## SITUATION ANALYSIS, DIAGNOSIS AND BASELINE STUDIES

Situation analysis in urban and peri-urban agriculture is often a starting point for programmes and projects supporting interventions to improve the contribution of urban agriculture to income, family nutrition, social and environmental conditions and wellbeing. Yet there has been little specific consideration of appropriate methods and tools for assisting situation analysis in the urban and peri-urban context.

# Methodologies for Situation Analysis



Angeline Mbavu cleaning mangos, Harare, Zimbabwe

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n considering methodologies for situation analysis, two useful frameworks were identified. A first is the Livelihoods Framework, which assists in conceptualising interrelationships between the different dimensions of people's lives and helps to reveal the complexity of urban livelihoods and poverty. It further assists in making a conceptual link between understanding at the household level and at the meso and macro level, encouraging the analysis of how livelihoods are influenced by institutional and policy processes and vice versa (Sanderson 2000, Martin et al. 2000). Another framework is the Pressure -Activity - State- Response (PASIR) framework. This framework is both theoretical and practical. It focuses on dynamic causal analysis by identifying factors bringing about change and exploring the consequences and impact.

Conceptual challenges concern defining and specifying the UPA type and household. The definition and use of concepts, which guide the exploration and analysis of urban agriculture

Adrienne Martin Nicoliene Oudwater Sabine Gündel

Livelihoods and Institutions Group, Natural
Resources Institute, University of Greenwich, UK

A.M.Martin@greenwich.ac.uk

and the urban context are particularly challenging. The terms 'urban', 'peri-urban' and 'rural' agriculture are sometimes used as broad descriptions of a continuum and sometimes as discrete categories. Conceptual clarity is especially important as urban agriculture is marked by the diversity of actors and plurality of countries involved. It is important to define urban agriculture in each context rather than relying on pre-established definitions (see Santandreu in this issue, Adam 1999).

The type of urban agriculture needs clear specification. The literature most frequently addresses cultivation that takes place in public and private open spaces. Homestead gardening is less frequently a focus, although it can make a significant contribution to household livelihoods, both in terms of food and income. A further problematic issue is the nature of 'households'. In urban areas, households are complex with household members in different places in different seasons, or with multiple occupancy of houses, and sub-letting and renting arrangements (Beall and Kanji 1999).

### PARTICIPATORY APPROACHES

There are some interesting examples of the use of participatory

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approaches in analysis of urban agriculture (see Santandreu and Slater in this issue). Engagement in a participatory process encourages participation of local communities and prepares the ground for improved local governance. It facilitates the integration of gender, cultural and environmental aspects in the development of problem definitions and project proposals.

The use of PRA tools such as transect walks and plot land-use mapping are usually recommended as introductory participatory exercises to provide an initial overview of the area to the researchers, while the participants can take a lead in identifying which issues are important to them. There are important differences between conducting PRA in urban and rural contexts, which have implications for the use of participatory tools and methods (Mitlin and Thompson 1994). The differences are associated with the greater diversity in urban livelihood strategies, the extent of reliance on natural resources, the combination of formal and informal activities, differences in language and ethnicity, in tenure arrangements for housing and land, etc.) and the role of local government intervention in urban areas. This has implications on wealth ranking, social mapping and calendars.

The obstacles to participation, especially in the poorest areas, include low levels of social capital, poverty and limited access to assets, insecurity resulting from crime or political activity and social isolation. There may be trade-offs between encouraging participation and achieving a goal. "Weighing up the pros and cons between empowerment of those living in poverty and pragmatic involvement of influential stakeholders is an important consideration which will determine the success or otherwise of the strategy." (Pederson 2001: 26). Local government structures may or may not provide a supportive infrastructure.

### STAKEHOLDER ANALYSIS

A crucial aspect to consider is the wide range of stakeholders encountered in urban settings. UA is taking place in a multi-sectoral environment and it is easy to miss some key stakeholders in a participatory process. The wide range of stakeholders also contributes to the presence of conflicting interests and tensions. To avoid this, the research team has to adopt a position of "critical neutrality" (see Santandreu in this issue). The research approach used successfully in such a complex context should produce information, which is relevant to different stakeholder groups; it should be transparent and participatory in order to allow people with different educational backgrounds to engage.

Methods to identify and explore stakeholder interests include: Small meetings with a few key stakeholders; Stakeholder workshops; Individual interviews; Indepth discussions; and Joint focus groups.

### **SAMPLING AND FOCUS**

As resources are usually limited, situation analysis has to be selective in its coverage of areas and types of urban agriculture. Criteria guiding area selection could include availability of open space, the distribution and scale of poverty, population and housing growth and density, levels of basic services, distance from city centre, transport linkages and cost, market integration, housing availability and cost, land use, tenure status, physical characteristics of land, and the proximity and availability of arable land (O'Reilly 1995, Adam 1999). The selection of the study area also has a political dimension, linked to the interests

of the different stakeholders involved. However, while the criteria and category descriptions might be clear, the actual physical areas designated may need to shift between categories over time as periurban areas take on urban characteristics, and parts of the rural hinterland become more peri-urban in nature.

There is a problem of ensuring representation in the choice of areas and participants for interviews and surveys. In small, less differentiated rural communities, key informant interviews and social mapping can be used to elicit a full list of village households for sampling purposes. However, in urban areas, the population density, high social mobility, a wider range of employment opportunities and less established social relations make it less likely that residents know each other well. In the longer version of this article you will find more tools described (www.ruaf.org). Some of these are case study approaches; focus group discussions; questionnaire surveys; and the compromise between the case study and inclusive questionnaire surveys; selecting households randomly along a transect walk.

### **POVERTY AND DYNAMICS**

Rapid change is characteristic of many urban environments hence there is a need for practical methodologies to capture trends and dynamics influencing urban and peri-urban agriculture, at different scale levels (intra-household, group/neighbourhood, city). It is important to link agricultural change with wider urban livelihoods issues and the underlying dynamics in terms of changing land tenure and emerging land markets, rural-urban linkages, migration patterns, local perceptions, the national economy, urban development policies, environmental issues and the historical. institutional and political context (Torres-Lima et al. 2001).

To understand the wider dynamic and institutional context, it is important to explore what changes people have perceived in relation to their livelihoods and to urban agriculture, how they have responded and what are their perceptions and aspirations. Visualisation using photographs can be helpful in exploring local perceptions of urban development (Antweiler 2000).

An important characteristic of poverty is its dynamism; poor individuals and communities are not necessarily permanently poor and it is important to distinguish between chronic and transient poverty (Rakodi 1998). There are different motivations for urban farming, described by Nugent (2000) as a 'mixed strategy of risk minimisation and food supplementation'. The extent to which it is important for the poorest, needs to be empirically established. Studies which have explored characteristics of urban poverty indicate that it is associated with multiple characteristics (O'Reilly 1995).

Participatory poverty assessments (PPA) are a very useful tool to explore local perceptions of poverty and deprivation. They help to identify the poor and different social groups from a local perspective, as

# There is a **need for practical methodologies**

well as the constraints experienced by the poor in pursuing particular livelihood strategies and accessing public and private services.

Analysis of social networks can assist the understanding of vulnerability and people's ability to mobilise support. Social networks and other informal institutions are the channels through which the urban poor access information, and social and economic support. Mbiba (2001a) criticises a narrow focus on the poor which risks missing out on the interlinkages that exist between poor groups and upper-income groups. Methods for exploring informal institutions are also particularly relevant. Methodologies for exploring gender relations and urban agriculture are further discussed in detail in Hovorka (this issue).

### **SUSTAINABILITY**

One of the claims made about urban and peri-urban agriculture is that they add to the "sustainability" of urban areas. Methods have been developed in many disciplines to assess the "sustainability" of an activity or enterprise. Common elements are to examine the impacts over a relevant time period of the activity and to consider the linked interactions of social, economic, and environmental phenomena (Nugent 2001).

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In terms of environmental sustainability the focus of many research projects has been on natural resource use (land use) and waste/wastewater utilisation. In many cases the research focus is on technological issues, but here are examples of less conventional ways of analysing waste management issues. For instance, IDRC sponsors a waste management project in three agro-ecological zones in West Africa to develop recycling strategies to close the rural-urban nutrient cycle as well as preserving the quality of the urban environment by reducing the waste accumulation. Another example is the Multidisciplinary Situation and Stakeholder Analysis (MSSA) to address waste management (Drechsel et al. 2001).

The discussion of sustainability relates closely to efforts to estimate the trends and economic benefits arising from UA. Although the relevance of indirect indicators is often acknowledged, the inclusion of intangible benefits as perceived by the respondents in the total economic value of urban agriculture is less frequently included (Perez-Vazquez et al. 2000, Martin et al. 2000, this issue).

Two methods of economic analysis in UPA are useful to provide robust information for the sustainability discussion. The two methods are cost-benefit analysis and contingent valuation, which not only address trends in production costs or wages, but

examine non-market, social and environmental aspects as well (Nugent 2001).

To develop an objective economic evaluation of urban agriculture, negative costs should be included as well (Nugent 2001), like increased risk of health, environmental degradation and availability of land for housing.

#### FOOD SECURITY

Urban agriculture makes a direct and indirect contribution to urban food supply. Data on indirect contribution to urban food supply can be collected through household surveys asking the respondents to estimate the proportion of the home consumption that is covered by home cultivation (see Moustier in this issue). Studies measuring impact of urban agriculture on food security tend to support the hypothesis that urban agriculture improves the food security of vulnerable households (Armar-Klemesu 2000). However, relatively few studies attempt to measure the link with nutrition.

### POLICY AND INSTITUTIONS

Participatory methods are associated more with researching the poor than with elites and policy-makers. Tools to encourage participation in town planning and urban development have recently included participatory applications of Geographical Information Systems (GIS) to facilitate stakeholder communication to develop a

consensus on land-use planning policies (Quan et al 2001).

Institutional analysis in urban agriculture is complex as urban issues are rarely the basis for inter-sectoral institutional collaboration and institutions rarely look across the rural/urban interface. Different institutional stakeholders - national government, local government, different departments and ministries have different responsibilities with regard to urban development, town planning, social welfare and economic development. If the benefits of participatory methods are to be realised, it is important that the understanding so gained, is used to influence wider policies and programmes designed and implemented by these institutions (Marshall and Te Lintelo 2001). Both formal and informal channels can be used.

# CONCLUSIONS AND FURTHER ISSUES

Some of the main lessons learned from this review are that:

- Conceptual clarity is important in guiding selection of location, methodology and analysis.
- The active and coordinated participation of all stakeholders is needed to facilitate improvements for vulnerable groups.
- Multidisciplinary teams require accessible methods to foster the participation of urban agricultural producers. Standard tools of participatory enquiry need adaptation for urban and peri-urban use.
- Documentation of the selection, combination and sequencing of complementary methods is very useful.
- ❖ The use of a combination of complementary methodologies, both quantitative and qualitative, is effective and helps in triangulation of information.
- Time is needed to build trust for participatory enquiry and action research. This is common to most participatory action but can be problematic in highly diverse urban areas with an unstable population and limited information networks.
- Reflective learning and critical assessment of methodology and research practice can help in adjusting to the challenges posed by unpredictable and possibly conflicting urban contexts.
- There should be consideration and discussion of the trade-offs between slow community empowerment and participation and goal-oriented influence on powerful stakeholders to expedite change.

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