 'Gender, Urbanization and Environment: A Research and Policy Agenda', prepared for the International Seminar on Gender, Urbanisation and Environment, held in Nairobi, Kenya, 13–16 June 1994. Mazingira Institute, Nairobi, Kenya.
This agenda was produced at the International Seminar on Gender, Urbanisation and Environment, held in Nairobi in June 1994. The purpose of the seminar was to draw together researchers from different regions of the world to discuss issues, theories, and methods, to put the priorities of poor women at community level on to the research agenda and to influence policy to take account of gender issues emerging from research. The agenda is presented according to the four main themes of the seminar, for each of which a working group of scholars and others identified the priorities for research and policy action, but it starts with common themes and priorities which represent the crucial findings of the seminar. Women's property rights and urban agriculture are highlighted.

Lee-Smith, D. (2006) 'Urban agriculture risk perceptions, communication and mitigation: community participation and gender perspectives', in A. Boischio, A. Clegg, and D. Mwagore (eds.), ***Health Risks and Benefits of Urban and Peri-urban Agriculture and Livestock (UA) in Sub-Saharan Africa*, Urban Poverty and Environment Series Report No. 1, IDRC, Ottawa.**
This paper addresses the perception of health risks among poor communities practising urban agriculture, and especially the differences between men and women. It also addresses some aspects of the communication of health risks to communities, and the way in which communities may themselves adopt mitigation strategies. This theme is specifically addressed as a gender issue.

Sometimes women are seen as more vulnerable than men, and the aspect of vulnerability of different groups to different levels and types of risk is briefly touched on. However, the paper explains that the capacity of communities in general and women in particular to respond to risks as active agents should also not be overlooked.

Lingen, A., R. Brouwers, M. Nugteren, D. Plantenga, and L, Zuidberg (1997) *Gender Assessment Studies: A Manual for Gender Consultants, Operational Guide*, **Women and Development Series, Ministry of Foreign Affairs, The Hague, The Netherlands.**
This manual presents the Gender Assessment Study (GAS), an instrument which has been developed for the formulation and appraisal phases of projects. It is a tool for designing project interventions in order to ensure that they will affect the empowerment of women positively. The manual explains the research methodology and its practical implementation in detail and is especially geared to the needs of those who undertake the study in the field. An interesting feature of the instrument is that it combines a gender analysis of the target group and the context with a gender analysis of the future implementing organizations, leading to a gender analysis of the project (proposal).

Mapetla, M., H. Phororo, and G. Prasad (1994) 'Urbanization, Gender and Environment: the Role of Wild Vegetables', paper presented at the International Seminar on Gender, Urbanization and Environment, Nairobi, Kenya, 13–16 June 1994. Mazingira Institute, Nairobi Kenya.
Although many people in Lesotho move to towns in search of better job opportunities, they miss out on access to natural wild-food resources. It is argued in this paper that such resources can be adapted to the urban environment, and wild vegetables could contribute to the nutrition and cash income of urban dwellers. Gathering, preparing, and eating are related to gender and culture. Earlier studies have shown that collecting and preparing wild vegetables is a strategy for rural women to provide a balanced diet for their families. Urbanization in Lesotho has affected women's access to natural resources such as edible wild plants. Settlements now occupy former agricultural land, and wild foods become scarce in peri-urban areas as a result of over-harvesting. Urban women have to spend much more time than previously to find enough wild plants for a meal. The study reveals that only a few people collect wild plants, and children are no longer taught about edible plants due, in part, to schools adopting westernized curricula which do not foster recognition of the value of indigenous plants. For many people in towns, wild foods have low status and they would rather buy cultivated vegetables from the market. Towns have created markets, but only rarely are wild vegetables sold. Women from the countryside sell the wild vegetables through informal networks in town. A promotion strategy for wild vegetables, focusing on knowledge, attitude, value, and nutrition is suggested. Outward rather than inward growth of urban areas is also recommended by the authors. It is argued that gardens

within urban housing sites in Lesotho are agriculturally more productive than fields in rural areas, and agricultural production does not diminish when fields are converted into housing sites with gardens in the present urban extension pattern.

Maxwell, D. G. (1999) *Internal struggles over resources, external struggles for survival: urban women and subsistence household production,* **Urban Agriculture Notes [online]. Available from http://www.cityfarmer.org/ danmax.html.**
Presents data on Kampala in an attempt to examine and understand semi-subsistence urban farming and the way in which the practice has been incorporated into the economic strategies of urban households and individuals. The paper argues that in contemporary Africa farming spans a continuum from a survival strategy for some to a large-scale high-return investment for a few. For the most part it should be considered as a deliberate crisis response on the part of urban women, to provide for themselves and their households a source of food which is not dependent on cash or volatile markets. The paper explores patterns of engagement in farming, the use of food, and division of labour. It also discusses reasons for farming and divisions of household responsibilities before drawing conclusions.

Moser, C. O. N. (1993) *Gender Planning and Development; Theory, Practice & Training*, **Routledge, London, UK.**
Gender planning is a new tradition whose goal is to ensure that women, through empowering themselves, achieve equality and equity with men in developing societies. *Gender Planning and Development* explores the relationship between gender and development, and provides a comprehensive introduction to Third World gender policy and planning practice. It describes the conceptual rationale for a new planning tradition based on gender roles and needs, and identifies methodological procedures, tools, and techniques to integrate gender into planning processes. It emphasizes the role played by training in creating gender awareness, and highlights the entry points for women's organizations to negotiate for women's needs at household, community, state, and global levels.

Palacios, P. (undated) *Policy Brief: Urban Agriculture, an Opportunity for Gender Equity* **(Spanish), PGU-ALC / FEMUM–ALC.**
This policy brief focuses on the steps that can be taken at the policy level to promote urban agriculture with a gender-equality perspective, recognizing that urban agriculture can respond to the specific problems faced by different social sub-groups but also that these different groups each have different potentials to confronting the problems. According to the brief, the following intervention strategies are necessary for equal and sustainable urban management: (1) diagnose reality from a gender perspective, (2) articulate the role and contribution of urban agriculture and integrate a gender perspective in the planning process, and (3) install the equal participation of citizens

as a social and economic right. These strategies are each broken down into practical steps. The brief concludes by presenting conceptual, methodological, and operational challenges concerning gender-sensitive urban agriculture, roles and responsibilities of actors involved in urban agriculture, and relevant contacts in the Latin American region.

Ratta, A. (1993) 'City women farm for food and cash', *International Ag-Sieve,* **6 (2): 1–2.**
This brief article outlines women's involvement in urban agriculture and highlights barriers and solutions to such activities. Farming is a viable alternative to wage labour for women and enables them to work close to home. Women's role is not limited to food production but includes processing food for home and market. These activities are rarely reflected in official statistics, nor are they recognized as a contribution to the family budget. Thus women do not fully benefit from research or extension services.

Van Esterik, P. (1999) 'Gender and sustainable food systems: a feminist critique', in M. Koc, R. MacRae, L. J. A. Mougeot, and J. Welsh (eds.), *For Hunger-proof Cities: Sustainable Urban Food Systems*, **pp. 157–161, IDRC, Ottawa.**
This paper explores conceptual and practical links between women and food and suggests how feminist analysis may further our understanding of food security. It argues that women's special relationship with food is culturally constructed and not a product of a natural division of labour. Women's identity and sense of self are often based on their ability to feed their families and others; food insecurity denies them this right. Food socialization and body image are also strongly gendered. The paper concludes with a working definition of feminist principles and a call for the development of a model of feminist food praxis. Food praxis refers to the practical 'mastery' of routines of producing, preparing, and consuming food. The paper proposes 10 points to guide further research and action. These include acknowledging women as gatekeepers of the food system, giving priority to the elimination of hunger, using multiple research methods, recognizing how political forces control people's access to food, emphasizing the temporal complexity of food routines, and providing a critically reflexive guide to advocacy action.

Wilbers, J., A. Hovorka, and R. Van Veenhuizen (eds.) (2004) 'Gender and urban agriculture', *Urban Agriculture Magazine Number 12: Gender and Urban Agriculture*. **Available from www.ruaf.org.**
Urban agriculture can have positive and/or negative consequences for men and women, depending on the situation and conditions. Data gathered on urban agriculture demonstrate that it generally has a positive impact on household food security, and thus will be beneficial to women, who most often are responsible for it. This issue of UA Magazine explores how urban agriculture relates to existing gender dynamics.

Field studies on gender and urban agriculture

Barndt, D. (1999) 'Women workers in the NAFTA food chain', in M. Koc, R. MacRae, L. J. A. Mougeot, and J. Welsh (eds.) *For Hunger-proof Cities: Sustainable Urban Food Systems,* **pp. 162–166, IDRC, Ottawa.**
Efforts to develop sustainable urban food systems must take into account the role of women in the various stages of production, preparation, and consumption of the food we eat. The Tomasita Project explores women's shifting roles in the restructured global labour force, tracing the journey of a tomato from a Mexican field to a Canadian table. This essay focuses particularly on salaried workers in Mexican agribusiness. The Tomasita project also aims to connect women food workers in Mexico and Canada, in both dominant and alternative food systems, through photo-stories, films, and video letters. Sharing these stories across borders helps women to understand how they are part of a broader global process while they learn from each other's tales of survival and resistance.

Boulianne, M. (2001) 'Urban agriculture and collective gardens in Quebec. Empowerment of women or "domestication of the public space"?' (original in French), *Anthropologie et Societés*, **25 (1): 63–80.**
In 'developed' countries, self-provisioning urban agriculture practices reappear periodically during phases of adjustment of the capitalist economy. It is actually the case in North America. The most recent experiences encourage collective production. They emerge in Quebec in the context of an increasing recognition of the social economy by the state. Supported by community groups, collective gardens appear as an alternative to food help for the impoverished, and as a tool to alleviate social exclusion. Women are the principal protagonists of these recent initiatives, either as members of the supporting groups or as producers. While certain researchers argue that women's community organizations active in the domain of food security have a strong potential for the individual and collective empowerment of women, others think that in times of decentralization of social programmes, these are rather associated with a 'domestication of public space'. Are the emerging experiences of collective self-provisioning gardening empowering for women, or are they contributing to the domestication of the public space? Relying mainly on fieldwork data collected in Quebec, the present article seeks to bring answers to this question.

Dennery, P. (1995) 'Inside Urban Agriculture: An Exploration of Food Producer Decision Making in a Nairobi Slum' (M.Sc. thesis*), Wageningen Agricultural University, The Netherlands.**
This study examines urban food producers and their households in Kibera, a large informal settlement of Nairobi. One of the main features of this study is the addition of a qualitative dimension to urban agriculture research in east Africa. Empirical evidence is provided on gender relations, labour relations, and the multiple uses of produce at the individual, household, and

community levels. The traditional division of agricultural labour was noted during fieldwork: men preparing the soil for planting, and women responsible for harvesting food for daily needs. Women decide how much produce to sell and what food to buy, in consultation with the spouse in order to provide a means of preserving marital harmony. Women's decision-making power may be undermined by factors such as size of plot, need for cash, and personal health. Women are also less likely than men to have knowledge about inputs, such as pesticides or use of sewage water, due to their limited exposure to commercially oriented agriculture. The study also reveals that numerous labour issues are directly related to the prevailing gender ideology in Kenya. Female urban producers must carry out most of the care and maintenance of the household, regardless of the time they devote to food production or other livelihood activities. Thus, women tend to stay in the field longer than men and are expected to fetch water and prepare meals upon returning to the house. In other cases, women's ability to control their own agricultural labour time is limited by responsibilities to others.

Dima, S. J. and A. A. Ogunmokun (2001) 'An Overview of Socio-Economics and Gender Aspects in Urban and Peri-Urban Agriculture: The Potential of the City of Windhoek, Namibia.', paper prepared for the Sub-Regional Expert Consultation Meeting on Urban and Peri-Urban Horticulture, University of Stellenbosch, Cape Town, South Africa, January 2001.
Urban and peri-urban agriculture can be defined as the process of producing agricultural commodities within demarcated urban areas and edges of urban areas. Because of colonial and post-colonial local-authority laws, rules, and regulations, urban agriculture has been practised illegally, discreetly, and without technical support by local authorities or the relevant ministries of agriculture. This paper provides an overview of the resources available, and the technologies used for urban and peri-urban horticulture in Namibia. This is followed by a survey of the recent literature on urban and peri-urban agriculture in Africa with a view to assessing its extent and contribution in terms of food production, employment creation, improvement in nutrition status, income generation, innovation, creation, adaptation, and appropriate technologies development. This is followed by a case study of urban and peri-urban horticulture in the city of Windhoek.

Drescher, A. (1997) 'Management Strategies in African Home Gardens and the Need for Extension Approaches', paper presented at the International Conference on Sustainable Urban Food Systems, 22–25 May 1997. Ryerson Polytechnic University, Toronto, Canada.
The relationship between urban food production, food security, and urban environments has been largely neglected. This paper focuses on results from a household garden survey conducted during 1992 and 1993. The main objective of the survey was to clarify the role of household gardens for household food security in Zambia, and to identify differences and problems in management strategies and their effects on production in different areas. The results reveal

that the main actors in urban agriculture are often women. In all compounds studied in Lusaka, women were to a greater extent involved in cropping and gardening than men. Gender analysis is used to reveal differences between men's and women's urban agriculture techniques with respect to alternative methods of plant production, crop species, and use of fertilizer, manure, and compost. The paper argues that gender-specific differences in agricultural activities need to be given more attention by extension services in urban and peri-urban areas.

Egziabher, A.G. (1994) 'Urban farming, cooperatives, and the urban poor in Addis Ababa', in A.G. Egziabher et al. (eds.), *Cities Feeding People: An Examination of Urban Agriculture in East Africa*, pp. 85–104, IDRC, Ottawa.
This paper focuses on urban agriculture in Lusaka and is based on a household garden survey conducted during 1992 and 1993. The main objective of this survey was to explore the role of household gardens in the context of household food security in Zambia. The findings reveal that women are more involved in agriculture and gardening in all compounds of Lusaka than men. In many ways, women play an important role in the food supply of households; through their productive labour, their decisions on production, consumption, and division of food, and through their income. A household-gardening model was developed to enable a better understanding of urban gardening activities in the social and environmental context. The model can assist in highlighting and clarifying some of the factors influencing urban agriculture. The household itself is based in the centre of the model, with various internal and external factors determining the vulnerability of the household. The study reveals that gardening contributes to food security directly by providing food and indirectly by creating income, respectively saving expenditures in the urban environment. Strengthening the role of women is recommended to policy makers seeking to develop the urban agriculture sector to address household food security.

Ethangatta, L. K. (1994) 'Households Headed by Elderly Women in the Slums of Kawangware and Kibagare in the City of Nairobi; Poverty and Environmental Concerns', paper presented at the International Seminar on Gender, Urbanization and Environment, Nairobi, Kenya, 13–16 June 1994. Mazingira Institute, Nairobi, Kenya.
The aim of the study is to determine the social–cultural, health-related factors and economic characteristics of elderly Nairobi women which may affect their nutritional status. The study is based on data collected from 201 elderly women from slums of Kawangware and Kibagare, and the low-income areas of Dagoreti and Waithaka in Nairobi. The findings reveal that women in low-income areas use their land for growing food crops such as beans, kale, cabbage, and bananas. Some of these women also had a dairy cow that produced milk for their own household's consumption or for sale to neighbours. The marketing of fruit and vegetables was also cited by women as an income-

generating activity in both slum and low-income areas. Elderly women in the slum areas turned to growing vegetables on the edges of roads and any other open spaces, in response to economic hardships. This activity created further environmental degradation, due to the uprooting of natural vegetation and consequent soil erosion in these spaces. The author concludes that there is an urgent need to provide basic means of raising incomes and standards of living for families headed by elderly women. In turn, better living conditions will improve the environmental conditions of slums and low-income areas.

Freeman, D. (1993) 'Survival strategies or business training ground? The significance of urban agriculture for the advancement of women in African cities', *African Studies Review,* **36 (3): 1–22.**
This paper suggests that, contrary to findings in other research, urban agriculture is not a stop-gap activity, nor a means to become wealthy. The motivations of the urban cultivators appear not to be influenced by what planners, researchers, or urban administrators feel ought to be the correct attitude to urban farming. This paper analyses interview data collected in Nairobi, Kenya in 1987 as part of a survey of active women cultivators. It first considers the stated motives of women cultivators and then assesses information gathered through detailed case studies of three individual women involved in urban farming. The most common motivation of women cultivators was the need to avert hunger, but also important was the availability of home-grown food so as to free up scarce cash earned by family members. The paper concludes that female cultivators face major impediments to meaningful advancement in Nairobi. Women are, in turn, dependent on the low-wage, formal manufacturing and service sectors for a market for their produce, and their activities are necessarily seasonal in the absence of the means to irrigate crops. The importance of this group as role models for other Third World women, the paper concludes, greatly outweighs their actual numbers.

Freidberg, S. (1999) 'Tradeswomen and businessmen: the social relations of contract gardening in south-western Burkina Faso', *Journal of African Rural and Urban Studies.*
This article examines the prospects for the expansion of export-oriented contract horticulture in south-western Burkina Faso, specifically in the area surrounding the city of Bobo Dioulasso. It sets out the main reasons why any discussion of West African contract farming must take account of the gender roles and moral codes which have historically informed relations between peasants and different members of the urban merchant community. Day-to-day provisioning and commercialization depends on the services of itinerant and local traders, many of whom are, especially in fresh-produce commerce, women. The crucial role of women traders, contrasted with that of male politicians and entrepreneurs, has created a distinctive culture of contract farming. The case study presented demonstrates how women traders have made the most of limited career opportunities by placing the flexibility

and durability of their commercial relations above season-to-season profits. In the interest of developing trading relations that they could pass to their daughters, women wholesalers set standards of trust and commitment that contractors find hard to match. The presence of a well-established, gender-based regional trade network poses potential obstacles to profitable contract horticulture schemes, because this network is essential to the economic security and occupational identity of both women traders and village gardeners in the Bobo Dioulasso 'garden belt'.

Gabel, S. (2004) 'Revealing Social Dimensions of Open Space Cultivation by Older Women in Harare: Advancing a Social Planning Discourse for Urban Agriculture', a thesis submitted in partial fulfilment of the requirements for the degree of Master of Arts (Planning) in the Faculty of Graduate Studies (School of Community and Regional Planning).
This research on urban agriculture in Harare, Zimbabwe, highlights women's ideas, needs, concerns, and agency, contextualizing these findings through an investigation of the institutional and policy environment governing the practice of open-space cultivation in the city. A feminist methodology provides an overall framework, while also incorporating ethno-methodology and participatory research methodologies to highlight the broader social, political, and cultural contexts of urban agriculture. A multi-method approach was adopted which included the use of semi-structured interviewing, focus groups, strategic meetings, participatory methods, visioning interviews, and action methods (such as field trips, creating a stakeholder forum, and organizing income-generating projects). Findings from this research have been used to develop a gender-aware history of women and urban agriculture (UA) in Harare. Key findings show that the forms of organization for open-space cultivation (SOSC) developed by older women have been historically unacknowledged, ignored, and impeded by those with decision-making power, most often male elites. Nine legal channels available for SOSC in Harare are uncovered in the research, dispelling the myth that UA is an illegal activity in the city. This research further elaborates on the impacts of legal ambiguity that have resulted in conflicts between various land-tenure systems and categories, demonstrating the serious governance challenges at the heart of supportive policy development for UA in the City. The voices of women are used to illuminate the dire need for local- and neighbourhood-level leadership, and the importance of addressing the cultural context in which UA is imbedded. A discussion of planning and governance in Harare reveals the exclusionary practices that operate to make the work of women, their UA- and land-based livelihoods invisible in planning practice and city decision making. The research shows the potential for shifting planning practice and discourse towards more people-centred, democratic forms of planning for UA.

Gianotten, V., V. Groverman, E. Van Walsum, and L. Zuidberg (1994) *Assessing the Gender Impact of Development Projects: Case Studies from*

Bolivia, Burkina Faso and India, Royal Tropical Institute, Amsterdam; ETC International, Leusden; Intermediate Technology Publications, London.
This book presents a preliminary methodological framework which was established in accordance with the objectives of a gender-assessment study (which investigates a development project's expected impact on women, compared with its impact on men, and also assesses the extent to which the project responds to the specific interests and needs of different categories of women). It also presents pilot studies in which the framework is tested, which provide information and recommendations for designing projects that will optimally strengthen women's position. The book is intended primarily for readers interested in policy on women and development, and in the methodology of gender-assessment studies. It is also intended for those interested in improvements to women's position, and to gender relations, in the specific context of planning and implementing development projects.

Hasna, M. K. (1998) *NGO Gender Capacity in Urban Agriculture: Case Studies from Harare (Zimbabwe), Kampala (Uganda) and Accra (Ghana)*, CFP series, report # 21, IDRC, Ottawa.
This study examines the marginalization of gender issues within urban-agriculture research agendas, drawing on data collected from field visits to the cities of Accra, Kampala, and Harare. It provides an overview and analysis of the nature and extent of NGO policies and strategies regarding the integration of gender into urban agriculture research. It is found that many NGOs are working with 'women in development' approaches. A proper understanding and scope of 'gender analysis' within these organizations is needed. Participatory learning partnerships should be developed among relevant groups, organizations, and institutions to share gender-sensitive research findings and create provisions for effective gender-focused policy interventions.

Hetterschijt, T. (2001) 'Our Daily Realities: A Feminist Perspective on Agro biodiversity in Urban Organic Home Gardens in Lima, Peru', Wageningen University, Wageningen.
The research for this thesis was conducted in the slums of Chorillos, a district in Metropolitan Lima. The main objective of the research was to study the factors which influence decisions concerning crops and plants in the organic home gardens of the urban farmers. The thesis recognizes that a key role in the establishment, maintenance, and development of the urban organic home gardens is played by the women. It is they who are mostly responsible for all activities involved in cultivating the home gardens and keeping guinea pigs, as the men work outside the house in another kind of job. In addition, the thesis underlines the important role that women play in the dissemination of knowledge, enthusiasm, and use of species, in their roles as female urban farmers and mothers.

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.**
Urban agriculture studies tend to aggregate data such that they mask differential experiences of men and women farmers, and fail to explain adequately the influence of location and human-environment relations on production systems. People's ability to create productive and sustainable urban agricultural systems is premised on who they are, where they are located, and how they interact with the environment in that location. This article presents an empirical investigation of the effects of gender on commercial urban agriculture in Greater Gaborone, Botswana. It employs a conceptual framework that bridges socio-spatial and human-environment traditions in geography and highlights gendered environments to facilitate this convergence. The investigation reveals that gender clearly influences the quantities and types of foodstuff produced for the urban market. Gender matters because men and women enter into agricultural production and participate within this urban economic sector, on unequal terms based on socio-economic status, location, and interactions with the environment. If urban agriculture is to contribute to food security and economic growth, as well as urban sustainability more generally, gender relations of power, as produced and reproduced through socio-spatial and human-environment relations, must inform our understanding of this phenomenon.

Hovorka, A. (2006) 'The No. 1 Ladies' poultry farm: a feminist political ecology of urban agriculture in Botswana', *Gender, Place and Culture* **13 (3): 207–225.**
The research draws on a feminist political-ecology perspective to demonstrate that agrarian restructuring and rural–urban transformation in Botswana offers women opportunities to renegotiate their marginalized positionality within the commercial urban agricultural sector in Greater Gaborone. Men and women participate in equal numbers, and both perceive this sector as offering them new and accessible avenues for economic and social advancement. Although there is continuity of women's social and economic disadvantage relative to men from rural to urban contexts, women are actively making claims on land and capitalizing on their traditional roles and responsibilities associated with poultry production. This negotiation of continuity and change in gendered positionality reflects and indeed suggests positive changes for women in urban Botswana, pointing specifically to the transformatory potential of urban agriculture despite constraints at the sectoral level. The research highlights the ways in which women are (re)defining their constraints and seeking out alternative opportunities for empowerment and action. To this end, gender remains an integral part of and key element to understanding agrarian restructuring and rural–urban transformation in Botswana.

Hynes, P. H. (1996) 'Why so many women?', in P. H. Hynes (ed.), *A Patch of Eden; America's Inner-City Gardeners*, Chelsea Green Publishing Company, Vermont.
In this chapter, the author considers whether there is a larger, broader history of women and gardens which underlies the community garden movement. What meanings – personal, social and political – have gardens held for women of different classes and ethnicities? The practice of gardening has been stratified by wealth and by gender. Millions of subsistence, kitchen, and medicinal gardens planted and tended by women have been central to household economy, village health, and local biodiversity. The garden has been a source of natural beauty for the urban and rural poor. Yet the value of this work is generally not counted in the economy, because it is unpaid and not market-based; nor is it recorded in environmental history, because it is considered insignificant work of many 'ordinary' women. Women's contribution through gardening to the world's food supply is chronically underestimated. The author draws a parallel between inner cities in the United States and the Third World: the urban community garden has the potential to feed households and generate local cottage industry, restore a measure of community life, and recycle organic wastes.

Ishani, Z. and D. Lamba (2001) 'Applications of Methods and Instruments in Urban Agriculture Research: Experiences from Kenya and Tanzania', paper for the workshop 'Appropriate Methodologies for Urban Agriculture', October 2001, Nairobi, Kenya. Available from www.ruaf.org.
The paper deals with methodology applied in two studies of urban agriculture in Kenya and Tanzania, conducted by, and in collaboration with, Mazingira Institute. The first study, entitled 'Urban Food Production and the Cooking Fuel Situation in Urban Kenya', was published by the Institute in 1987. The second study, 'Gender and Urban Agriculture and its Implication for Family Welfare and the Environment in Dar Es Salaam, Tanzania', was completed in 2000 (not published). The Kenyan study comprised six cities and towns, covering the various agro-climatic zones. It analysed the patterns of food and fuel production and consumption by the urban households in Kenya by considering the socio-economic characteristics of the sample population, crop production, livestock production, and fuel. In addition, it raised issues for consideration by policy makers. The Tanzanian study, ' Tanzania – Gender and Urban Agriculture: Cattle Raising and its Implication for Family Welfare and the Environment in Dar es Salaam, Tanzania', was at the city level. It analysed gender roles in cattle raising in the district of Kinondoni in Dar Es Salaam.

Ishani, Z. and D. Lamba (eds.) (2001) *Emerging African Perspectives on Gender in Urbanization; African Research on Gender, Urbanization and Environment*, Kenya Litho Limited, Nairobi, Kenya.
This book contains five studies, from Kenya, Uganda, Ghana, Nigeria, and Egypt. It addresses the themes of women's access to and control of housing, or

their role in housing production, and women's access to and control of other resources in the urbanization process.

Ishani, Z., K. Gathuru, and D. Lamba (2002) *Scoping Study on Interactions Between Gender Relations and Livestock Keeping in Kisumu,* **Natural Resources International, Chatham, UK.**
The focus of the study is the improvement of gender-biased division of labour, inequality between males and females in power and resources, and gender biases in rights and entitlements to increased productivity, remuneration, and development of women livestock keepers. The study was conducted in Kisumu, an urban area located on the shores of Lake Victoria, in Kenya.

Jaiyebo, O. (2001) 'Women and Household Sustenance: Livelihood Impacts from Development Changes and Strategies for Survival in the Peri-Urban Areas', paper prepared for the DPU International Conference: 'Rural–Urban Encounters: Managing the Environment of the Peri-Urban Interface', London, 9–10 November 2001. DPU, London.
In Nigeria, the woman is regarded as the homebuilder, having a pivotal role in the society. This study focuses on women and provides insight into the women's perceptions of their own livelihood status and the impacts of developmental changes and strategies employed for survival in the peri-urban areas. The study area is Ibadan, Nigeria, the choice of which stems from its geographical location, socio-economic heterogeneity, and population size. Ibadan, the capital city of Oyo state, is located in the humid south-western zone of Nigeria and accommodates more than half of the total population of the State. A random sample of 96 women was obtained from two locations, north and south of the main city. The study reveals that the major developmental changes which have had the greatest impact on the women's livelihoods are changes in land use as a result of urban growth, and decreased purchasing power resulting from an ailing national economy. Strategies employed for survival include income diversification and the involvement of children in income generation.

Kiguli, J. (2003) 'Mushroom cultivation in urban Kampala, Uganda', *Urban Agriculture Magazine no. 10 Micro-Technologies for Urban Agriculture*, **pp. 20–21. Available from www.ruaf.org.**
Urban agriculture in Uganda is mainly viewed as a household survival strategy, in the context of rising poverty. Mushroom cultivation is a recent trend in Kampala. This paper explores the rationale for growing mushrooms, with a focus on gender participation, as more women are involved in mushroom cultivation than men, and the necessary conditions for success.

Kreinecker, P. (2000) 'La Paz: urban agriculture in harsh ecological conditions', in N. Bakker et al. (eds.) *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda*, **pp. 391–411, DSE, Feldafing, Germany.**
The climate in La Paz enhances the development of adapted techniques for urban agriculture. Officials tend not to see urban agriculture, although

in fact it is everywhere. Urban agriculture is a survival strategy for socially marginalized people because it fits well in their economy, which is based on social relations. Several urban farming systems can be found, of which private home gardens and communal gardens are more important. Land titles are unclear, and little capital is used. Farmers are organized in informal and formal groups and networks. Women play a central role in farming, and urban farming contributes to women's independence. Urban agriculture contributes little to food-energy supply but increases the diversity of food consumption. Many factors hamper the development of urban agriculture: among others the ecological conditions, cultural heterogeneity, and land-tenure situation. A future strategy needs to emphasize existing structures and socially accepted Andean varieties to improve the situation of marginalized people.

Kusakabe, K., C. Monnyrath, C. Sopheap, and T. C. Chham (2001) *Social Capital of Women Micro-Vendors in Phnom Penh (Cambodia) Markets: A Study of Vendors' Association*, **UMP–Asia Occasional Papers no. 53, United Nations Urban Management Programme, Regional Office for Asia and the Pacific, Bangkok.**

In Cambodia, because of the long history of civil strife, it is said that mutual trust has been destroyed, and that because of people's negative experience of 'co-operatives', there is a stigma attached to organizing and working together and sharing information together. Efforts to revive social capital and initiatives to organize people are taking place in Cambodia. One such initiative is the micro-vendors' association in Phnom Penh markets. With the support of a local NGO, Urban Sector Group (USG), and The Asia Foundation, micro-vendors in public marketplaces are forming an association under the Women's Economic and Legal Rights Project (WELR). This study examines how being a member of the vendors' association influenced the members' sense of mutual trust and confidence in making changes in the society, and how such trust in turn influenced their gender norms and ideologies, and how they see their own positions in the households. The study examines this collective process and shows how balance is struck in the micro-vendors' association in Phnom Penh. Through their collective action against the authorities, are they able to overcome their existing economic and social subordination? Or are they encouraging their members to conform to the existing norms through building social capital?

Lee-Smith, D. (1997) 'My House is my Husband – A Kenyan Study of Women's Access to Land and Housing', Thesis 8, Department of Architecture and Development Studies, School of Architecture, Lund University of Technology, Lund University, Sweden.

This thesis explores women's access to property in Kenya. Part 1 gives the Kenyan background and the theoretical and methodological approach. Part 2 presents findings about the social construct of the gender contract, and elaborates these in the context of women's subsistence work, colonization, and women's formation of organizations. Part 3 consists of the conclusions,

which include a model of change in gender relations at the micro-level. This is a feminist work in the field of women and housing, using gender-contract theory. Empirical data were gathered through random household sample surveys and in-depth interviews in the peasant, plantation, and urban poor areas during 1990–92. The issue is how women in Kenya get access to property (land and housing), and specifically the social mechanisms that govern men's and women's relationships with each other and with property. The gender contract is identified as the social mechanism, and two forms of the contract are identified in Kenya: the subsistence gender contract and the market gender contract. The Kenyan gender contracts delineate a power relationship in which women's lack of access to property keeps them subordinate to men and requires them to provide subsistence. Women's actions are based on their strategies for improving their lives. Collective action is one such strategy with important implications for housing. A gendered housing policy is needed which recognizes women's access to property as a human right and which builds upon their proven housing-production capability. It should support the values and objectives of women's groups, namely the provision of subsistence to their families.

Levin, C. E., D. G. Maxwell, M. Armar-Klemesu, T. Ruel, S. S. Morris, and C. Ahiadeke (1999) *Working Women in an Urban Setting; Traders, Vendors, and Security in Accra*, **FCND Discussion Paper no 66, IFPRI, Washington.** Data collected from a 1997 household survey carried out in Accra, Ghana, are used to assess the crucial role that women play as income earners and in securing access to food in urban areas. One third of the households surveyed are headed by women. For all households, women's labour-force participation is high, with 75 per cent of all households having at least one working woman member. The high number of female-headed households and the large proportion of working women in the sample provide a good backdrop for looking at how women earn and spend income differently from men in an urban area. Livelihood strategies for both men and women are predominantly labour-based and dependent on social networks. For all households in the sample, food is still the single most important item in the total budget. Yet there are important and striking differences between men's and women's livelihoods and expenditure patterns. Compared with men, women are less likely to be employed as wage earners, and more likely to work as street food vendors or petty traders. Women earn lower incomes, but tend to allocate more of their budget to basic goods for themselves and their children, while men spend more on entertainment for themselves only. Despite lower incomes and additional demands on their time as housewives and mothers, female-headed households, petty traders, and street food vendors have the largest percentage of food-secure households. Women may be achieving household food security, but at what cost? This paper explores differences in income, expenditure, and consumption patterns in an effort to answer this question and suggests ways

in which urban planners and policymakers can address special concerns of working women in urban areas.

Made, P. (2000) 'A field of her own: women and land rights in Zimbabwe', in J. Mirsky and M. Radlett (eds.), *No Paradise Yet: The World's Women Face the New Century,* pp. 81–100, Panos/Zed Books, London.
Land tenure, a prime issue for women in urban and rural agriculture, is addressed here from the point of view of women farmers in the capital of a southern Africa country. More than 70 per cent of Zimbabwe's agricultural work force is female; an equal share of urban agriculture is managed by women. Women cannot inherit land, either from their fathers or husbands. The author concludes that economic development will be slow, with only half the population empowered by legal access to land.

Maxwell, D. G. (1993) 'Land Access And Household Logic: Urban Farming In Kampala', Makerere Institute of Social Research, Kampala (Uganda).
The objective of this paper is to evaluate the various claims made about urban agriculture in Kampala, Uganda. This includes reviewing the limited literature on the importance of this activity in Kampala; attempting to assess direct evidence on nutritional status; examining the means of access to land; and understanding the logic of various households involved in urban food production. Gender analysis is applied to examinations of land access and household logic. The paper contends that commercial producers may be either men or women, and male and female household members may collaborate in business ventures. In production for food security, it is common for senior women in the household to gain access to land through borrowing, renting, squatting, or purchasing use rights. Urban agriculture contributes to household food security and enables women to use cash income on items other than the purchase of food. Urban agriculture often becomes a survival strategy for low-income female-headed households, widows, and families suddenly abandoned by a primary wage earner.

Maxwell, D. G. (1995) 'Alternative food security strategy: a household analysis of urban agriculture In Kampala', *World Development* 23 (10): 1669–1681.
The author contends that little is understood about the forces behind urban farming or its impact at the household level. Intra-household and gender relations, as well as declining wages and economic informalization, are all important to an understanding of urban farming. The paper presents an overview of the household analysis of urban farming, as based on research carried out in Kampala, Uganda, between November 1992 and October 1993. This includes a discussion of intra-household dynamics, access to land, and a comparison of food security and nutritional status in farming and non-farming households. Underlying the evidence gathered is the fact that urban farming is almost completely under the control of women, who bear responsibility for the provision of food. Discussion also centres on the implications of urban

farming and possible policy alternatives. The author suggests that programmes promoting urban farming should give priority to low-income, female-headed households for equity reasons. Such programmes could be established through women's organizations, such as informal savings and credit groups, and should be closely monitored, both in terms of the direct effect on women's income and in terms of food security and child nutritional status.

Mbiba, B. M. (1995) *Urban Agriculture in Zimbabwe: Implications for Urban Management and Poverty*, **Avebury, Aldershot (UK).**
This book addresses the phenomenon of urban agriculture in Zimbabwe. While it acknowledges that the activity is a significant source of food and income for the urban poor, the book draws attention to the development conflicts raised by the activity. It attempts to place urban agriculture within the context of urban economy, the environment, institutional concerns, gender, and urban poverty. Evidence presented confirms the role of urban agriculture for employment of women and children. A review of gender dimensions of informal urban cultivation highlights the needs, problems, and experiences of women's double burden of production and reproduction. Men's social and economic motivations for urban cultivation activities are also noted. Issues of 'gate-keeping', female landlordism, and decision making are discussed in terms of gender dynamics. It is noted that women are not a homogeneous group, hence the need to revise generalizations about poor women and extend research issues to high-income groups. The author contends that urban cultivation should form only one part of a strategy designed to improve the position of urban women, for it does not tackle the problems of women's access to education, skills, wage labour, and self-employment. Based on on-going research, the book demonstrates the potential for urban agriculture as part of the urban economy, but argues that the urban poor, including women-headed households, are not major beneficiaries of the activity.

Mianda, G. (1996) 'Women and garden produce of Kinshasa; the difficult quest for autonomy', in P. Ghorayshi and C. Belanger (eds.), *Women, Work and Gender Relations in Developing Countries*, **pp. 91–101, Greenwood Press, Westport Connecticut.**
This chapter focuses on women and the organization of garden production in Kinshasa, Zaire. Gender relations are viewed as power relations, whereby garden production becomes a power game played between women producers and husbands. Women undertake garden production to acquire economic independence from their husbands, as well as to meet the financial needs of their families. Through various strategies and tactics, women manipulate the sexual division of labour, despite its constraints, for their own benefit. They gain advantage over their husbands for initiating the production. In order to claim total autonomy, women gardeners establish control over the management, marketing, and revenue derived from production. They thus modify, at the level of garden production and at all levels of power related to this production, the traditional image of women.

Mitullah, W. (1991) 'Hawking as a survival strategy for the urban poor In Nairobi: the case of women', *Environment And Urbanization*, **pp. 13–22.**
This paper considers the role of hawking as a survival strategy of low-income women and their families. Drawing on findings of a study carried out in Nairobi, Kenya in 1987/1988, it presents information on the importance of such activities to household income, offers a brief history of the trade, and discusses the concept and nature of the informal sector.

Mudimu, G. D. (1996) 'Urban agricultural activities and women's strategies in sustaining family livelihoods in Harare, Zimbabwe'. *Singapore Journal of Tropical Geography* **17 (2): 179–194.**
Though a widespread practice, urban agriculture is not planned for or supported by urban planners and managers as a legitimate form of urban land use in Harare, Zimbabwe. As women are the main participants in urban agriculture, their activities come into direct conflict with planning provisions for urban space. This study examines the role of women in urban agriculture, and views and perceptions of the use of urban space for agricultural activities in Harare. The large presence of women cultivators is indicative of women's reduced opportunities for formal employment in urban areas, and the perceived notion of women having primary responsibility for providing family sustenance. While women were the predominant 'owners' of the plots, the men in the fields were primarily cultivating land on behalf of their spouses or as hired hands. A significant proportion of female respondents were heads-of-households, and urban agriculture is practised by women of all socio-economic classes. Those women in professional occupations tended to hire contract workers for their plots. Data collected also support the fact that larger households are more likely to be under pressure to supplement their food sources and incomes via urban agriculture as a survival strategy. Urban agriculture offers women the opportunity to enhance their economic power within the household, although not without negotiating with their spouses, and increases their ability to provide food for family consumption. The study identifies two immediate issues requiring the attention of policy makers. First, the potential increased competition for land, as reduced employment opportunities push more men to pursue urban agriculture activities, may pose a threat to women's future access to land. Second, current urban planning concepts must be reviewed so that a clear policy on urban agriculture is formulated, in order to support women's struggle for sustaining family livelihoods in the urban economy.

Ofei-Aboagye, E. (1996) 'Gender Critique on Urban Agriculture: Food Security and Nutritional Status in Greater Accra (Ghana)', Report for IDRC Project No. 96-0013 003149, IDRC, Ottawa.
This proposal review is based in an IDRC study on food security and nutritional status in Greater Accra, Ghana. It highlights key issues in gender considerations for research on urban agriculture. It focuses on the reviewer's expectations regarding objectives of the study and suggestions for improvement along gender lines. The reviewer notes that resources of land, water, credit, information,

and other inputs need to be considered from a gender perspective. Gender proportions of poverty and its influencing factors should inform the design of conceptual framework and proposed methodology (with qualitative methods facilitating particularly rich gender enquiry). The reviewer contends that the participation of a female lead-researcher does not necessarily guarantee incorporation of a gender perspective. Use and involvement of policy makers, the National Council on Women and Development, women's organizations and the media are critical at various stages of the research.

O'Reilly, C. and A. Gordon (1995) *Survival Strategies of Poor Women in Urban Africa: The Case of Zambia*, NRI Socio-economic series 10, Natural Resources Institute, Chatham, UK.
This research was carried out with the aim of providing better definition and targeting of project interventions, recognising the importance of natural resource-related activities (food production, processing, and trade) to poor women in urban areas. The research paper discusses ways in which women's livelihood strategies could be strengthened, emphasizing the need for multi-dimensional initiatives. Credit (particularly for the poorest), confidence building, access to information, and specific income-generating activities (urban agriculture, skills training and food processing, strengthening trading links with rural areas) are highlighted as major requirements.

Rakodi, C. (1988) 'Urban agriculture: research questions and Zambian evidence', *The Journal of Modern African Studies,* 26 (3): 495–515.
This article explores the forgotten or ignored area of food-crop cultivation in urban areas in the 1980s. The author contends that the first stage in studying any neglected area is to review existing evidence and policy, in this case from Zambia, to reveal gaps and suggest avenues for further enquiry, policy formulation, and experimentation. The author situates urban agriculture within a wider framework of the gender division of labour, specifically the economic activities of women. Food production in Zambian cities is predominantly a women's activity, determined by the size of household, income per capita, stability of urban residence, and the availability of land for cultivation around the house and/or within reasonable walking distance. A strategy to increase the household production of fruit and vegetables for consumption and sale must be examined in the context of household decision making, and especially the labour time available to women. Women's response to opportunities to grow more food will depend on the extent to which they make decisions about cultivation, the use or sale of produce, and the distribution of benefits within the household. More detailed evidence from urban agriculture projects and wider implications of such a policy must be assessed before more widespread cultivation is advocated. This includes assessing the benefits to households, and especially to women, compared with alternative economic opportunities which might be made available by other initiatives.

Methodologies and tools for gender mainstreaming in urban agriculture

Ahlers, R. (2005) 'From Increasing Participation to Establishing Rights: Evading the Gender Question in Water Resource Management', EMPOWERS Regional Symposium: End-Users Ownership and Involvement in IWRM, 13–17 November 2005, Cairo, Egypt.
Gender-sensitive policy in water-resources management has shifted from an emphasis on recognizing women as water users and increasing their participation in decision-making bodies, to a focus on securing formal rights to water. Increased involvement of women in male-dominated institutions was perceived to address gender inequality in access to and control over water resources. In recent years, rights-based approaches have gained ground in response to increasing private-sector presence in the water sector and the policy of water supply.

Amaratunga, C. (2005) 'Creating Learning Cultures for Gender Mainstreaming; Strategic Approaches for Impact Assessment of Multi-sectoral Approaches; the Case of HIV/AIDS in Subsistence Agriculture and Artisanal Fisheries', Institute of Population Health, Faculty of Medicine, Dept. of Epidemiology and Community Medicine, University of Ottawa, Ottawa.
The inclusion of gender mainstreaming and multi-sectoral frameworks in agricultural planning can be extremely helpful in understanding and measuring how development interventions affect women and men, girls and boys differently. This case study of gender mainstreaming in the health sector provides a useful example of how a gender analysis can serve as a critical tool for social change. Not only does a gender-mainstreaming approach help to measure empowerment differentials between the sexes, it is also useful for assessing stakeholder assets and needs. This, in itself, provides a practical starting point in the programme-planning process. This paper provides an overview of strategic approaches for impact assessment of multi-sectoral approaches for gender mainstreaming in agriculture. It includes examples and illustrations of gender-audit guidelines, checklists, and programme interventions.

Derbyshire, H. (2002) *Gender Manual: A Practical Guide for Development Policy Makers and Practitioners*, DFID, London.
This gender manual is designed to help non-gender specialists to recognize and address gender issues in their work. The intention is to demystify gender, make the concept and practice of gender 'mainstreaming' accessible to a wide audience, and clarify when to call in specialist help. It focuses on the processes of gender mainstreaming which are similar in all sectoral and regional contexts, and also similar, in some instances, to other processes of social development and organizational change.

De Zeeuw, H. and J. Wilbers (2004) *PRA Tools for studying urban agriculture and gender*, **RUAF, Leusden, The Netherlands. Available from www.ruaf.org**

This document has been prepared to facilitate the gender case studies to be undertaken by the regional RUAF centres as a training exercise and an input to the gender expert consultation. After giving an introduction to PRA, it presents a range of PRA tools which can be used to investigate various important issues when analysing gender and urban agriculture in local situations, such as the access to and control over resources, decision-making power, division of labour, external factors that influence gender, and constraints, problems, and opportunities.

Feldstein, H. S. and J. Jiggins (eds.) (1994) *Tools For The Field: Methodologies Handbook for Gender Analysis in Agriculture*, **Kumarian Press, West Hartford, Connecticut.**

From agricultural production to post-harvest activities, this handbook offers a practical set of tools for the novice or experienced professional working on gender analysis in agriculture. It provides real-life examples of how to assemble and use all the research tools you need to collect gender-sensitive data in a timely and cost-effective way. Covering Latin America, Asia, and Africa, the handbook consists of 39 original cases by contributors from the North and the South. The cases illustrate a range of techniques from making gender-sensitive interview guides to ensuring participatory rural appraisal methods that include a gender dimension. Contents include learning about the system and initial diagnosis; research planning; on-farm experimentation and trial assessment; on-going diagnosis and special studies; extension, training and institutionalization.

Gabel, S. (2001) 'Methodological Reflections on Using Participatory and Action Oriented Research with Women Farmers in Harare', paper for the 'Appropriate Methodologies for Urban Agriculture' workshop, 1–5 October 2001, Nairobi, Kenya. Available from www.ruaf.org.

The task of conducting qualitative, participatory and/or action research in a setting that is far removed from one's own can be somewhat daunting, especially for a student organizing her field work independently for the first time. The author, in doing her Master's study with the Municipal Development Programme in Harare, Zimbabwe, experimented with participatory and action-oriented research from many academics and practitioners of participatory development. In this paper she gives the results and reflects upon the use of these methods.

Gender and Water Alliance (GWA) and UNDP (2006) *Resource Guide. Gender in Water Management*, **GWA, Dieren, The Netherlands. Available from www.genderandwater.org/page/2414.**

This resource guide is intended as a reference document to assist water and gender practitioners and professionals, as well as persons responsible for

gender mainstreaming, and anybody else who is interested in the water sector. The Guide was developed in response to an identified need for information on gender mainstreaming in water resource management. While considerable information exists, it is dispersed among different institutions and organizations, making it difficult to know where to get specific resources for particular aspects of gender mainstreaming in the water sector. This Guide supports the efforts of those trying to mainstream gender in their programmes and projects, and those seeking to improve their knowledge and skills in gender and water resource management.

Guijt, I. (1994) 'Making a difference: integrating gender analysis into PRA training', *PLA Notes*, **IIED, London.**
This article argues that only in few instances does PRA training focus on the 'who?', and that it rarely explores the issue of social differences based on gender. It recognizes, however, a slow increase in recent years in the number of attempts to improve the practice of PRA by allowing gender issues to shape both the practical work and the analysis. It argues: 'If gender is to become a concrete and meaningful concept for PRA trainees, then those who are learning to work with PRA will need to become aware of gender before any fieldwork takes place.' The article on the other hand also provides some words of caution, warning against the 'gender average' (assuming harmony and homogeneity among women or men) and possible confrontations between local women and men over issues of power and autonomy.

Guijt, I. (1995) *Questions of Difference: PRA, Gender and Environment, A Training Video*, **IIED, London.**
This two-hour video with provoking images can be used to stimulate discussion and to lead into class-based exercises. It gives a summary of the key elements for using PRA to understand gender and environment. The video is structured in thematic segments of 2–14 minutes, from which users can select those of interest or for specific training. The three case studies show workshop participants using PRA methods to explore issues relating to gender and the environment.

Hill, C. L. M. (2005) *Making the Links: Addressing HIV/AIDS and Gender Equality in Food Security and Rural Livelihoods Programming*, **A toolkit for CIDA staff working on initiatives related to food security and rural livelihoods, Canadian International Development Agency (CIDA).**
This toolkit was designed to enable CIDA staff to address HIV/AIDS and gender equality in food security and rural livelihoods programming. While it is primarily geared towards the CIDA programme cycle, the toolkit is also useful to a wider audience, including NGOs. It includes seven guidance sheets, providing entry points for addressing HIV/AIDS and equality in the programme cycle in a gender-sensitive manner, and suggests how to consider gender-equality results in performance assessment and in results-oriented logical framework analysis.

Hovorka, A. J. (1998) 'Gender Resources for Urban Agriculture Research: Methodology, Directory and Annotated Bibliography, CFP series report # 26, IDRC, Ottawa.
Although there is a growing interest in the mainstreaming of gender in development research, there is also a general lack of understanding of how this type of analysis can be applied. The purpose of the publication is to provide researchers with simple and systematic methodological tools for practical application of gender analysis within urban agriculture. It was developed primarily for the Cities Feeding People team members, but can be applied by anyone doing a similar type of research. The methodology covers all stages of a research project: (1) proposal; (2) data collection, interpretation, and analysis; (3) monitoring and evaluation. Still, it is not intended as a blueprint, but rather gives guidelines. Included are a directory of gender resource persons for urban agriculture research and an annotated bibliography on gender and urban agriculture. It is a very useful publication, both with regard to research and development methodology and for practical information.

Morris, P. T., S. Kindervatter, and A. M. S. Woods (2003) *The Gender Audit Questionnaire Handbook*, **American Council for Voluntary International Action (InterAction) Commission on the Advancement of Women (CAW), Washington.**
This handbook presents the rationale behind mainstreaming gender in an organization's culture and structure. The gender audit is a tool that is used in organizations to identify staff perceptions of how gender issues are addressed in their programme portfolio and internal organizational process. It has a list of questions and describes strategies for sampling, data collection, analysis, and results presentation. It also illustrates how to use the gender-audit results in action planning.

National Institute of Urban Affairs (NIUA) (undated) *Working With the Urban Poor: A Manual for Trainers*, **NIUA, New Delhi.**
This manual aims to build the skills of trainers in training programme partners at all levels – community, city, district, and state – to work towards the empowerment of women and the achievement of national social-sector goals.

Njenga, M. E., N. Karanja, C. Kabiru, P, Munyao, G. Kironchi, K. Gathuru, and G. Prain (2007) *Mainstreaming Gender Analysis in the Research Process of the International Potato Centre (CIP)*, **Urban Harvest, CIP, and PRGA. Available from www.prga.org**
Urban Harvest, the CGIAR system-wide initiative on urban and peri-urban agriculture, which is convened by the International Potato Center (CIP), has incorporated a strong gender component within its research approach. The project reported here carries forward various initiatives, among them a small project to help to mainstream gender in CIP's research programme, whose overall objective was to initiate a process of gender mainstreaming in CIP

through institutional mechanisms, and by piloting the approach in research projects in sub-Saharan Africa. In addition, the report discusses the strengths and challenges encountered in the field application of the PR and GA tools and approaches in both urban and rural farming and how to build on the strengths and address the challenges.

Norwegian Agency for Development Cooperation (NORAD) (1999) *Handbook in Gender and Empowerment Assessment*, **NORAD, Norway.**
As NORAD's role is to assess project proposals presented by partners, and not to participate in project formulation and planning, this manual does not aim to conduct full-scale gender and empowerment analysis of projects but rather assists the user to identify the need for such analysis. It also provides guidelines for NORAD's requests for gender analysis at the various stages of the project cycle: project appraisal, appropriations, progress reporting, project reviews, and evaluations.

Ostergaard, L. (1992) *Gender and Development: A Practical Guide*, **Routledge, London.**
People concerned with development work have awoken in the past two decades to the urgent need to involve women as active participants and beneficiaries of their programmes and projects. But the transition from idea to reality is occurring slowly. As a result, too many development efforts are still being badly designed, failing to achieve their goals, and having a negative impact on women. In this book, eight experts explain the importance of gender awareness and illustrate how gender relations vary from culture to culture. They argue that every development effort should be preceded by a gender analysis and they show in practical terms how this leads to more success in both the long and the short terms.

Oxfam GB (2006) *A Change in Thinking; Gender Budgeting – Now's the Time*, **Oxfam GB, UK Poverty Programme, Oxford, UK.**
This DVD includes experiences in gender budgeting across the United Kingdom. Oxfam and its partners believe that gender budgeting can help local and national governments to improve the lives of both women and men. It includes information on the concept of gender budgeting, the view from a local-government perspective, and a range of case studies.

Palacios, P. (2003) 'Why and how should a gender perspective be included in participatory processes in urban agriculture', in *Research and Intervention in Urban Agriculture: Methodologies and Instruments for Analysis*, **Module 3 of the regional training course on urban agriculture in Quito-Ecuador, IDRC / UMP–LAC / ETC.**
This document analyses the reasons why it is important to include gender equality in participatory processes concerning urban agriculture and explains how this can be achieved, addressing the distinction between strategic and practical needs, as well as the development of specific and affirmative actions.

Quisumbing, A. R. and B. McClafferty (2006) *Gender and Development: Bridging the Gap between Research and Action*, **IFPRI, Washington.**
This guide offers a non-technical presentation of research findings from IFPRI's multi-country research programme on gender and intra-household issues, along with implications and key questions for integrating gender research findings into project cycle and policy decision-making processes. The volume draws on work undertaken by IFPRI and its collaborators in developing and developed countries since the early 1990s. It presents empirical evidence – based on IFPRI's field research, using both quantitative and qualitative techniques – on the ways in which gender and intra-household issues affect the success of development interventions, and then shows readers how to incorporate the findings effectively into development programmes. The guide – its findings, format, and presentation – has been field-tested in workshops with practitioners in Kathmandu, Nairobi, Guatemala City, and Washington, DC.

Quisumbing, A. R. and B. McClafferty (2006) *Food Security in Practice; Using Gender Research in Development*, **IFPRI, Washington.**
This guide bridges the gap between research and practice by providing up-to-date, relevant information on why and how gender issues, when taken into account, can improve the design, implementation, and effectiveness of development projects and policies. It presents key research findings from IFPRI's gender and intra-household programme in the framework of project and policy cycles. The authors took the additional step of field-testing the guide among practitioners in Africa, Asia, and Latin America to see whether the findings were relevant outside the study countries. Finally, they conducted a workshop with US-based practitioners and policy makers to see how the findings related to the policy cycle. The guide records the insights, comments, and suggestions of the ultimate users of this research.

Van Dam, H., A. Khadar, and M. Valk (2000) *Institutionalising Gender Equality; Commitment, Policy and Practice, A Global Source Book*, **Critical Reviews and Annotated Bibliographies Series: Gender, Society and Development, KIT, Amsterdam.**
Encouraged by the growing international women's movement and recent world conferences on women, many governments, NGOs, and other development organizations have made commitments to the goal of promoting equality between women and men. The majority have taken steps towards turning commitments into action by including a concern for women and gender in planning, policy, and, to some degree, practice. As a result, a wide array of measures, approaches, and practical actions intended to introduce a gender perspective and bring about change in organizations is beginning to emerge. However, it has become clear that integrating gender issues is a complex and contested process, apt to encounter resistance from both organizations and individuals.

Wassenaar, N. (2006) *Incorporating gender into your NGO.* **Available from www.Networklearning.org**
Often NGO/CBOs have difficulties knowing how to incorporate gender into all aspects of their organization and thus ensure gender mainstreaming, balance, and equality within the organization and its activities. This manual assists with this process, starting with an explanation of basic concepts and definitions of gender, followed by 'what to do and how to do it', both within and outside an organization, in order to scan all aspects with a gender-sensitive eye. In the process it explains the need for change and the constraints that must be addressed; it offers an awareness of wrong concepts and influencing factors. Several steps are needed in the process of 'engendering' an organization, and these steps are described one by one, from analysis of the organization, development of an action plan, implementation, and then monitoring and evaluation. Finally, related resources and websites are given; links to tools, such as gender checklists for the project cycle, are provided.

Zwarteveen, M. (2006) *Effective Gender Mainstreaming in Water Management for Sustainable Livelihoods: From Guidelines to Practice*, **Both Ends, Amsterdam.**
This working paper presents the main findings of a joint project of the Gender and Water Alliance and Both Ends, namely the comprehensive assessment of water management in agriculture. The authors analyse the difficulties of mainstreaming gender in water management. They develop a minimum agenda with practical and realistic recommendations to practitioners, policy makers, researchers, and gender specialists working in the field of water and agriculture, to help them to genuinely and effectively address gender differences and inequities in policy and research in this field.

Websites

www.fao.org/gender

This is a Gender and Food Security site of the Food and Agriculture Organization of the United Nations. It contains articles on projects and programmes, and a thorough set of statistics and other information is also available.

www.genderdiversity.cgiar.org

The purpose of the gender and diversity (G&D) programme of the Consultative Group on International Agricultural Research (CGIAR) is to help the CGIAR centres to make the most of the rich diversity of their staff to increase research and management excellence. It promotes such activities as diversity-positive recruitment, international teamwork, cross-cultural communications, and advancement of women. The website addresses issues of inclusion, opportunity, dignity, and well-being. It also has a database of women scientists and professionals around the globe, resource centres, and newsletters.

www.genderandwater.org

The mission of the Gender and Water Alliance (GWA) is to promote women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security, and environmental sustainability. GWA believes that equitable access to and control over water is a basic right for all, as well as a critical factor in promoting poverty eradication and sustainability. The website of GWA serves as a platform for the alliance and network and provides key documents on gender mainstreaming of the water-resources management sector.

http://www.networklearning.org

On this website, many manuals, field guides, and training courses have been made available to groups who need them. The site stimulates the free distribution of information, in an attempt to encourage global learning processes. It also includes a section dedicated to gender issues.

http://topics.developmentgateway.org/gender

This website is part of the dgCommunities, an interactive place where knowledge resources focused on development can be found and where members of the communities can share their own work, participate in discussions, find people with similar interests, etc. The gender community specializes in Gender Mainstreaming links to documents, events, websites, etc. as well as feature articles, special reports, online discussion forums, and periodic online events.

http://www.prgaprogram.org

The CGIAR System-wide Program on Participatory Research and Gender Analysis (PRGA) develops and promotes methods and organizational approaches for gender-sensitive participatory research on plant breeding and on management of crops and natural resources. The programme's website contains links to PRGA publications and other resources such as the Newsletter.

http://www.siyanda.org

Siyanda is an on-line database of gender and development materials from around the world. It is also an interactive space where gender practitioners can share ideas, experiences, and resources.