

# Different Ways to Monitor

## Urban and Periurban Agriculture in Dar Es Salaam, Tanzania



Urban Vegetable Promotion Project

**In Tanzania, urban and peri-urban agriculture is a well-known activity and has reached the level of official acceptance (Jacobi et al. 2000). Systematic monitoring and evaluation as well as channelling generated information and feedback from the field to the relevant levels has supported this acceptance.**

**A** balance is sought between “conventional” and “participatory” monitoring. Both “hard data” are necessary, as is a system that allows primary stakeholders to monitor and evaluate their activities using different methods and their own indicators. Truly appropriate monitoring and evaluation should

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### **Group evaluation after discussion on implementation of planned activities**

enhance internal learning and provide evidence to support qualitative statements about the impact of an action. This information can be relevant to members of the community and to decision-makers.

### **GETTING STARTED - URBAN AGRICULTURE AS URBAN LAND-USE**

To get urban and peri-urban agriculture accepted, verifiable data about its impact in a city is needed. This is an obvious demand from planners, but in many cases the information is lacking.

For Dar es Salaam, a reasonable database is available, which consists of aerial photographs, maps and GIS data. In 1999 an inventory on vegetated open spaces in Dar es Salaam was initiated. (Dongus 2000). Based on the analysis of aerial photographs (taken in 1992) all open spaces in the then built-up areas were identified and physically visited. Through tapping the network of agricultural officers and local leaders, it was then possible to identify newly emerging open spaces and to update the information base. The results were transformed into a digital map for further use. Urban planners and decision-makers are the main users of this information. At the same time, discussions with the producers clarified the need for particular services and possible entry points for cooperation.

Aerial photographs and GIS data have been a good source of information for larger plots, but could not provide accurate figures about the micro-scale home gar-

dens in the city. A physical survey carried out once a year in a well-defined area was undertaken over five years, to get an idea about the land used for home-gardening in Dar es Salaam. This survey was part of an implementation programme in the community to support home gardening and carried out by extension workers. The participation of the owners gave a clear picture why gardens disappeared, why new ones emerged, and the main problems faced in the process.

### **THE WARD PROFILE**

A more “participatory” method in assessing agricultural activities is the “ward profile”. This tool was

*The ward profile involves ward officials, an extension worker and a mix of resource persons from the ward (e.g. farmers, the community worker, NGO staff, residents). A more experienced extension colleague facilitates the process.*

*Starting with a map with the ward boundaries and its main features, all agricultural areas/activities, which are known by the resource persons are indicated. Areas with specific features like backyard gardening, commercial production and live-stock keeping are shown. The exercise does not give accurate figures, but assesses the importance of a certain farming activity as well as possible “links” or sources of support (e.g. farmer groups in the wards, active NGOs/ CBOs, input shops, market places).*

*Through group discussion, it always becomes obvious that a range of possibilities for linkages exist, which have not been considered before. A “transect” walk of one or two hours is used to discuss and validate initial findings of the profile. It is of course not possible to cover the whole ward on that day. The extension worker is then in charge of completing the map and constantly updating it with the information obtained through the extension activities.*

## Appropriate monitoring and evaluation should enhance internal learning

not introduced to “obtain information”, but to indicate entry points for extension officers to offer services to urban farmers and assess the agricultural potential of their ward. In the process all urban agriculture related activities practised in the area, services and potential links (e.g. credit-providing NGOs and input shops) relevant to improve the service delivery in the site to urban farmers are indicated. The ward profile has been used to monitor changes in agricultural land use through periodic updates.

The extension workers and the ward leaders are the people making use of the profile, but other stakeholders (e.g. NGOs/ CBOs) who are also interested in supporting agricultural activities can benefit from it.

### MONITORING AND EVALUATION BY URBAN FARMERS

A variety of participatory approaches and of tools for participatory M&E are known to support community interaction and encourage learning. In Dar es Salaam, urban farmers and an extension agent are the main actors in this process. The latter acts as resource person for technical questions and facilitates, but also acts as a “broker”, giving advice on how to tap available support necessary for urban agricultural activities.

Practical experience shows that some of the constraints expressed by the farmers need external solutions in the form of

technical or institutional support, or financial resources that cannot be provided by the group itself. In a joint action plan, activities and the roles of all actors are clarified and agreed upon. Already in this process, criteria (indicators) on how to measure the success of the collaboration are set. During implementation, group members often realise that technical training alone will not be enough to improve their situation. Aspects related to internal group organisation, communication and leadership are some of the topics, which are frequently discussed (Rimoy & Amend 2001).

To monitor the process of the interactions and to make commitment and accountability obvious, farmers and the extension worker jointly document their meetings on a “monitoring sheet”. The sheet contains brief information on what has been done and the status of the activity. After both parties have signed them, the sheets are kept as a document of the group work. They are also used for writing monthly reports, as an indicator for performance of extension staff, and can serve as an objective way to document agricultural activities in the urban area.

### LEARNING FROM EXPERIENCE

A group evaluation is an essential part of the cycle. The group is encouraged to reflect on its achievements and if rele-

*When a group has gone through the agreed upon activities, a date for an evaluation is fixed. Farmers and extension workers review the initial action plan and the criteria set by the group. Questions are formulated to assess the criteria.*

*When the group is expected to have better yields the question could read: “Did the yield in my field increase? Yes or no?” A question allowing for more variation could be: “How do I see the co-operation in our group among our members? Possible answers: I am very happy, happy, it is O.K, I am not satisfied”.*

*Depending on the group the information can be detailed or rather general. Each question and possible answers are written or drawn on a piece of paper placed on the ground inside a wide circle. In the next step, every member puts a stone on the answer she or he favours. This step takes a very short time, and allows even a bit of privacy, as everybody is free to move around answering the questions. The actual learning takes place when the visualised results are discussed. “Why did the majority of our members have higher yields, while few have the same yield? What did we do differently?” Or: “why are so few people happy with our cooperation in the group?” A question, which always should be answered is: “Did we achieve what we had in mind? Why or why not?”*

### REFERENCES

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vant, to adjust its planning. The base for the assessment is the initial vision of the group. The success criteria put forward by the farmers are usually centred on better income, cheaper and better quality food. Intermediary improvements indicated are better yields, less crop losses, and enhanced marketing. Also, improved group cohesiveness and a better social security system are ways to express an impact begun by the agricultural activity. However, the indicators vary from group to group.

For many, the evaluation is a real learning experience. Positive experiences of individual group members usually motivate others to try out things. If a group has agreed to do certain activities jointly (e.g. applying for a piece of land, following up the connection of a water pipe), it will show whether the members have been committed and how they are organised. Often, internal group and leadership issues come up, which otherwise would not have been discussed. This first evaluation usually encourages farmers to review, adjust their plans and focus their activities.

### CHANNELLING THE INFORMATION TO THE MUNICIPAL AND CITY AUTHORITIES

Urban agriculture in Dar es Salaam is “visible” as an urban land-use, but also in the interaction between the urban farmers and the extension worker. To make these activities known and the information available to others, they finally have to be channelled to the city authorities. Only if the feedback reaches politicians and decision-makers the experiences made in the urban communities combined with “hard data” can pave the ground for support to urban and periurban agriculture.