PROCEEDINGS OF THE MDP/IDRC
WORKSHOP ON THE POLITICAL ECONOMY
OF URBAN AND PERI-URBAN AGRICULTURE
IN EASTERN AND SOUTHERN AFRICA

Bronte Hotel, Harare, Zimbabwe
28 February to 2 March 2001

MUNICIPAL DEVELOPMENT PROGRAMME
EASTERN AND SOUTHERN AFRICA

In Association with

IDRC

Final Report
Foreword
Acknowledgements

The Municipal Development Programme for Eastern and Southern Africa is grateful to the International Development Research Center [IDRC], which developed the idea for the work on the political economy of urban agriculture and provided a grant for the implementation of the activity. Special thanks go to Ms Denise Derby for her faith in MDP as a development partner organization, which influenced IDRC’s decision to implement the activity jointly with MDP. She was also key in shaping the form and content of the activity and had splendid ideas for the workshop. Ms Derby changed jobs within IDRC, and hence was unable to participate in the workshop. Dr. Luc Mougeot, Head of Cities Feeding People Programme, assumed responsibility for the activity within IDRC.

In Dr. Mougeot, we found a fountain of ideas for the activity, based on his in-depth knowledge and experience on the subject of urban agriculture and his world acclaimed publications. Luc, as colleagues popularly call him, guided the workshop and spent time reviewing this report and the research proposal that we have developed.

MDP is indebted to Dr. Beacon Mbiba of South Bank University and University of Zimbabwe for making available the database of resource persons on Urban Agriculture in Africa, and assisting in selecting researchers, including himself, who then developed papers for the workshop. The team of researchers worked wonderfully well, in a short space of time, putting together ideas that formed the basis of the workshop and were useful in shaping the research proposal. Thanks go to the institutions represented by the researchers for allowing their staff time to work on their research papers. The team of researchers and organisations represented is as follows;

1. Ms Alice Kinyungu-Njambi: Wenam Associates Kenya
2. Professor Malongo Mlozi: Sokoine University Tanzania
3. Mr. Augustus Nuwagaba: Makerere University Uganda
4. Ms Gertrude Atukunda: Makerere University Uganda
5. Mr. Paul Muwowo: Ministry of Agriculture Food, and Fisheries Zambia
6. Mr. Godfrey Mudimu: University of Zimbabwe Zimbabwe

We thank Professor Daniel Tevera of the Department of Geography and Environmental Science, University of Zimbabwe for ably providing rapporteuring services during the workshop. More importantly, we thank him for putting together this report with the assistance of Mr. Philip Kundishora who is a post-graduate student in the same department.

As part of the workshop, a field trip was organised for participants to tour urban agriculture sites in Harare. The tour would not have been successful without the contribution of a comfortable 30-seater bus by the Department of Rural and Urban Planning, University of Zimbabwe. Dr. Godfrey Mudimu, the man of humour, was the guide on the tour, and he ensured we had a glimpse of his mother’s off-plot field of maize crop in Mabvuku low income residential area.

Colleagues at the Municipal Development Programme deserve mention for their encouragement and support. Mr. George Matovu, Regional Director saw to it that the activity was implemented. He was the link-pin with IDRC and provided the initial contact.
with Ms Denise Derby. His vision and unwavering support to the UA initiative in particular and the programme in general is a constant source of inspiration.

There is no workshop when there are no participants. Some workshops are more successful than others because of the contribution the participants make. We have pride in the participants who worked tirelessly in meeting all the stated objectives of the workshop. Those that have not been mentioned earlier on include; Mrs. P. Charumbira, City of Harare; Dr. Izumi Kaori and Ms Farayi Zimudzi, FAOSAFR; Ms Abby Mgugu, Women and Land Lobby Group; Mr. Crispen Musekiwa, Urban Councils Association of Zimbabwe; Mr Edgar Moyo, The Herald; Mr Rindayi Chimonyo, University of Zimbabwe; Ms Petra Jacobi, GTZ Tanzania, Dr. Felix Haazele, University of Zambia; Ms Zarina Ishani, Mazingira Institute; Dr. Tanya Bowyer-Bower of the School of Oriental and Africa Studies, University of London; Ms Fiona Ramsey, Urban Management Programme. The full list of the participants and their contact information is included as Annex 8.

Lastly, we owe a lot to those that worked very hard behind the scenes, in the Finance and Accounts offices at IDRC and MDP and all those that provided services during the workshop and in producing this report.

Merci, thank you all
Shingirayi Mushamba
Urban Agriculture Coordinator - Municipal Development Programme
Acronyms

CBO: Community Based Organisation
ESA: Eastern and Southern Africa
FGD: Focused Group Discussion
IDRC: International Development Research Center
MDP: Municipal Development Programme
NGO: Non-Governmental Organisation
PE: Political Economy
SADC: Southern African Development Community
UA: Urban Agriculture
UVPP: Urban Vegetable Promotion Project
Executive Summary

1.0 Objectives of the MDP-IDRC Political Economy Activity

- To bring together participants from Eastern and Southern Africa, and resource persons from other regions to discuss the subject of urban agriculture from its political economy dimension.
- To commission technical papers on the basis of which a regional workshop would be conducted.
- To organise and successfully conduct the regional workshop.
- To develop a research proposal on the political economy of UA which for submission to the IDRC for funding and implementation.
- To document and disseminate the workshop proceedings report widely in hard copy and through the Website.

Several resource persons were commissioned to prepare and present country papers at a workshop, including Dr Mbiba who prepared the regional paper. Five other researchers were asked to prepare a paper each on the political economy of land for urban and peri-urban agriculture in one of the selected countries (i.e. Kenya, Tanzania, Uganda, Zambia and Zimbabwe). The main aim of the workshop was to develop a research proposal on the political economy of UA in Eastern and Southern Africa.

The specific objectives were to:
- Receive the commissioned technical papers;
- Discuss the PE of UA and develop a research proposal;
- Develop a research proposal on the PE of UA in Eastern and Southern Africa; and
- Recommend, as part of the research proposal, an action plan for implementation.

Expected Outputs

- Research proposal for submission to IDRC and other partners for funding;
- Workshop proceedings report, which is expected within six weeks after the workshop; and
- To receive comments on the draft technical papers.

2.0 Workshop Proceedings

2.1 The paper on the Political Economy of UA in Eastern and Southern Africa highlighted that:

- The three critical issues pertaining to political economy of UA are: (a) control and access to the key resources (inputs) to UA; (b) who controls the land allocation process?; and (c) which mechanisms will increase productivity?

- Political economy entails an analysis of the aggregate societal and institutional relations that impinge on the production, marketing and consumption of both food and non-food products that are produced from urban and peri-urban areas.
2.2 The paper on the political economy of UA in Kenya highlighted that:

- UA in Kenya takes place both at a subsistence level (involving the urban poor) and at the subsistence / commercial level (middle class residents).
- There is need for research on: (a) the dynamics of urban land markets and sub-market; (b) the role of UA in the national and local economy; and (c) the need to review the impacts of existing legislation on the ground.
- Specific research issues in Kenya should focus on: (a) the nature and types of UA; (b) effects of UA on urban ecosystem; (c) nature of land markets and sub-markets for UA; (d) legislation and by-laws currently controlling UA; and (f) possibilities for multi-disciplinary research on UA.

2.3 The paper on the political economy of UA in Tanzania highlighted that:

- Studies done in Tanzania suggest that various groups of the urban population are engaged in UA for different social, economic and cultural reasons;
- Enforcement of by-laws resulted in the slashing of crops grown by urban cultivators.
- Specific research needs: (a) although UA is recognised in Tanzania, legislation is not helping to make the activity viable; (b) the existing by-laws seem to work in favour of the elite and are working against the poor; and (c) the issue of tenure needs to be further explored because of its potential to facilitate or hinder UA in the country.

2.4 The paper on the Political Economy of UA in Uganda highlighted that:

- Land unavailability constitutes the most profound impediment to the growth of UA in Uganda;
- The land market for UA is mainly informal and the majority of the people cultivate the land they do not own;
- Challenges facing UA include: lack of access to land; lack of substantive legislation to legitimise UA; the need for building partnerships for a better understanding of the activity and the need for integration of UA in urban planning activities.
- Suggested research areas: (a) integration of urban farming in urban development planning; (b) the improvement of Urban Agricultural productivity - the role of technical assistance and capital development; (c) micro and macro-economic rationality of UA - from safety net to spring board (d) UA and urban environment management; and (e) impact of UA on rural food production marketing and incomes

2.5 The paper on the Political Economy of UA in Zambia highlighted that:

- Early UA research in Zambia was undertaken in the 1950s;
- Policies on UA exist but there is no enforcement of by-laws because the councillors need votes;
- The alleged link between UA and malaria could not be corroborated by studies undertaken in the late 1970s;
- The Ministry of Agriculture has no specific policy on UA. UA does not feature in most government programmes;
- The 1991 national Extension action Plan (NEAP) did not incorporate UA;
- Forces behind UA include poverty, rapid urbanisation, liberalisation of the economy;
• Constraints of UA include shortages of free / cheap water, high cost of land, inadequate extension services, and lack of micro-credit.

2.6 The paper on the Political Economy of UA in Zimbabwe highlighted that:

• Mudimu pointed out that the paper is a synthesis of past and current empirical research.
• In Zimbabwe local authorities view urban agriculture as impacting negatively on quality of urban life and contributing to a decline in the aesthetic quality of urban space and increasing costs of urban environment management.
• UA provides opportunities for households to improve availability of own produced foods and cash income and reduces the vulnerability to food insecurity;
• Current trends suggest need to transform and create new institutions for management of urban space for agriculture;
• Expansion of urban agriculture in the face of shortage of urban land and increased demand for water calls for: more efficient and appropriate technologies for intensive production, effective extension programmes and information dissemination;
• Suggested research areas: (a) there is need to come up with new institutional arrangements for managing urban space; (b) there is need to assess the impact of the conversion of peri-urban land into housing schemes on vegetable supply, food security and demand for urban space for off-plot cultivation; and (c) there is need for a comparative study on the environmental impacts of high-density housing and population concentration.

2.7 Field Trip to UA Sites in Harare

• The objectives of the field trip were: (a) to enable participants to have a better understanding of the real practical issues when discussing the political economy of urban agriculture based on observation, in Harare, Zimbabwe; and (b) to examine the environmental impacts of urban agriculture on ecosystems.
• The participants were taken from Bronte Hotel through Highlands and Greendale high income residential suburbs to the low income residential areas of Mabvuku and Tafara. Most land in these residential suburbs is planted with either maize or sweet potatoes.
• From Mabvuku-Tafara, the team went to Hatfield residential suburb, a middle income – medium density neighborhood. Participants observed intensive crop production along the roadsides and on the vlei open spaces. From Hatfield, the route led participants through Mbare. From Mbare, the participants were taken to Kambuzuma Sections 1 & 2, Warren Park and Belvedere, and back to Bronte Hotel. What was striking during the tour is the realization that UA is intense in Harare although there is very little livestock in and around the city.

2.8 Group Presentations on Thematic Issues

As an important step towards the production of a research proposal four groups were formed and were tasked to discuss the following thematic areas:
• Group 1: Research issues on formal and informal rules and strategies used by different stakeholders to access land and other resources
• Group 2: Research issues on public policy evolution and how it affects access to and use of land for UA by different stakeholders.
• Group 3: Research issues on institutions for enhancing / maximising collaboration and for resolving conflicts over resources for UA.
• Group 4: Policy and technology interventions

2.9 Development of a Framework for the Research Proposal on the Political Economy of UA in Eastern and Southern Africa

The participants were given an opportunity to discuss the format for the projects to be submitted to IDRC for funding. Also the research methodology to be followed was discussed.

2.10 The Way Forward

At the conclusion of the workshop each of the participants was asked to make a few comments on what they perceived to be the way forward and how their respective organisations could be involved.
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PART 1: INTRODUCTION

1.0. Background to the Workshop

In December 2000, Ms Denise Derby of IDRC and Mr. G. Matovu exchanged notes on a possible joint project in the field of urban agriculture. This followed MDP’s strategic manoeuvre to establish an office on UA for Eastern and Southern Africa. As a result, MDP became a natural ally for, among others, the IDRC on UA initiatives in eastern and southern Africa.¹

Following the exchange of ideas between MDP and IDRC, it was agreed to focus on the political economy of urban agriculture. The selection for this aspect of the subject was in recognition of the work already undertaken in documenting the status of urban agriculture in most countries in the region, and the inadequate attention given to the political economy dimension of it. Yet, access to and control of resources for urban agriculture determines who practices and who benefits from the sector.

As soon as the decision was taken to embark on the project, MDP nominated Mr. Shingirayi Mushamba as Task Manager. A modest budget of CAD$40,000.00 was agreed upon for the project. Specific activities that would be undertaken were agreed upon. This culminated in the signing of a contract between the parties for the execution of the project.

The following were some of the landmark activities in the project:

- Commissioning of five papers (our idea was to have participants do some background preparation before the meeting, e.g. prepare papers for presentation, such as reviews of research, or analysis of policy or planning issues);²
- Identification of participants and resource persons from the region;
- Organisation of a regional workshop i.e. travel by participants, workshop venue and materials, implementation of the workshop, documentation and printing of reports; and
- Development of a research proposal for submission to IDRC – Cities Feeding People Programme

What follows below is a full description of the activity.

Introducing the Political Economy of Urban Agriculture

Land is a critical resource for urban and peri-urban agriculture. However, urban residents, particularly those in poverty, often do not have secure access to land, which makes it risky for them to invest time and resources in agriculture. In addition, urban land use planning and management often do not prioritize urban agriculture as a legitimate or priority land use.

¹ MDP and The Resource Centre for Urban Agriculture and Forestry signed a co-operative agreement in 2000. The partnership is aimed at facilitating the collection and sharing of information on urban agriculture among many stakeholders, thereby promoting the analysis and debate on critical issues for the development of the sector.
² E-mail message notes by Denise Derby, December 2000
Mbibia (2001) defines the political economy of urban agriculture as the regulation, management and control over access to resource inputs for the practice of urban agriculture. Of the resource inputs, which include labour, water, and other inputs, land is the principal and critical resource for urban and peri-urban agriculture. Soonya Quon (1999) confirms that land use issues, specifically availability of land, access to land and usability of land, are of particular concern to urban farmers. However, urban residents, particularly those in poverty, often do not have secure access to land, which makes it riskier for them to invest time and resources in agriculture.

In many developing country cities, land ownership and tenure, processes of land transfers, and access and use rights to land are complex, and dynamic. Land markets and sub-markets are a mix of formal and informal transactions, some of which are not well understood. As a result, it is often unclear who has rights to the land, how these rights are acquired and ensured, who benefits and who loses in terms of access to the land and its products, and how this affects the practice of urban agriculture. The gendered and other dimensions of these issues are also not well understood.

In many urban areas, rapid changes in land titles, or the official or illegal privatisation of land, may adversely affect access by marginalised groups for urban agriculture. In peri-urban areas, access to and control of land are often characterised by a dynamic mix of customary, public and private tenure systems. There is a need for better understanding of such systems, as well as of how contesting claims or disputes over rights to the land are negotiated and resolved. There is a need to be able to better analyse how power relations among stakeholders, and the processes through which these are manifested - i.e. the political economy of access to land - affect the practice and outcomes of urban agriculture. Finally, there is a need to examine how to integrate these issues into urban governance and urban policy, planning and land management.

In order to examine the above issues, MDP and IDRC agreed in December 2000 to work on a Research Support Project which would support a workshop and preparation of papers designed to develop a research project, which will analyse the political economy of land for urban and peri-urban agriculture in Eastern and Southern Africa. The Research Support Project would include:

- reviews of the state of research in the region on the dynamics of urban land markets and sub-markets, and on patterns of land access and use, particularly for urban agriculture; including what is known about the strategies and relationships - formal and informal - through which people access, or do not access, land for urban and peri-urban agriculture; and the extent to which knowledge of the above issues are, or are not, integrated into urban policy, planning and legislation;
- identification of the significant gaps in research arising from a review of the above issues, as well as a review of research opportunities and capacities in the region;
- identification of specific research issues that could be addressed in subsequent research; and
- identification of potential partners in a future research initiative.

**General Objectives of the Research Support Project:**

---

To bring together researchers and experts from sub-Saharan Africa to identify priorities and opportunities for research on the political economy of land for urban and peri-urban agriculture in the Eastern and Southern African region, and to develop a research agenda.

**Specific Objectives of the Research Support Project:**

1. To organise a workshop for researchers, policy makers, practitioners, and other experts from Sub-Saharan Africa, to review the state of research on the political economy of land for urban and peri-urban agriculture, to identify gaps, priorities and opportunities for further research, as well as regional expertise and potential partners, and to develop a research agenda accordingly;

2. To commission papers, for presentation at the workshop, that review the state of research on issues related to the political economy of land for urban and peri-urban agriculture, and identify gaps and research priorities;

3. To prepare a report on the workshop and on the next steps agreed on during the workshop, including the process for developing and submitting a proposal involving relevant institutions, to IDRC's Cities Feeding People Programme and other interested partners, by April 2001.

IDRC then made a transfer of resources for the project to MDP in January 2001. By then, MDP had established contacts with Dr. Beacon Mbiba of South Bank University, United Kingdom. Dr. Beacon Mbiba has been instrumental in the establishment of the Peri-Urban Research Network PeriNET which is a network of researchers on peri-urban transformations, including agriculture. The following are resource persons who were commissioned to prepare country papers, including Dr Mbiba who prepared the regional paper:

<table>
<thead>
<tr>
<th>Names</th>
<th>Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dr. Beacon Mbiba</td>
<td>South Bank University and University of Zimbabwe</td>
<td>Zimbabwe²</td>
</tr>
<tr>
<td>2. Ms Alice K Njambi</td>
<td>WENAM Associates</td>
<td>Kenya</td>
</tr>
<tr>
<td>3. Prof. M. Mlozi</td>
<td>Sokoine University College of Agriculture</td>
<td>Tanzania</td>
</tr>
<tr>
<td>4. Mr Augusts Nuwagaba &amp; Ms Gertrude Atukunda</td>
<td>Makerere University</td>
<td>Uganda</td>
</tr>
<tr>
<td>5. Mr Paul Muwowo</td>
<td>Ministry of Agriculture, Food and Fisheries</td>
<td>Zambia</td>
</tr>
<tr>
<td>6. Dr. Godfrey Mudimu</td>
<td>University of Zimbabwe</td>
<td>Zimbabwe</td>
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</tbody>
</table>

MDP in consultation with IDRC, prepared the terms of reference for the papers.

**Terms of Reference for Researchers**

Each researcher was asked to prepare a paper designed to develop a research project, which analysed the political economy of land for urban and peri-urban agriculture in Eastern and Southern Africa with particular reference to one of the selected countries i.e. Kenya, Tanzania, Uganda, Zambia and Zimbabwe.

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² Dr. Beacon Mbiba is a senior lecturer at the University of Zimbabwe and a Co-ordinator of Peri-Urban Transformations Project, University of South Bank, United Kingdom.
The TOR were as follows:
1. To undertake a review of the state of research in your respective country on the following:
   • dynamics of urban land markets and sub-markets.
   • patterns of land access and use, particularly for urban agriculture, including what is known about the strategies and relationships – formal and informal – through which people access or do not access land for urban and peri-urban agriculture.
   • the extent to which knowledge of the above issues are, or are not, integrated into urban policy, planning and legislation.
2. To identify significant gaps in research arising from a review of the above issues, as well as a review of research opportunities and capacities in your country;
3. To identify specific research issues that could be addressed in subsequent research; and
4. To identify potential partners [individuals and institutions [government, NGOs and civic associations and private sector] in a future research initiative.

Time Frame

The Draft papers were to be prepared over a period of five weeks from 15th January and submitted on Friday 16th February 2001, for circulation. The final papers were required to be submitted at a three-day workshop on The Political Economy of Urban and Peri-Urban Agriculture in Eastern and Southern Africa scheduled to take place from 28th February to 2nd March 2001.

Workshop Preparations

Workshop preparations began in early January 2001. Bronte Hotel was selected to be the workshop venue and negotiations were made on rates for accommodation, meals and conference facilities for participants. Arrangements were made for travel by participants. In the third week of February 2001, draft papers prepared by resource persons were submitted. MDP read through the papers and made initial comments and inputs, which the researchers incorporated into their reports.

Preparations for workshop materials, most of which were distributed in advance of the workshop, were done at MDP. The presence of Dr. Luc Mougeot two days prior to the workshop facilitated sharing of ideas on the workshop programme, objectives and methodologies of implementing the workshop. By the 27th of February 2001, the stage was set for the workshop to kick-start.

1.1 Objectives, Expectations and Outputs

The workshop facilitator, Mr. Shingirayi Mushamba, welcomed the participants and reviewed the agenda. He outlined the objectives of the MDP-IDRC political economy activity, workshop objectives, expectations and outputs as follows:

Objectives of the MDP-IDRC Political Economy Activity
1) To bring together a rich mix of participants from eastern and southern Africa, and resource persons from other regions to discuss the subject of urban agriculture from its political economy dimension.

2) In order to achieve the above, to commission technical papers on the basis of which a regional workshop will be conducted.

3) To organise and successfully conduct the regional workshop.

4) On the basis of the regional workshop discussions, to develop a research proposal on the political economy of UA which will be submitted to IDRC for funding and implementation.

5) To document the proceedings of the workshop in the form of a workshop proceedings report.

6) To disseminate the workshop proceedings report widely in hard copy and through the Website.

Objectives of the Regional Workshop

Main Objective

The main aim of the workshop was to develop a research proposal on the political economy of UA in Eastern and Southern Africa. The proposal will be submitted to, among others, the International Research Centre (IDRC) for funding.

The specific objectives were to:
1) Receive the technical papers that were commissioned as a basis for the workshop on the PE of UA;
2) Discuss the PE of UA with the view to developing a research proposal in order to achieve the main objective;
3) Develop a research proposal on the PE of UA in Eastern and Southern Africa; and
4) Recommend, as part of the research proposal, institutional mechanisms for implementation, set time frames and develop targets, in short, develop an action plan for implementation.

Workshop Expectations

The participants listed the following as their workshop expectations:
1) To gain deeper understanding on the meaning of the political economy of urban agriculture. Political economy approach - there hasn't been adequate attention on this; is a determinant of UA;
2) To know why Kenya, Tanzania, Uganda, Zambia and Zimbabwe had been selected for the workshop.
3) To be informed about the background of the workshop and the proposed research programme?
4) To be clear about the expected outcomes (from the point of view of the MDP).
5) To know whether land is the only issue when discussing the political economy of urban agriculture.
6) To know whether there were other resources that could be discussed or taken into account when discussing the political economy of UA.
7) To know the impacts of urban agriculture on the poor, For example, whether they benefited, or were squeezed/flushed out?
8) To know how farming systems were evolving in African cities?
9) To know how relevant farming systems, technologies and policies were in determining UA. They also wanted to know whether these key issues would be discussed at the workshop; and
10) To get clarification on logistical issues relating the workshop activities e.g. resource mobilisation, the actors who will be involved and the way forward.

**Expected Outputs**

- Research proposal for submission to IDRC and other partners for funding;
- Workshop proceedings report, which is expected within six weeks after the workshop; and
- Comments and contributions on the draft technical papers which can be used to finalise the technical papers.

**1.2 Welcome Remarks**

Mr George Matovu, the MDP Regional Director welcomed participants to Harare on behalf of the MDP. He also thanked the IDRC for their support which made the workshop possible. He then went on to provide MDP – ESA’s background as follows:

The Municipal Development Programme was established in 1991 with funding from the governments of Italy, the Netherlands, International Development Research Centre (IDRC), the Federation of Canadian Municipalities (FCM) and the World Bank Institute as an executing agency. MDP’s mission is to enable and support decentralisation, strengthen the capacity of local governments to deliver services and ensure development at local level as a vehicle for improving the quality of life of local communities.

The Municipal Development Programme (MDP) has two regional offices, one in Harare for East and Southern Africa and another in Cotonou, Benin for Western and Central Africa. The Harare regional office covers 25 countries in Eastern and Southern Africa but its main focus is on 8 countries namely Botswana, Ethiopia, Mozambique, Namibia, Tanzania, Uganda, Zambia and Zimbabwe. MDP-ESA is focusing on 5 themes:
- Policy research and governance
- Direct technical assistance to local authorities
- Training of local authorities
- Information management and dissemination
- Decentralised cooperation

Mr. Matovu concluded by thanking all the participants for coming to Harare and expressed his hope that all participants would find the workshop valuable.
PART 2: WORKSHOP PROCEEDINGS

DAY 1

2.1 The Political Economy of UA in Eastern and Southern Africa: An Overview

Dr. Beacon Mbiba gave a presentation of the Political Economy of UA in Eastern and Southern Africa. The presentation is summarised below. A written paper was circulated to participants and is attached as Annex 1. The highlights of his presentation were as follows:

Trends in UA Research

• This workshop’s focus on the political economy of urban and peri-urban agriculture is a significant step towards a better understanding of the phenomenon and clearer possibilities for its management.

• Since the 1990s, urban and peri-urban agriculture activities have progressed from comprehensive descriptive documentation of practices to project work with farmers and attempts at planning and policy integration.

• IDRC features significantly in some of these initiatives.

• Only few studies have made an explicit critique of UA. Instead, the work has largely glorified the potential benefits of UA and at the same time criticise planners, planning and policy makers as major obstacles to the realisation of these benefits.

• The neglect of political economy analysis relative to the attention given to design, environmental and linguistic concerns is linked to a weak theoretical base for UA.

• Urban Agriculture is based on three conceptual frameworks which are environmental design, architectural and procedural. Unfortunately, these frameworks leave out the political economy issues. Three critical issues pertaining to political economy of UA are (a) Control and access to the key resources (inputs) to UA such as land, (b) Who controls the process that allocates land for UA? (c) Which are the mechanisms or dynamics that will increase productivity?

Political Economy, the Land, Policy and Planning Dimensions

• Political economy entails an analysis of the aggregate societal and institutional relations that impinge on the production, marketing and consumption of both food and non-food products that are produced from urban and peri-urban areas. The political economy of UA is anchored on distribution, control and access to the use of land assets / resources. The political economy of UA is basically about power relations and conflicts associated with control and use of this resource.

Theoretical Perspectives: Cities, Planning and Urban Agriculture
Throughout history conceptions of the city and of planning have ‘zigzagged between an emphasis on outcome and process’. Figure 1 gives an overview of the four dominant approaches to planning indicating views of the city upon which they are founded plus an emphasis on how UA literature exhibits aspects of each.

**Figure 1: Theoretical Mind Map of City and Planning Approaches**

<table>
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<tr>
<th>Substantive Focus/Concepts</th>
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<tbody>
<tr>
<td>(a) Ecological Environmental</td>
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<td>(b) Design/Architectural ‘New Urbanism’</td>
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<tr>
<td>(c) Procedural Concepts Role of the Planner Communicative Collaborative Approach Institutional and Agency Roles</td>
</tr>
<tr>
<td>Political Economy Radical democrats and pragmatic approach Significance of agency</td>
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<tr>
<td>Development theory Modernisation Dependency</td>
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<td>The Land Dimension</td>
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<tr>
<td>Future Research Activities MDP/IDRC and PeriNET A Cluster Approach</td>
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</table>

- e.g. Health Wastes City Greens Nutrition
The Ecological, Environmental Systems View of the City and Planning

• The most enduring view of the city is one that portrays it as a system of inter-related parts akin to the biological or ecological systems. Open spaces were seen as an ecological part of the system that would act as ‘lungs’ to purify and extract pollutants from the city environment.

• UA’s popularity with donors and development practitioners has much to do with perceptions that the phenomenon meets environmental criteria of sustainable development discourse. It is seen as an industry that could enhance sustainable urbanisation through waste recycling, use of derelict space and so on. Despite the environmental school, serious reservations remain that relate to health risks for consumers and ecological limitations. These risks arise from air pollution and use of polluted industrial waste water.

‘New Urbanism’ – the Design, Engineering and Architectural Perspective

• ‘New urbanism’ emerges as a critique of urban sprawl and the underlying design principles. The view has an emphasis on a ‘compact, heterogeneous city’. The general thrust in the UA literature is that design and economic imperatives in the new urbanism militate against urban agriculture and economic benefits associated with it.

The Communicative – Collaborative Perspective

• The communicative – collaborative model is a procedural approach on how planning should be done. The approach assumes an even distribution of powers among all stakeholders but in reality ability to participate is mediated by assets at the disposal of each potential participant (information, access to expertise, access to finance, organisation and institutions, physical assets such as land, human resource such as education, health status and so on). Such assets symbolise power whose distribution exacerbates inequalities. The theory needed for UA dwells on the power relations that characterise urban areas and to locate UA within it.

The ‘just city’ and political economy perspective

• The ‘just city’ and political economy perspective takes a conflictual view of society and considers that for positive change to happen, those excluded from power should fight for it. This was in response to perceived poor governance manifest in the physical decline of the urban environment and deterioration in service provision (refuse removal, housing, etc.) This perspective puts faith in human agency’s capabilities to bring about change no matter what the structural constraints maybe.

• In contrast to the above pragmatic ‘just city’ dimension is a more normative analytical political economy perspective. Its focus on and demands for equity takes the form of a critique of the capitalist city. The key questions posed by this approach are on who benefits from ongoing activities (e.g. UA) with a focus on groups defined in terms of economic interests and more recently by gender, race, age etc.
The simple message for UA programmes/projects is that while acknowledging the differential nature of our society, we have to proceed in a way that:

a) Embraces entrepreneurship and economic growth or wealth generation simultaneously with concerns for equity.

b) Captures the elite and middle class as a resource (or social capital) that has a contribution to make towards poverty alleviation and increased urban food security.

Development Theory

Related to the ecological – environmental sustainability discourse is a development dimension theory of UA which has been imposed on urban areas by development institutions without much empirical analysis of the claimed benefits. The critique argues that in UA, development institutions have found a ‘new life’ – linking the phenomenon to poverty alleviation, urban nutrition, environmentalism, informal sector employment and gender issues.

For modernists, UA in its subsistence form is symbolic of rural backward habits; is practised by recent rural to urban migrants; it damages the urban environment, aesthetics and should be discouraged through destruction without compromise. On the other hand, for the new Marxists UA represents a means for labour to reproduce itself. Thus supporting UA is tantamount to support of exploitation of labour; making labour work twice namely at the factory first and then at home.

The Land Dimension

Table 1 shows that land remains one of the most controversial issues associated with UA and that several themes are prominent in the UA land relationship, namely

a) the potential that urban land holds for UA;

b) the potential that UA holds for diluting, solving or exacerbating the rural land problem;

c) reduction of plot sizes and associated implications for UA; and

d) the notion that UA can be practised on small pieces of land etc.

The best approach to a fruitful discussion of the political economy of the land issue is to utilise the basic spatial typology of UA that focuses on:

a) intra-urban agriculture that be either on-plot or off-plot

b) peri-urban agriculture
Table 1: The Land Dimension

<table>
<thead>
<tr>
<th>Spatial Level</th>
<th>Key Concerns</th>
<th>Theories / Concepts</th>
</tr>
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<tbody>
<tr>
<td>On-plot</td>
<td>• Size and adequacy</td>
<td>Modernisation</td>
</tr>
<tr>
<td></td>
<td>• <strong>Design standards</strong></td>
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<td></td>
<td>• Infrastructure provision and standards</td>
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<td></td>
<td>• Health and environmental issues</td>
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<tr>
<td></td>
<td>• Control and access</td>
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<tr>
<td></td>
<td><strong>Modernisation</strong></td>
<td></td>
</tr>
<tr>
<td>Off-plot</td>
<td><strong>Public 'Open Space'</strong></td>
<td></td>
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<tr>
<td>Community Spaces</td>
<td>• Ownership and Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Networks and client-patron relations</td>
<td></td>
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<tr>
<td></td>
<td>• Environmental issues</td>
<td></td>
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<tr>
<td></td>
<td><strong>Dependency</strong></td>
<td></td>
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<tr>
<td>Peri-Urban Zones</td>
<td><strong>Regional Dimension</strong></td>
<td></td>
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<tr>
<td>Pressures from:</td>
<td>• Urbanisation</td>
<td>Modernisation</td>
</tr>
<tr>
<td></td>
<td>• <strong>Commercialisation</strong> of production and land markets</td>
<td></td>
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<tr>
<td></td>
<td>• <strong>Globalisation</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Land tenure conversion and conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Institutional gridlock</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ecological footprint</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Modernisation</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peri-urban Change, Commercialisation and globalisation of peri-urban activities is good for economic growth; new opportunities come with title deeds etc.</td>
<td></td>
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<tr>
<td></td>
<td><strong>Dependency</strong></td>
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<tr>
<td></td>
<td>Peri-urban Change is exclusionary, exploitative and leads to poverty, marginalisation of locals, plus breakdown of local institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Structuration</strong></td>
<td></td>
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<tr>
<td></td>
<td>Both of the above are possible; agency can reproduce and change the direction of impacts.</td>
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**Urban Agriculture and the Intra-Urban Land Question**

- The literature intra-urban agriculture clearly shows that the open spaces are contested spaces, that empirical evidence is not conclusive as to the economic viability and environmental safety of UA products emanating from these spaces.

**Peri-Urban Agriculture and the Land Question**

- Peri-urban areas suffer not only from social contests for control and access but also from pressures of urbanisation and globalisation. The literature on UA is generally oblivious to land related socio-political pressures and concentrates more on those arising from sprawling built development.

- An emerging trend throughout the region is one of increased commercialisation of peri-urban land uses and greater commodification of land rights. For the elites, peri-urban areas are potential / alternative ‘theatres of opportunity and accumulation’. The challenge for governance and sustainable livelihoods in the urban periphery is to go beyond a focus on the poor *per se* and to investigate networks that link the various actors in a given locality.
**Reflections on Research frameworks and Approaches**

- Our deliberations on the political economy of urban and peri-urban agriculture with special reference to the land dimension are an explicit recognition that the problem with or for UA is not agriculture as such but the context within which it is done. The way forward has to follow two inter-related strands:
  a) that there is need for research on intra-urban agriculture issues e.g. how to increase productivity, production techniques and marketing techniques.
  b) that urban and peri-urban agriculture’s success will be dependent on the context and diversity of local dynamics, especially around land, governance and institutional success to resolve associated conflicts.

- In the field of UA and African research in general, there has been a tendency by both local states, NGOs and international development institutions to undermine rather than enhance the research capacity in universities. However, the IDRC is among the few international institutions that have pursued development research with a commitment towards local ownership and capacity building.

- With IDRC support, the MDP has a window of opportunity to link up with regional and international researchers to pursue research whose results would inform and strengthen its dialogue with practitioner partners in the region. The Urban and Peri-Urban Research Network (Peri-NET) has several researchers with interest on urban and peri-urban agriculture.

**Conclusion**

- the UA political economy approach is about land resources

- there is need for entrepreneurial UA involving working with the poor and the elite.

**Suggested Research Areas**

The following research questions are pertinent:

- Where and under what conditions have UA been incorporated into urban planning processes?
- What are the crucial structure - agency determinants of success or failure in cases where urban farmers have negotiated for land?
- What opportunities are there for replicability and transferability of the above experiences?
- What are the patterns and dynamics of intra-urban land ownership and how do these impinge on UA?
- Through what mechanisms and channels (and with what effects) do actors get access to land for UA or are excluded from it?
- Should there be formal institutionalisation of ownership of current individualistic control of off-plot public lands.
• What is the nature and characteristics of entrepreneurial urban and peri-urban agriculture.
• Which are the existing arrangements for dispute resolution of urban / peri-urban land conflicts especially where investments (e.g. housing, retail parks) are concerned?
• How can local knowledge be used to enhance resolutions that benefit local livelihoods and institutions?

**Discussant: Dr. Tanya Bowyer-Bower**

She observed that:
• Mbiba gave clarity to the term political economy of UA;
• The typology, on the plethora of research on UA in the region was most helpful;
• The idea of including the elites in UA studies is interesting and is likely to generate considerable debate considering that there are those who strongly argue that for long the elites have excluded the poor in their access to resources
• The distinctiveness between on-plot and off-plot, urban and peri urban agriculture should be highlighted.

**Comments from the Floor**

Participants made the following specific comments on the presentation:

• the definition of political economy approach was problematic and there was need for further discussion;
• how can the conflicts/tensions between urban planning as a technical process and urban management as a political process be resolved?
• since UA is about conflicts related to urbanisation there is need to focus on the various conflicts occurring. Also there is need to focus on the institutional setting. For example, how do various stakeholders perceive UA? Is it possible for them to identify their interests and differences?
• how are the interests of various stakeholder groups identified and how can they be addressed?
• politicians and elites use the poor as a resource and the reverse should also happen where the poor use the politicians and middle class as a resource.
• the mismatch between planners' conception of the city and the reality on the ground needs to be interrogated.
• all the models of city image referred to exist in different cities although there are some models that are more dominant than others.

General contributions made are as follows:

• is there a possibility of having a political economy framework as a tool for studying UA?
• conflict resolution is a key area that needs further research and should be addressed in training sessions.
• it is critical to understand that ‘poor’ farmers do not necessarily limit themselves to subsistence production (certainly not in peri-urban areas where they may have access to more land). Income generation to meet the costs of other foods, household...
incidental and school and medical fees may be motivation to mix subsistence and market production even among poor farmers.

2.2 The Political Economy of UA in Kenya

Ms Alice Njambi Kinyungu gave a presentation on the political economy of UA in Kenya. Her full paper is attached as Annex 2. The highlights of her presentation were as follows:

Introduction

• In Kenya "land", is a burning issue. Currently 50% of the Kenyans live below the poverty line.
• public land is under the auspices of local authorities although ultimate authority is in the hands of the Minister.
• Artificial scarcity of land is manipulated by the 'gatekeepers' who stand to benefit from it.
• land ownership for speculation has contributed to the artificial shortage of land.
• temporary occupation leases (usually for 1 year), the leasees often illegally rent it out.

UA in Kenya

• takes place both at a subsistence level (involving the urban poor) and at the subsistence / commercial level (middle class residents).
• UA is considered illegal, the Act does not recognise it as urban land use, despite its implications on water use.
• land fragmentation and shortages are key variables that influence UA.
• the existence of several title deeds for the same pieces of lands is a problem.
• According to Mazingira studies 60% of the urban population are involved UA, 17-20% of the households keep livestock.
• only 4% of the UA farmers were paying rent /fees for the land.
• both formal and informal approaches are used in order to access urban land markets. The informal land markets are of importance to UA in Kenya. Political patronage is used to gain access to urban land.
• there is a linkage between formal and informal urban land markets but the implications of these linkages have not been adequately studied.
• UA has not been recognised as an important land use that involves the poor.
• research has focussed on urban land markets; there is need for research on land access strategies.
• urban farmers do not apply for permission to undertake farming because of the illegality of the activity
• land between the urban fringe and the rural areas - is now being bought by TNCs for horticultural activities.
• the elites are moving into the peri-urban areas because of the availability of title deeds (the settlement scheme)
• incremental changes in the conceptualisation of UA are occurring, e.g. the Nakuru Strategic Plan, Environmental Plans

Gaps:
There is need for research on:
- the dynamics of urban land markets and sub-market;
- how the urban poor identify land that is available for UA?;
- the role of UA in the national and local economy;
- need to review the impacts of existing legislation on the ground; and
- environmental implications of urban planning.

Way forward:
- there is need to recognise UA as a viable economic activity.

Specific research issues in Kenya
- The nature and types of UA occurring in urban areas.
- Effects of UA on urban ecosystems (in terms of use, distribution and management of resources such as water).
- The nature of land markets and sub-markets and their effects on UA.
- The implications of legalising UA as a form of land use by the urban poor.
- Legislation / by-laws and their effects on landuse in urban and peri-urban areas.
- Development of a data bank on organisations involved in UA.

Discussant: Dr. Kaori Izumi

She noted that:
- the paper is descriptive but informative;
- the paper could have been more analytical, e.g. by referring to some of the current theoretical concerns addressed in Dr. Mbiba's paper;
- a possible aim of the research could be how to empower the poor to access land;
- there is need for a systematic approach that focuses on urban land markets and modes of accessing urban land for UA by various groups;
- the paper is too broad and could be strengthened by focussing on a narrow range of issues which could be examined in greater detail;
- how to make the laws more enforceable is quite problematic; and
- while the issue of power relations between local and central government is interesting it, however, needs to be further explored.

Comments from the Floor

Participants made the following specific comments on the presentation:
- there is need to provide data showing the significance of UA, (e.g. tonnage of output, area under cultivation);
- there was need to examine how lack of government openness in Kenya was likely to affect the future of UA; and
- that planners are a ‘technical breed’ who are used by politicians. Hence there was need to problematise the relationships between the two groups.
General Contributions:

- ILO has introduced dependency theory analyses to examine the operation of UA and it might be useful to consider some of the approaches;
- promotion of UA promotes the subsidization of international capital operation in developing countries; and
- analyses of globalisation trends and impacts in the South could help to highlight the concerns of dependency theorists vis-a-vis UA.

2.3 The Political Economy of UA in Tanzania

Professor Malongo Mlozi gave a presentation on the political economy of UA in Tanzania. A written paper was made available to the participants and is attached as Annex 3: Below is a summary of the presentation.

Overview of UA

- studies done in Tanzania suggest that various groups of the urban population are engaged in UA for different social, economic and cultural reasons;
- livestock rearing is a key characteristic of UA in Tanzania;
- UA occurs in low density areas, between low and medium density areas, and high density areas.

Tenure and Evaluation of Land Policy in Tanzania

- during the colonial period UA was highly noticeable in urban areas;
- after independence in 1969 leaseholds were converted into Rights of Occupancy. This had a positive effect on UA, because low-income urban dwellers could now use the undeveloped land;
- in 1999, the government issued a Village Land Act which was important for peri-urban agriculture. The Act made it possible for urban dwellers to own land located in a village through the "right of occupancy", "deemed right of occupancy", the "derivative right", and through the "disposition". The land Act of 1999 gave clear definitions of peri-urban and urban areas but did not give equal participatory rights to women in important decision making process over land; and
- land in Tanzania is not scarce. However, legislation governing access to land is the problem.

UA By-Laws

- enforcement of these by-laws resulted in the slashing of crops grown by urban cultivators.
- some senior government and ruling party officials are involved in UA and this makes enforcement of by-laws problematic.

Specific Research Needs

- UA and the vulnerable groups (women, youth, retired etc.)
• Assessment of food production strategies in urban areas.
• Linkages between urban wastes, UA, and urban beautification.
• UA and urban environmental management.
• Determination of livestock carrying capacities in different density areas within urban areas.
• Determination of economic combinations of livestock types and crop varieties in different areas within cities.

Comments from the Floor

Participants raised the following questions and comments on the presentation:

• while UA is an accepted land use in Tanzania, it seems the existing by-laws militate against the activity;
• there was need for the paper to provide more specific details on UA activities on the ground; and

General Contributions:

• there is need to provide data arguing for larger plot sizes for UA. The trend in World Bank supported programmes and projects has been to reduce the minimum plot size from about 300 m² to 150 m². This actually works.
• how can we help policy makers with action research that will resolve land use conflicts and multi-level survival strategies on the ground?

2.4 The Political Economy of UA in Uganda

Mr. Augustus Nuwagaba and Ms Gertrude Atukunda made a joint presentation on the Political Economy of UA in Uganda based on a paper that had been previously circulated and is attached as Annex 4. Below is a summary of the presentation:

Emergence of UA in Uganda

• land unavailability constitutes the most profound impediment to the growth of UA in Uganda;
• there are contradictions in African City formation and the role of urban planning; and
• there is considerable debate on the place of UA in City transformation. Some see it as an adaptive strategy of urban poor while others see it as a rural cultural artifact or an indicator of growth or decay.

Access to Land for UA

• the land market for UA is mainly informal and most people cultivate the land they do not own. However, the most prominent land tenure for UA is Mailo- freehold tenure;
• squatting, borrowing and buying user rights are the most common methods of accessing land for UA.

Changing Character of UA
• UA has changed from being a safety-net to spring board as many urban people now engage in a wide range of activities and also keep livestock;
• there is a growing tendency to legitimise UA and the harassment for urban farmers has been terminated for now;
• at the same time UA is being recognised as an economically viable activity;
• UA enjoys substantial good will from different stakeholders because it contributes to the urban economy and is associated with considerable nutritional benefits.

Challenges facing UA in Uganda

• lack of access to land;
• lack of bona fide land rights, hence low investment;
• lack of substantive legislation to legitimise UA. The bill for legalising UA has not been passed for 2 years running;
• there is need for managers to understand the concept of an African City (who plans it and for what purposes?),
• there is need for building partnerships for a better understanding of the activity (e.g. civil society, planners, academics).
• there is need for integration of UA in Urban planning activities.

Suggested Research Areas

• Political Economy of informal sector transformation in Africa; the role of UA in Uganda.
• Integration of urban farming in urban development planning
• The improvement of Urban Agricultural productivity: The role of Technical Assistance and capital development.
• Micro and Macro-economic rationality of urban Agriculture: From safety Net to spring Board.
• Urban Agriculture and urban environment management.
• Impact of urban agriculture on rural food Production marketing and incomes

Discussant: Ms Petra Jacobi

She raised the following comments and questions:
• the presentation focussed on UA processes;
• the discussion of land tenure system provided a good background;
• UA is mostly carried out on Freehold areas than on private land;
• is UA a means of securing land for future development?
• what are the reasons for changes in perceptions on UA?
• how can UA be integrated into planning? Who would be the stakeholders and how should the integration be done?
• there is need to highlight the dilemma of urban politics in urban planning.

Comments from the Floor

Participants raised the following comments:
• there is need to underscore the importance of distinguishing between on- and off-plot cultivation and especially urban and peri-urban agriculture. This was not addressed clearly in the presentation.

General Observations:

• Most of the presentations are not explicit enough about the process of acquiring vacant land for UA.

2.5 The Political Economy of UA in Zambia

Mr. Paul Muwowo gave a presentation on the Political Economy of UA in Zambia based on a paper that was previously circulated and has been attached as Annex 5. Below is summary of the presentation.

• early UA research in Zambia was undertaken in the 1950s and a lot of research has since been done on the topic;
• policies on UA exist but there is no enforcement of by-laws because the councillors need votes and do not want to alienate the voters;
• the alleged link between UA and malaria could not be corroborated by studies undertaken in the late 1970s. A 1978 survey of 1603 maize plants in Lusaka concluded that the slashing of maize had no impact on malaria control;
• the Ministry of Agriculture has no specific policy on UA. UA does not feature in most government programmes;
• it is unfortunate that the 1991 National Extension Action Plan (NEAP) did not incorporate UA;
• forces behind UA include poverty, rapid urbanisation, liberalisation of the economy. In Zambia economic crises and the liberalisation of the economy had contributed to the recent expansion of UA.
• constraints of UA include shortages of free / cheap water, high cost of land, inadequate extension services, and lack of micro-credit.

Areas of Future Research

• The areas of research include extension service provision, land tenure and urban development, gender implications, economic importance Urban Agriculture, nutrition, land management and possibilities of using solid waste in Urban Agriculture.
• Extension service provision.
  - research has to be done so that an alternative extension methodology can be developed which will take into account the heterogeneity of the Urban and Peri-Urban Farmers.
• Land Tenure.
  - Some of the questions include: Are the owners of these holdings farmers or not? What criteria were used when allocating this land to them? Is it morally right for them to hold land while some people have no land for cultivation? These and many more have to be studied in depth to understand the implications.
• Gender Implications
  - There is need to find out the economic contribution of women to household food
    security and their economic position in the urban economy.

• Economics of Gardening
  - There is need to study the gross margins of Urban Agriculture and come up with
    sustainable means of carrying out this activity.

• Urban Agriculture and its contribution to Household Nutrition
  - There is need to establish nutritional facts quantitatively. Such facts could be a
    basis for lobbying in change of policy towards Urban Agriculture with the
    planners.

• Solid and Liquid Waste Management
  - It necessary to carry out detailed studies on the quality of waste and any heavy
    metals with reference to health.

Discussant: Rene van Veenhuizen

He observed that:
• the presenter had provided a good overview of the forces behind UA in Zambia;
• the issue of providing UA with extension is quite interesting and should have been
  explored further in the paper;
• the use of participatory approaches for extension.
• linkages with households and production systems, power relations, dynamics of urban
  farming systems, poverty are important when one wants to examine the political
  economy of UA;
• there is scope for open minds
• there is need to examine specific approaches to UA in various cities;
• it is critical to situate UA within the broader context of urban development for one to
  fully appreciate the arguments for and against UA;
• it might not be appropriate to undertake research from action issues.

Comments from the Floor

Participants made the following specific observations:
• there is no empirical evidence provided by the presenter to convince urban planners
  that UA is economically viable. We need action oriented research.
• should the systems of dual land tenure systems described in the paper be viewed
  negatively?
• the presentation provided a good exposure of UA in Zambia. However, what is the
  situation regarding ownership structures on the ground?

General Observations:

The general observations made include:
• should UA on open land be encouraged?
• there is need to move away from descriptive studies that have dominated previous
  research on UA in the past;
• how do you plan for land that you don't own?
• can we use the colonial backdrop to explain the pattern and process of UA? How should an African city look like? What does a Green City concept entail?
• what is the difference between urban and rural agriculture?

2.6 The Political Economy of UA in Zimbabwe

Godfrey Mudimu’s presentation on the Political Economy of UA in Zimbabwe is based on a paper that was previously circulated to the participants. The paper appears in this report as Annex 6. Below is a summary of the presentation.

Conflicts in Urban Land Use for Agriculture

• In Zimbabwe local authorities view urban agriculture as: demanding a significant proportion of cities’ land; impacting negatively on quality of urban life and contributing to a decline in the aesthetic quality of urban space; and increasing costs of urban environment management.
• The role of UA to the livelihoods of the cultivators: (a) it provides opportunities for households to improve availability of own produced foods and cash income; (b) reduces the vulnerability of women and children to food insecurity and negative impacts of the economic reforms; (c) savings in food purchases frees their budgets for other household needs; and (d) contributes to better family nutrition.
• There is a shift in established institutional attitudes toward urban agriculture due to an increase in the number of participants; increased participation by middle income; and the importance of UA as a strategy for sustaining urban food security.
• Urban authorities now acknowledge and accommodate urban agriculture in use of urban space.

New Institutional Arrangements for Urban Agriculture

• Current trends suggest need to transform and create new institutions for management of urban space for agriculture. This would involve: (a) the establishment of stakeholders and advocacy groups to facilitate changes and organise the participants for the common good such as sustainable land use; (b) an Urban Agriculture Policy and Technical Advisory Group should be formed to oversee the development of policy to manage urban agriculture; (c) the group should be made up of all stakeholders from the central, local governments and advocacy groups and representative of urban farmers; (d) designating some of the farms surrounding urban centres and dividing them into small land units for allotment to residents of urban areas for food production; and (e) increased investment into horticultural production in Communal Areas surrounding urban centres.
• Expansion of urban agriculture in the face of shortage of urban land and increased demand for water calls for more efficient and appropriate technologies for intensive production as opposed to current extensive land use and effective extension programmes.

Areas for Research
• Given the importance of urban and peri urban agriculture in alleviating food insecurity and the demand for urban space for agriculture, there is need to come up with new institutional arrangements for managing urban space so as to increase accessibility by a large number of residents. This calls for a study to identify sustainable options.

• There is need to assess the impact of the conversion of peri-urban land into housing schemes on (a) vegetable supply (b) on food security; and (c) demand for urban space for off-plot cultivation.

• the trend towards conversion of on-plot gardens into housing projects requires a comparative study on the environmental impacts of high-density housing and population concentration.

• The over dominance of maize production grown as sole crop has potential problems. It is depressing production of other crops (legumes: groundnuts, roundnuts, beans, sweet potatoes). There is also potential for increased built-up of pests and diseases that may affect future production. There is need for a study on this so that appropriate strategies would be put into place.

Discussant: Ms. Zarina Ishami

She observed that:

• the pressure points (e.g. increase in incomes, food security) will lead to activity -impacts (e.g. effectiveness, efficiency, equity, sustainability and integrity) and responses. Various issues need to be considered when one focuses on the political economy of UA (see model provided in Figure 2)
Figure 2: Issues to be Considered when Focusing on the Political Economy of UA.

Policy process

- The various policy processes that have a bearing on the political economy of UA include well being (e.g. health, education, high incomes), empowerment, access to land and security of tenure (e.g. high insecurity for women due to inheritance laws). Also, other factors such as macro-level policies (e.g. central government policies on macro-economics), micro-level policies and the nature of the political system (e.g. whether democratic, corrupt, etc.) are also important. Finally, the globalisation process is impacting on commercial farming in both rural and urban areas. As a result the process has an impact on the political economy of UA.
- Also there is need for both proactive and reactive research.

Comments from the Floor

Participants raised the following comments and questions regarding the presentation:
- the presentation focused on systems and policy. What is not clear is the role of technology e.g. is there a clear linkage between technology and the political system?
- the idea of allotments on farms acquired close to the city is problematic. Allotments would work in favour of the elite. Instead, land use zoning seems to be the realistic way forward. The political economy framework is an effective way of showing the various linkages. However, the links are more than what is presently suggested.
- the issue of allotments suggested by the presenter needs to be discussed within the context of urban areas that are expanding physically and are encroaching on peri-urban areas.
- there are variations across several policy apparatus. Over time there have been changes e.g. tolerance, supportive, etc.
- the actual market dynamics for UA need to be explored in Mudimu’s paper.
there is need to emphasize both the dark and light sides of UA as the presenter has attempted. Most of the presentations have tended to dwell on the positive aspects.

General Observations:

They also made the following general observations:

- it is not clear from all the presentations so far whether UA more damaging than rural agriculture.
- can the urban farmers be trained so that they become more productive?
- it is alleged that UA in Harare has resulted in siltation of river channels, sedimentation of water reservoirs – has this been quantified?.
- since urban cultivators no longer have the luxury of expansive plots, there is need to revisit the issue of technology.
- the poor urban cultivators have an interest in technologies that would increase outputs.
- institutions are very important policy holders. But there are also other actors e.g. church organisations. There is need to highlight the synergies existing among various stakeholders.
- at the micro-level there is need to address various issues e.g. UA and gender issues.

Day 2

Following the presentation of the commissioned papers during day 1, focus on day 2 shifted to a field trip in the trip in the morning followed by the discussions of various thematic issues affecting the political economy of UA.

2.7 Field Trip to UA Sites in Harare

As part of the Regional Workshop on the Political Economy of Urban Agriculture a trip was organised. The participants, drawn from Canada, Kenya, Tanzania, The Netherlands, Uganda, United Kingdom, Zambia and Zimbabwe[ toured Harare’s residential suburbs, industries and commercial centers. The field trip was conveniently organised on the morning of the second day, as an integral part of the workshop.

The objectives of the field trip were as follows:

- To enable participants to appreciate the extent and nature of urban agriculture in Harare, Zimbabwe;
- To enable participants to have a better understanding of the real practical issues when discussing the political economy of urban agriculture based on observation, in Harare, Zimbabwe; and
- To examine the environmental impacts of urban agriculture on ecosystems such as wetlands/ vleis where most of the crop production is taking place

In covering the workshop, The Herald carried an article which estimated that 48 000 tones of maize would be harvested from urban fields in Harare and Chitungwiza during the 2000/2001 farming season. Most participants found the figures unbelievably high and
hence the field trip provided an opportunity for them to assess the scale and intensity of UA in Zimbabwe’s cities.

The field trip lasted for three hours. The participants were taken from Bronte Hotel at 0800 hours, through Highlands and Greendale high income residential suburbs. The rationale for the route through Highlands and Greendale was that the maize production that abounds on and off-plot in this up market residential area would demonstrate to participants that the practice of UA is not restricted to the poor. It was also meant to dispel the notion that the rich practice UA for commercial reasons only. Instead, the middle class and rich of Harare do it now as part of a way of living, and being able to access fresh mealies cobs which the family can enjoy from their own field.

From Highlands and Greendale, the participants were taken to the high density-low income residential areas of Mabvuku and Tafara. The participants passed through Chikurubi Police Camp, where production of the popular vegetable rugare (sukuma wiki) is grown intensively. Participants also saw the extent of use of the open space between Greendale and Mabvuku suburbs. Cultivators have taken over the whole open space and have planted maize crop.

Before entering Mabvuku, one comes across a number of carpentry industries and the headquarters of a building contacting company. Cultivators have planted maize on the road reserve and along the perimeter boundary of the factories. The plots belong to workers at the factory who use their lunch break, which is normally from 1300 – 1400 hours, to till the land and plant or weed, and then report back for work when time is up. Workers who work on night shift will knock off and go into their field and cultivate, before returning home for a meal and short rest before the next shift.

Participants were then taken into Mabvuku and Tafara suburbs. Issues that were observed in the suburbs were:

- A number of new houses [approximately 250] have been constructed by a housing cooperative on what was formerly an open space. A number of urban cultivation plots were, therefore, lost. The phenomenon of housing schemes being developed in areas that were under cultivation is significant. For certain, there is massive horizontal expansion of the built area in Harare, inspite of the economic hardships faced since the liberalization of the economy in the early 1990s.

- Nearly every square meter of land in the residential suburb is planted with either maize or sweet potatoes, the two popular crops in most Zimbabwean towns and cities. The justification for this selection of crops is that maize is the staple food in Zimbabwe. Families, therefore, strive to be self sufficient in maize. In the past, maize used to come from the rural areas. However, with fuel shortages, the price of fuels have sky rocketed in Zimbabwe, resulting in increase in busfares. This has seen the price of transporting a bucket of maize on a bus or other means of transport being much more than the value of the bucket of maize. Further, due to the increase in bus fares families have reduced the number of trips they make to the rural areas. The price of maize meal from industry has increased by more than ten fold in the past five years. This has compelled many urban households to grow their own maize. The increase in the area under cultivation of sweet potatoes is explained by the increasing price of bread. Sweet potatoes are a perfect replacement for bread, which is taken with tea in the morning as breakfast. The price of bread has increased from Z$1,50 in
1990 to Z$32 in 2001. The increase in the area under sweet potatoes cultivation in most urban areas corresponds to the increase in the price of bread.

- There is increasing development of additional housing structures, largely illegal, on the existing plots. This has resulted in loss of on-plot land for cultivation, thereby increasing the demand for off-plot land for cultivation.

- The maize crop in the suburbs provides cover for thieves that raid nearby houses and use the maize fields for hiding their loot and also escaping those that may chase them. Participants were impressed by how some residents were coping with this. As soon as the maize cob develops, they cut the top part of the plant and prune it, getting rid of all the foliage and leaves, thereby leaving the field clean but with the maize intact. Such strategies need to be investigated further. Combined with good crop selection, for example sweet potatoes, it is possible to plant crops within residential neighborhoods that do not pose any security risks.

- We were also able to observe how boundaries between plots are maintained and honored by the cultivators. Given the need to optimize on space, the boundaries are made of a thin line of uncultivated land, on which weeds are thrown during weeding to make the boundaries more clear.

- We were also informed that due to economic hardships, the risk of some maize cobs being stolen from the fields has increased, although in the past this was unheard of. Stories are told of people who turned into crocodiles after eating stolen maize cobs. Anecdotal evidence suggests that if one eats stolen maize cobs, the digestive system just stops functioning and one has perpetual constipation. Such stories have served as a serious deterrent to stealing of crops from the fields. We were also informed that as a strategy to cope with the increasing spate of thefts of maize from the fields, families were simply increasing the area cultivated, hoping to get a surplus in yields which can compensate for the amount that may be stolen.

- In some fields, we saw the potential of space optimization for UA. Some cultivators plant an early crop of maize, which they harvest as green mealies. They then plant an early maturing crop such as beans and sweet potatoes. In some fields, the maize crop is planted early, and as it reaches tusseling stage, ridges are constructed.

At a cement-manufacturing factory, which is located very close to Mabvuku suburb, we saw a good crop of maize within the factory yard. Workers in some companies have discussed with their management and have been allowed to plant crops on land that is not needed for immediate use within the factory premises. It would be important to understand what additional assistance such workers may get from the company, such as loans for fertilizer inputs. It however struck participants as a challenge the extent to which commercial and industrial space can be made available for UA in the interim.

From Mabvuku-Tafara, the team went to Hatfield residential suburb, a middle income – medium density neighborhood. Participants observed intensive crop production along the roadsides and on the vlei open spaces. They were informed that the owners of the plots were from the nearby Airforce and Army middle-top raking officials’ residences that were constructed by the government between 1996 and 2000.

From Hatfield, the route led participants through Mbare, the oldest African residential township. It is in Mbare that the wholesale market for vegetables and other crops is found. From Mbare, the participants were taken to Kambuzuma section 1 & 2, Warren Park and Belvedere, and back to Bronte Hotel. What was striking during the tour is the
realization that UA is intense in Harare. Even the ‘Harareans’ who were taking part in
the tour acknowledged that they were not aware of the good crop and the large extent of
UA practiced in the city, in all the residential neighborhoods. Come to think of it, the
48000 tons expected could be an underestimate for Harare and Chitungwiza. The second
significant point is the integration of UA with other landuse, residential, commercial and
industrial in all places around the city centre. The third is the contrast between the
residential, industrial and other landuses in the rest of the town when compared with the
central business district. While UA has been integrated in all the other landuses
throughout the city, the central business district (CBD) remains a no-go area for UA.
Finally, we observed that there is very little livestock in and around the city. Here and
there, we saw small but well managed chicken runs.

Interesting!

2.8 Group Presentations on Thematic Issues

The following thematic issues were identified for group discussion and presentation: (a)
Research issues on formal and informal rules and strategies used by different
stakeholders to access land and other resources; (b) Research issues on public policy
evolution and how it affects access to and use of land for UA by different stakeholders;
(c) Research issues on institutions for enhancing / maximising collaboration and for
resolving conflicts over resources for UA; and (d) Policy and technology interventions. In
order to enrich group discussions selection to the respective areas was not made on the
country of origin but by area of specialisation and natural interest. The thematic
discussions aimed to provide another dimension to the discussions which had previously
focused on the technical aspects of UA and had not examined the topic from a thematic
angle.

The technical presentations had been done on the basis of geographic location, e.g. Kenya
and Uganda. The thematic issues approach made it possible to focus on cross-cutting
issues based on common themes. In fact, there was a shift from day 1 to day 2 where
identification of research issues was no longer by country but by thematic issues.

2.8.1 Group 1: Research Issues on Formal and Informal Rules and Strategies Used
by Different Stakeholders to Access Land and Other Resources

The group presentation during plenary covered the following: definitions and research
issues.

- The group defined private land as individually owned (e.g. residential, commercial
institutional, financial and industrial). For public land ownership they gave state or
municipal authorities as examples.

Access to land: Private: (own, rented on informal arrangements (lodgers)

Research issues identified:

- Quantify categories of land available for UA. Is there research on availability of land
for UA?
• What are the arrangements between landlords and tenants / lodgers for the latter to access on-plot space for UA?
• Is there security of tenure for women (widows, divorced, customary marriages)?
• What are the arrangements between employers and employees / others for the latter to access on-plot space for UA? (such arrangements exist in Zimbabwe but not in Kenya).
• Are there options for providing support services where tenure is secure and UA is better protected?

A) Public Land Issues:

• How to acquire and allocate public land for UA (temporary occupancy licences, group licenses)?
• Viable options to ensure that allocation and use give priority to low income and the landless (e.g. small plots, agreements with specific criteria).
• Larger plot allotments would give the high income groups sufficient space for housing and UA.
• How do producers get access to resources other than land for UA (e.g. water, fertilisers, seeds, capital) both formal and informal?
• What arrangements exist between governments and producers to maintain green areas in exchange for access to land for UA? Whoever will be using the green will be required to maintain it.
• How does distance to plots influence strategies for accessing land and resources.
• What are the best practices and possible improvements to water usage (e.g. water saving technologies, water saving crops, livestock, use of treated water, reusing safe waste water)? Are there any practices on water uses?
• Is the restructuring of public open space a viable option for the future?

Discussion: Comments and Inputs from the Floor

• Informal structures that have evolved need to be emphasised and be mapped out clearly.
• There is need to map out time frames regarding availability of land for UA.
• Vulnerable groups (e.g. women and ethnic minorities) need security of tenure.
• There is need to address the effect of including or excluding the upper income groups in UA.
• There is need to focus on other resources other than land.
• What is the effect of security of tenure / use on UA practices (e.g. on investment levels, production systems)?
• Perhaps we should not focus on the upper groups with respect to UA, instead we need to have mechanisms that enable urban cultivators to graduate from UA to other activities.
• We need to understand deeper what motivates some urban residents to engage in UA. This project is attempting to delve into an enormously complex and dynamic situation. A key to capturing gender aspects (rather than WID) and local experiences, and equally useful for the analysis of conflict and cooperation between different
levels and departments in the government, is to address relations of power. Analytically it is useful to move away from binaries (powerful-powerless) and instead see power as something that is exercised. Therefore where there is power there is always resistance. This is the site of conflict, negotiation and cooperation. Therefore some analysis needs to engage explicitly in questions of who exercises power?; where?; how?; to what end?; and with what results?

2.8.2 Group 2: Research Issues on Public Policy Evolution and how it affects Access to and Use of Land for UA by Different Stakeholders

The group’s presentation covered policy-urban legislation and landuse planning, conflict resolution, culture and policy, and participation, awareness and capacity building.

Policy- urban legislation - landuse planning.

- Review parent laws taking into account the reality on the ground while upholding contemporary standards.
- What are the forces behind policy changes? Which actors are involved and what roles do they play?
- How can policy and landuse planning intervene in a manner that is enabling rather than prohibitive of UA?
- What landuse planning adaptations are needed to manage 'open spaces' in order to make them accessible to the poor?

Conflict resolution

- Do existing policies minimise conflicts and facilitate the management of resources for UA or do they exacerbate conflicts?
- What legislation and policies are needed to resolve or minimise conflict: (a) at the urban / peri-urban interface and (b) between / among central government, local authorities and other actors (e.g. cultivators, CBOs, NGOs).

Culture and policy

- How does culture impact on policy development or on successful implementation of UA laws/legislation?
- How can policy be made to promote an urban landscape that reflects African values, including the use of space for agricultural activities?
  - How should standards be set in a manner that promotes UA?

Participation, Awareness & Capacity Building

- What policy changes are needed to enhance participation of stakeholders in the review, management, design and implementation of UA?
- How can we design policies that enhance stakeholders' awareness of innovative / different ways of organising efficient UA (e.g. in terms of productivity and environmental protection)?
Discussion: Comments and Inputs from the Floor.

- How do we ensure sustainable UA in terms of technology used, practices and management approaches?
- Conflicts between formal and informal policies / regulations (e.g. customary vs. bureaucratic, formal vs. informal, new legislation vs. old legislation) need to be addressed.
- There is need for research on the actors involved in UA policy making and implementation (e.g. their agendas).
- There is need for research on corruption and ways of combating such practices in UA.
- Various policy options that constrain or enhance UA include:
  (a) appropriate legislation for UA
  (b) assessing the risks of legislating / legalising UA.
  (c) research on why current legislation is not enforced / applied.
- Urban agriculture and governance linkages are critical areas for attention.
- There is need for research on the interface between various levels of governments, - potentials/ constraints for UA, etc.
- There is need for research on awareness levels of policies and legislation relating to UA.
- There is need to look at how existing and previous policies have diminished participation. Other issues that need to be addressed are whose participation and how.

2.8.3 Group 3: Research Issues on Institutions for Enhancing / Maximising Collaboration and for Resolving Conflicts Over Resources for UA.

The group’s presentation covered co-ordination, roles of institutions / stakeholders and challenges.

- There is need for co-ordination of roles and responsibilities among all stakeholders at various institutional levels (e.g. who takes the lead in co-ordination of institutions over resources for UA? What mechanisms are appropriate for enhancing effective co-ordination)?
- How to enforce existing and future legislation regarding access to UA resources and adjudication of conflicts?
  (a) land ownership
  (b) environmental aesthetics
  (c) crop trespassing / theft.
- What roles do institutions / stakeholders play in (harnessing resources for UA, policy, resolving conflicts) to shape perceptions and attitudes on UA? (positive dynamic).
- What will be the role of communities in affecting adoptive planning?
- What is the existing capacity (both human and financial) for enhancing collaboration and conflict resolution?
- What state of governance (both national and local) is necessary for enhancement of institutional performance?
• What will be the impact of institutionalising urban agriculture on the:
  (a) groups involved
  (b) production systems
  (c) wider urban economy?

Challenges:  
- Sourcing funds
- Human resources

Discussion: Comments and Inputs from the Floor

• What is the role of the sectoral ministries (e.g. Ministry of Agriculture) in facilitating urban agriculture?

• There is need for capacity building for effective collaboration to take place among the participants.

• There is need to include the urban cultivators among the actors.

• Is it always necessary for various institutions to collaborate (e.g. local authorities, NGOs, CBOs, etc.) when their existence is often attributable to an anti-collaborative approach?

• There is need to include all organisations that can become social assets. For example, in Tanzania it would be important to include households on the list of institutions.

• Earlier customary law is mentioned but it is absent from this discussion (I suspect this is more of an issue in the peri-urban areas) How is ‘customary law’ enforced, practised and lived?

• There is need to discuss conceptually, notions of ‘cooperation’ and ‘conflict’ - how is this experienced at multiple scales (intra-household to Central Government)? To what extent should conflict be ‘resolved’ at a local level (on the ground) (In this section it was pointed out that in the Tanzanian case households need to be included as actors - I suggest this should be considered more in all cases)

• Other questions to pose that come from several of the issues raised (particularly in terms of empowerment and impacts of existing legislation): Has (how/when) current legislation dis-empowered actors involved in UA? If so how and when? How can we ensure that new policies do not do the same?

2.8.4 Group 4: Policy and Technology Interventions

The group’s presentation covered the following: research to inform policy and research involving technological interventions.

1) Research to inform Policy

• This focuses on environmental impact and profitability issues.
• Review all legislation and institutional control dynamics between levels of governance
• Establish criteria for land use zoning (optimal land for UA).
• Identify the cultivators their motivation and the positive and negative points of who should cultivate and why.
• Evaluate use and management of resources (e.g. water, land, labour, capital)
• Assess impacts of UA on urban infrastructure (e.g. sewerage, roads, drainage, water supply, crime) and how to mitigate these.
• Assess health impacts (e.g. malaria, typhoid, heavy metal toxicity, noise pollution, smell pollution. etc.)
• Assess nutritional impacts (quantity of food, quality and nutritional content).
• Regarding land tenure, assess rights of access to / use of land. Conditions of use and control of land and the positive and negative impacts of official recognition of UA. How to mitigate the negative impacts.
• Assess impacts of UA on Urban markets for foodstuffs and on traditional rural supply areas.
• Assess implications for rural-urban linkages.
• Assess capacity at state and local government levels (landuse planning, human resources, financially, infrastructure, know how, agricultural extension).
• Implications for poverty alleviation of off-plot cultivation (moral outlook) Advocacy organising.
• Identify competition for land involving NGOs, women groups church groups to empower the poor to participate in UA - formalising within policy.
• Identify competing land uses an evaluation of competing land uses to the perceived value of UA to the urban system.

Research to Inform Technology (Technology Interventions)

• Cost effectiveness of processing UA produce (location, technology available, government / private control.
• Availability and suitability of agricultural extension (funding of it, qualification and training relevant).
• Appropriate farming systems for urban areas (agricultural diversification, size of area, technology used, crops grown, permaculture, livestock kept, recycling urban domestic waste).
• Credit availability for urban farmers (loans available).
• Availability of inputs for urban agriculture (security and sources of supply, control of costs).
• Use of urban waste in farming systems and interrelatedness of refuse disposal with UA.
• Technologies to mitigate negative effects of UA within acceptable limits.
• Marketing systems for urban farmers (optimisation).
• Irrigation technologies for UA.
• Advocacy for empowering the poor to participate in UA - NGOs, Civil society, women groups. etc.

Discussion: Comments and Inputs from the Floor

• Research on the viability and sustainability of UA should be the focus of future research.
• Need to broaden city development strategies. Currently research on UA is very relevant and should be considered for incorporation into city development strategies.
• UA is developmental. How do we address it? Can we have a resolution from the working group here?
• Need for researchers to identify the context where conditions are ideal for action research.
• Under research to inform policy: when asking about cultivators it is important to consider multiple motivations.
• Positive and negative points of who should cultivate and why - perhaps I need more explanation of the discussion here but it struck me as strange that we should be attempting to decide on this question and then I also wondered how we would answer such as question.
• In this list of issues here I did not see any discussion of technology for whom (i.e. whose interests and priorities informed the decision to develop what technologies)? I find that often when the discussion turns to technical matters the ‘people’ component of the project gets left out and yet new technology introduces another resource into ongoing negotiations of access and control. I therefore suggest that it is important to conceptualize new technology as another site for conflict and cooperation.
2.9 Developing a Framework for the Research Proposal on the Political Economy of UA in Eastern and Southern Africa

Armed with research issues identified during days 1 and 2, the participants went into day 3 well equipped to develop a research proposal. As part of the proposal development process, to develop a research proposal. As part of the proposal development process, the participants decided to follow the format used for proposals submitted to the IDRC for funding.

In terms of developing the actual research proposal, the participants followed a stage-by-stage process, beginning with the argument and objectives of the research. Both the argument statements and research objectives were reached by consensus after extensive discussions. Time constraints forbade the development of the full proposal. That task was given to the MDP and a team of selected researchers.

A. IDRC Project Format

The following format for projects to be submitted to IDRC was presented:

1. Title
2. Argument
3. Objectives
   - General objectives
   - Specific objectives (evaluation oriented)
4. Methodology
5. Expected Outputs
6. Division of responsibilities
   - Project team
     - Disciplinary
     - Institutional
7. Time table of the project
   - Activities
8. Budget (in Kind and in Cash)
   - External
   - Internal
9. Official Request
   - Proponent
   - Recipient
   - Associates
10. Legal Status of
    - Recipient
    - Associates

1. Methodology

Issues
Data Collection
Analysis
Results - Recommendations
Dissemination of Products
  Technical Reports
  Book / Article / Briefs
  Manuals
  Databases
  Resource Directories
  Maps, Slides, Videos
  Dissertation, Theses

B. Issues for Project Proposal
  "Political Economy on Urban Agriculture in Eastern and Southern Africa".

2. Argument

  Given
  • Urban Agriculture is Valuable
  • There is increased interest from diverse actors
  • There are changing dynamics of urban agriculture within changing urban economies
  • Tensions and contention related to UA are current and emerging
  • There is recognition of the potential of UA for...
  • Positive arrangements.
  • Knowledge Gaps, Missing Skills and Institutional Insufficiencies

3. Objectives

  General objective

  To contribute to a better understanding of the political economy of UA in order for public policy and technology interventions to improve access by the urban poor to, and use of, resources for UA.

  Specific objectives (evaluation oriented)

  Therefore, what is needed can be categorised as follows:

  1. To identify and document research on formal, informal rules and strategies used by different stakeholders to access land and other resources for UA.

  2. Assess, identify and analyse research on issues of public policy and legislation that constrain or enhance practice of UA (particularly by the urban poor).

  3. To identify and document research on institutions that enhance collaboration and resolve conflicts, over access to resources for UA.

  4. To integrate / link research on:
    a. specific public policy interventions to improve access by the urban poor to resources for UA in specific countries.
    b. specific technology interventions to improve productivity of the use by the urban poor of resources for UA.
5. To identify capacity building needs in public policy-making institutions and develop strategies to address these.

6. To identify public policy options and use these policy options to inform and influence relevant public policy processes regarding UA (conflict, contentions, collaboration, arrangements).

7. To contribute to the state of the art (knowledge) on UA.

- It is important to move beyond only actors involved in / with UA in terms of policy development. For example one of my critiques of Ghana’s new National Land Policy (June 1999) is that the Ministry of Mining was not included in the policy team despite the recognized impacts of mining on land degradation. This is a key issue in the Ga District (see Maxwell et al.’s CFP report) where top soil mining (sandwinning) for the building industry is a big concern for peri-urban farmers in terms of access and quality of land. Therefore there is a need to dialogue with the Ministries and stakeholders who are not directly involved in UA but have an impact in terms of UA resources.

2.9.1 Group Discussions on Objectives

Four groups were formed and each group was tasked to focus on two objectives (previously identified) and discuss expected outputs and the proposed methodology.

**Group 1: Its task was: To Identify and Document Formal and Informal Rules and Strategies Used by Different Stakeholders to Access Land and Other Resources for UA. (Objective 1)**

<table>
<thead>
<tr>
<th>Expected Outputs Description, quantification and qualification of:</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Socio-economic benefits and costs of practising UA in different land categories</td>
<td>Primary data collection Secondary Photos, slides</td>
</tr>
<tr>
<td>b) Different categories of land used for UA</td>
<td>Satellite imagery Primary data collection Secondary Literature Maps, slides</td>
</tr>
<tr>
<td>c) Identifying users of land for UA and production systems</td>
<td>Primary Secondary Participatory (gender disaggregated data and vulnerable groups)</td>
</tr>
<tr>
<td>d) What arrangements exist (formal and informal) for the users to access land for UA.</td>
<td>Primary Secondary Participatory (gender disaggregated data and vulnerable groups)</td>
</tr>
<tr>
<td>e) Security of tenure and use of land by users.</td>
<td>Primary – users, service providers Secondary</td>
</tr>
<tr>
<td>f) Support services available for users of UA (if any).</td>
<td>Primary, Secondary, slides, photos</td>
</tr>
</tbody>
</table>
Group 1: Assess, Identify, Analyse and Substantiate Issues of Public Policy and Legislation That Constrain or Enhance Practice of UA (Objective 2).

<table>
<thead>
<tr>
<th>Expected Outputs</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Documentation of existing legislation/policies/regulations in different countries that have implications for UA.</td>
<td>Secondary</td>
</tr>
</tbody>
</table>
| b) Identifying best practices regionally in terms of legislation/policies/regulations, learning and adapting from such practices. | Primary
Secondary |
| c) Assessment of laws in a) on the implications for UA for men, women and other groups. | Primary
Secondary |
| d) Identifying issues (formal/informal) which could form the basis for future legislation/policies/regulations for UA | Primary
Secondary |

Discussion (Group 1)

- Identified legislation, policies regulations etc.
- Gender perspective needs to be mainstreamed.
- Objective 2 has been presented as activities rather than outputs. Need to formulate the groups’ expected outputs, include activities and tangible outcomes – need also to develop clearly the impact of these.
- Resources for UA – we should not restrict ourselves to land but we also need to examine water as an UA resource – need to link land and water, some users already have land, what they need is water.
- In discussing the political economy of UA we need to focus on land, water labour and capital.
- Land and water are key resources that are regulated by local authorities (the others are not and may be we shouldn’t focus on them).
- Substantiate refers to ‘validation’.
- Rather than use the term ‘resources’ we need to use the term ‘factors of production’.

Group 2 was given the following tasks:

To identify and document research on institutions that enhance collaboration and resolve conflicts, over access to resources for UA (Objective 3)

To integrate / link research on specific public policy interventions to improve access by the urban poor to resources for UA in specific countries (Objective 4a)

To integrate / link research on specific technology interventions to improve productivity of the use by the urban poor of resources for UA (Objective 4b)
## Group 2: Objectives 3 and 4

<table>
<thead>
<tr>
<th>Objective</th>
<th>Source</th>
<th>Instruments</th>
<th>Activities</th>
<th>Outputs</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Central government - Local government - Sector min. - Community actor - existing reports - secondary data - journals - policy doc. - legislation</td>
<td>in-depth interviews - questionnaires - group interviews - participatory surveys - desk reviews</td>
<td>To carry out: (instruments column) stakeholder meetings</td>
<td>• Reports of: - key actors; - key conflicts issues; - actual &amp; potential roles actors could play to enhance collaboration • Better understanding of; - Attitudinal / perceptional change of actor • Improved access between actors &amp; stakeholders</td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>As in output of objectives 2 &amp; 3</td>
<td>-do-</td>
<td>• Develop guideline of statutory instruments &amp; proposals for new institutional arrangements that favour UA • lobbying to policy makers for change &amp; inclusion of the by-laws. • Improve the enforcement of by-laws.</td>
<td>- Improved understanding of the need for policy revision - Guidelines and arrangements - revised parent laws, landuse plans, by-laws.</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td>As in output of objective 1,2,3. Review information for urban extension service</td>
<td></td>
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<tr>
<td></td>
<td>- Participatory research (farmer –extension researcher)</td>
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<tr>
<td></td>
<td>- Carry out: technology inventory</td>
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<tr>
<td></td>
<td>- information inventory</td>
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<tr>
<td></td>
<td>- Carry out: problem analysis</td>
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<tr>
<td></td>
<td>- technology improvement &amp; development.</td>
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<table>
<thead>
<tr>
<th>Potential / used technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved / adopted technologies</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible parties</th>
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</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>- Interviews,</td>
</tr>
<tr>
<td>- Desk reviews</td>
</tr>
<tr>
<td>- surveys</td>
</tr>
<tr>
<td>- lobbying</td>
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<tr>
<td>- integrating new guidelines</td>
</tr>
<tr>
<td>- Researchers</td>
</tr>
<tr>
<td>- Researchers</td>
</tr>
<tr>
<td>- MDP facilitation</td>
</tr>
<tr>
<td>- Action oriented NGOs such as Land and Women Group.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4a</th>
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</thead>
<tbody>
<tr>
<td>- develop guidelines</td>
</tr>
<tr>
<td>- Researchers, Local authorities (planners and councillors)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4b</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Technology inventory</td>
</tr>
<tr>
<td>- Technology development</td>
</tr>
<tr>
<td>- Cultivators, livestock keepers</td>
</tr>
<tr>
<td>- Researchers, extensionists</td>
</tr>
<tr>
<td>- Private companies.</td>
</tr>
</tbody>
</table>
Discussion (Group 2)

- Opportunities that have already been identified in the various countries to improve policy interventions need to be considered – e.g. in Kenya and Uganda – poverty reduction plan.
- There are three consumers namely: (a) the urban farmer; (b) the city managers and (c) policy formulators. They need to learn and share experiences.
- The tangible expected outputs are limited to reports. Are reports sufficient to cater for the interests of all the stakeholders?
- With respect to 4b what is the scope for gathering more data?
- How is information dissemination going to be done?
- How will you link research with expected outputs? Perhaps we should go back to the different country papers to see how the links can be effected.

Group 3 was given two objectives:

To Identify Capacity Building Needs in Public Policy Making Institutions Involved in UA and Strategies to Address These (Objective 5).

<table>
<thead>
<tr>
<th>Source of information</th>
<th>Research Instruments</th>
<th>Outputs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Reports</td>
<td>Interview Guide</td>
<td>Inventory of Institutions</td>
<td>Information is available</td>
</tr>
<tr>
<td>Key Informants</td>
<td>Interview Guide</td>
<td>Levels of Institutions</td>
<td></td>
</tr>
<tr>
<td>Key Informants</td>
<td></td>
<td>Profiles of Institutions</td>
<td>There is good rapport between the researcher and the policy makers</td>
</tr>
<tr>
<td>Policy Documents</td>
<td></td>
<td>Roles of Each Institution</td>
<td></td>
</tr>
</tbody>
</table>

| Institutional Case Studies    | FGD Guides            | Needs Assessment               | Organisations are willing to Divulge Information |
|                               |                      | a) Human Capital                | Organisations are willing to Network      |
|                               |                      | b) Financial Capital            |                                           |
|                               |                      | (Crosscutting in the Region /Peculiar to Countries) |                                           |
|                               |                      | (Long term, Medium, Short term) |                                           |
| Key Informants                | Interview Guide      | Possible Linkages               |                                           |
|                               |                      | A) Existing                     |                                           |

53
B) Potential

Group 3: Public Policy Options To Inform And Influence Relevant Public Policy Process Regarding UA: (a) conflict; and (b) collaboration (Objective 6).

<table>
<thead>
<tr>
<th>Outputs (influencing)</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>- New institutions for UA</td>
<td>- Start-up workshops with all stakeholders</td>
</tr>
<tr>
<td>- Formalised collaborations</td>
<td>- Responding to needs of institutions for UA</td>
</tr>
<tr>
<td>- Mediating functions for resolving conflicts</td>
<td>- Sharing responsibilities with institutions</td>
</tr>
<tr>
<td>- Follow-up of resolutions</td>
<td>- Periodic Reviews for M &amp; E with stakeholders.</td>
</tr>
<tr>
<td>- Bills</td>
<td>- Skill improvement of institutions.</td>
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<tr>
<td>- By-laws</td>
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<tr>
<td>- Agreements</td>
<td></td>
</tr>
<tr>
<td>- Strategic plans</td>
<td></td>
</tr>
<tr>
<td>- Programmes of work</td>
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</table>

Discussion (Group 3)

- Objective 5 needs assessment and we also need to focus on the utilisation of the resources.
- The focus should be on public institutions that influence policymakers.
- Capacity building - there is need to identify people (young and old) to champion the process. A senior person is not necessarily the ideal person for a young / junior person could be dynamic. Is there a way of identifying the champions?
- Regarding the last 3 objectives: information dissemination is critical / information networking is also important.
- How to interpret building needs is important.
- Methodology: it is very useful to have a forum of policymakers, conflicts are revealed at such for a. Mazingira institute has used such for a for effective dissemination.
• How do you build capacity using the forum concept?
• Assessing information: there is suspicion between researchers and policy makers which makes research difficult. How do you bring the policymakers on board.

**Group 4: Objective 7 - To contribute to the state of the art (knowledge) on UA.**

Methodology for Political Will at:
I. National level / central government a) Politicians b) Technocrats
II. Local Government Authorities a) Councillors b) Technocrats
III. Regional level within the region (use existing organisations, i.e. SADC, COMESA, East African Community.)
<table>
<thead>
<tr>
<th>Objective</th>
<th>Outputs</th>
<th>Method of Dissemination</th>
</tr>
</thead>
</table>
| 1         | 1) National Reports  
2) Workshop to verify National Reports  
   - including local languages  
   - appropriate format  
3) Regional report (compares and contrasts) | (1) to in-country stakeholders before (2) Then (3) to  
i) in-country stakeholders  
ii) multilateral donors  
iii) bilateral donors  
v) Research institutions e.g. through RUAF / MDP, Websites etc. |
| 2a        | Report to include mention of all options considered, and advantages and disadvantages of each debated and the state policy recommendation accepted. | then as above |
| b         | 1. National synthesis of current research findings and new research findings  
2. national workshop for all stakeholders  
   - to present report  
   - to accept feedback  
   (i) Refereed research articles in International journals  
   (ii) Disseminate to in-country stakeholders  
3. Regional synthesis per topic | Amended (2) to in-country stakeholders  
- radio debate  
- video conferencing  
- theatre for development  
(3) to as per objective 7. |
| 2b        | - Reports Databases  
- Databases  
- Regional Level  
- National Level | - to all stakeholders  
- appropriate information to specific groups of actors who can benefit. |
| 3         | Report | Workshops for those who will be affected by the outcome |
| 4a        | Regional only reports for all technologies together  
a) manuals written in local language  
b) radio debate  
c) theatre for development  
d) young farmers association  
e) youth groups  
f) presentations to schools | i) Each report to relevant stakeholders in each country  
ii) Regional - workshops for main extension officer  
iii) manuals (relevant to all regions) |
<p>| 4b        | | |</p>
<table>
<thead>
<tr>
<th>5</th>
<th>Official Report to relevant institutions (careful diplomacy)</th>
</tr>
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</table>
| 7 | 1. a book on the political economy of UA in East and Southern Africa.  
2. a regional governmental meeting to discuss the future of UA in E & S Africa  
3. An international conference on the political economy of urban agriculture worldwide  
4. a regional focus group network to be in contact on a regular basis to report on developments in UA in E & S Africa (to include an office base in the region). Purpose of regional office  
5. to co-ordinate & distribute a quarterly news-latter  
6. to keep a library of relevant information  
7. to co-ordinate / hold training workshops  
8. to obtain funding to disseminate relevant information |
Discussion (Group 4)

- The group identified a lot of practical issues that could be done to disseminate information.
- The idea of producing books is fine but as a dissemination strategy it is not always effective because officials have no time to read.
- The idea of policy briefs would be a solution because they are short and reader friendly.
- In Tanzania they have persuaded a newspaper journalist to write weekly articles on UA. Now UA has a permanent page in the local / municipal newspaper.
- We should place a lot of emphasis on dissemination.
- Political will: there is need to mobilise this as part of our information dissemination strategy.
- Political will: we need to work on it. At MDP we have started bringing together ministers to discuss local government issues. An issue such as UA would be suitable at our next meeting of ministers in the Eastern and Southern African region in Lilongwe.
- Regional dissemination: through publications and dissemination of information we could sensitise regional governments.
- Use of radio: you could disseminate effectively using radio by presenting programmes on UA. In Uganda this has been very effective.
- Minister / Researcher – where you have researchers who have been top politicians or top politicians who have been researchers dissemination is enhanced.
- Critical moments: we need to look out for these (e.g. floods) to disseminate information on UA. This forces politicians to pay attention even if they didn’t want to.
- There is also need for us to address global concerns (e.g. waste management, unemployment) in order to address problems that are facing communities.
- On-site visits, newsletters and pictures are all effective.
2.10 The Way Forward

At the end of the last session of the third day Mr. Mushamba, the workshop facilitator, thanked the participants for their keen involvement which had contributed to the success of the workshop. After the participants had completed the workshop evaluation forms each was given an opportunity to speak very briefly on their assessment of the workshop, what they had learnt from the workshop and what they intended to do upon returning home.

2.10.1 Mr. George Matovu – Regional Director, MDP Eastern and Southern Africa

He reported that:

- There are several things that we could do as individuals and as a group to maintain the momentum.
- The workshop has put together a rich mix of academicians, policy makers, technocrats, etc. The mix has made it possible to pursue a multidisciplinary approach to research on UA and that is quite healthy.
- A report will be produced within 6 weeks and that will be one of the concrete outputs of the workshop. The draft proposal will be distributed to all participants.
- We need to think about how to network in order to continue with the dialogue.
- The next tangible output is a draft proposal that will be submitted to IDRC and other donors but we need to think about the time frame.
- Mr. Matovu thanked the participants for a wonderful workshop that had generated a lot of new ideas. He urged the participants to create a network which will guide the group’s research activities on urban agriculture.
- The workshop has generated ample information for us to use. When you return to your countries you will be making reports and it is important that you fully document your experiences at this workshop.
- Finally he thanked Mr. Mushamba for organising an effective workshop.

2.10.2 Dr. Luc J.A. Mougeout – Senior Programme Specialist, Head of Cities Feeding People Programme, IDRC

- Dr. Mougeout congratulated Shingi Mushamba for organising a successful workshop. He mentioned that he was impressed by the richness of the ideas generated and he recommended that there was need to develop a network / group emerging from the workshop. However, he warned that such a network needs to be carefully maintained if good results are to be produced.
- He emphasised the need to source financial resources from productive donors / partners. Dr. Mougeout informed the participants that the IDRC was committed to the initiative and was keen to see it through. Finally, he mentioned that he hoped to receive a proposal from the MDP within the next few months.

2.10.3 Mr. Rindayi Chimonyo – Women and Land Lobby Group

- He mentioned that the MDP initiative was useful and the women and Land Lobby Group was keen to be involved.
• The Women and Land Lobby Group is based in Harare and has been lobbying for UA to be legalised.
• The group donated 14 T-shirts to the participants with a printed message calling for UA to be legalised.

2.10.4 Mr. Godfrey Mudimu – Department of Agricultural Economics and Extension

• He presented a proposal for the establishment of the Eastern and Southern Africa Network for Urban Agricultural Research, Training and Advocacy.
• He proposed the formation of a regional network to consolidate and enhance the human and social capital for planning, research training and advocacy for sustainable urban agriculture. The network will bring together planners, researchers, extension workers and advocacy groups to achieve the following objectives:
  1. To work together to promote sustainable urban agriculture.
  2. To generate and disseminate information on appropriate policies for urban agriculture.
  3. To develop and implement appropriate support systems for the urban farmers.
  4. To have an organised and systematic approach for assisting urban farmers in utilising the urban space.
  5. To have an organised and systematic approach for assisting urban farmers in utilising the urban space.

2.10.5 Dr. Beacon Mbiba PERINET

He reported that:
• Peri-Net is a network of institutions and researchers engaged in urban and peri-urban research and exchange of local, regional and global development experiences.
• In Africa, the network seeks to link and enhance young scholars who are committed to intellectual capacity building in African institutions and to produce knowledge for use by and in partnership with local authorities, central government departments and community groups.
• The objective is to identify, develop and promote front line ideas or innovations and to bring these into effective local and regional level use in areas of urban governance, peri-urban development, land management, sustainable local economies and livelihoods and poverty alleviation.
• The network will facilitate opportunities for in-depth research on critical urban / peri-urban policy issues and the sharing of experience among researchers, practitioners and policy makers at local and regional levels.
• Ongoing PeriNET research is in Lusaka, Nairobi, Kampala, Mbarara, Harare, Petersburg and Durban. This covers areas of:
  1. Urban governance
  2. Peri-urban land transformations; land markets, tenure transformations, commercialisation and globalisation.
  3. Urban-rural linkages
  4. Urban and peri-urban agriculture
  5. Urban and peri-urban livelihoods
  6. Peri-urban land invasions and conflict resolution
  7. Partnerships for sustainable peri-urban development.
• Peri-NET will link and engage with other global-local actors whose programmes seek to promote sustainable urban and peri-urban development such as UNCHS, UNDP, IULA, Cities Alliance, International Support Group for Urban Agriculture (SGUA), the Municipal Development Programme (MDP), FAO and various development NGOs.
• The PeriNET was established in 2000 with an initial research grant from The British Academy.
• Members of PeriNET are involved in debates with other agencies for example on Urban and peri-urban Agriculture with MDP and IRDC. There is research and policy dialogue with central government departments and municipalities for example on peri-urban health and informal settlements (Kampala); peri-urban land conflicts management (Harare).

2.10.6 Dr. Kaori Izumi – (FAOSAFR)

Reported that:
• UA is covered in FAO’s urban poverty programme,
• FAO is a technical agency and not a funding agency and was likely to assist with technical support rather than financial resources.
• Dr. Izumi thanked the workshop organisers for an excellent and relevant workshop.

2.10.7 Ms. Zarina Ishani – Mazingira Institute

Reported that:
• The Mazingira institute was established in 1978 and that its activities included research, networking and information dissemination. Mazingira did the first study of UA in Kenya in the mid-1980s and has been involved in issues of governance and land grabbing.
• Mazingira manages a Civil Land Action Network whose aim is to educate and inform people.
• They also promote research on gender and environment in UA.
• The latest UA research done by Mazingira was on cattle keeping
• Finally, Mazingira has organised regional study visits and sponsored researchers from Eastern and Southern Africa.

2.10.8 Dr. Tanya Bowyer–Bower – Environment and Development School of Oriental and African Studies, University of London.

• Dr. Bowyer-Bower reported that her involvement in UA dates back to the early 1990s when she, together with several researchers in the Department of Geography at the University of Zimbabwe carried out a survey on UA in Harare that was funded by the DFID. She has since been doing research in Nigeria and is exploring possibilities to do research in Zimbabwe.
• She also reported that DFID will fund a UK institution that is involved in collaborative research with an African institution.
• She is keen to participate in the MDP-IDRC research initiative.
2.10.9 Mrs. P. Charumbira – *Acting City Planner, Department of Works, City of Harare*

- She reported that the workshop had broadened her thinking about UA. She mentioned that, her employer, the City of Harare now views UA in a more positive manner and was searching for ways of incorporating UA into the land use plans.
- Mrs. Charumbira mentioned that it was possible to use research results from the proposed research in order to implement an UA pilot project here in Harare.

2.10.10 Ms. Petra Jakobi – *Urban Vegetable Promotion Project, Ministry of Agriculture and Cooperatives / GTZ, Tanzania.*

- Ms. Petra Jakobi is an environmental advisor to a GTZ funded project on urban farmer groups and is currently working on a PhD.
- Since her project has close linkages with municipalities in the field of UA she was willing to share success and failure stories with whoever was interested.
- She encouraged the participants to lobby their governments and propose projects on UA because there were good chances that the GTZ would consider the project for funding. However, she made it clear that GTZ funding was through government departments and not private groups or individuals.
- The Urban Vegetable Promotion Project (UVPP) is operating in the urban wards of three districts of Dar es Salaam and its objective is to assist urban farmers to improve the production of vegetables.
- The project enhances the producers self-help capacity and strengthens the extension structure to deliver extension services for urban farmers. At the same time it generates information about the prevailing production systems to develop a concept for effectively promoting UA.
- Target groups and main partners are vegetable producers with a special focus on female gardeners.
- Extension activities include technical support in vegetable and fruit production for urban areas, facilitation of community or group based input supply and capacity building and organisational support to the groups.

2.10.11 Mr. Rene van Veenhuizen – *Editor: Urban Agriculture Magazine ETC – RUAF The Netherlands*

He reported that:
- He had learned a lot from the workshop.
- The RUAF programme is essentially about facilitating UA and to place it on the agenda. Projects within the project included bibliographic data base – video – resource person – institution data base.
- One of the mandates is the organisation of electronic conferences. The recent electronic conference on UA was organised jointly with FAO.
- RUAF was currently preparing a methodology workshop on UA. He invited the participants to offer ideas and share experiences.
• They propose to produce a video on UA.

2.10.12 Prof. Malongo Mlozi – *Department of Agricultural Education and Extension, Sokoine University of Agriculture, Tanzania.*

• Prof. Mlozi re-introduced himself as an academic from Sokoine University with a keen interest in UA
• His department has supervised many students at Masters and PhD levels researching on UA.
• His department has close ties with UA practitioners and a collaborative project with Israel.
• Prof. Mlozi is of the opinion that Sokoine University would play a key role in the proposed UA research initiative by participating in research and offering training.

2.10.13 Dr. Felix Haazele – *Department of Animal Science School of Agriculture, University of Zambia*

• Dr. Haazele is an academic at the University of Zambia with research interests in UA.
• He reported that his participation in the workshop had been an eye opener.
• He observed that as trainers and researchers it is imperative that through our work, we promote good practices with respect to UA.

2.10.14 Ms. Getrude Atukunda – *Research Associate, Makerere Institute of Social Research, Uganda*

• Getrude Atukunda is a research associate at Makerere Institute of Social Research.
• She mentioned that she had benefited a lot from the workshop and when she returns to Uganda her new role will be to advocate for good UA practices.

2.10.15 Mr. Augustus Nuwagaba – *Faculty of social Sciences, Makerere University, Uganda.*

• Mr. Augustus Nuwagaba reported that he found the workshop very useful and had gathered a lot of information which he would use for his PhD studies.

2.10.16 Mr. Paul Muwowo – *Extension Methodologist, Department of Field Services Ministry of Agriculture, Food and Fisheries, Zambia.*

• Mr. Muwowo reported that it had taken him 2 years to convince his bosses to take UA seriously.
• As a practitioner in government he would be very willing to work with MDP on UA research activities.

2.10.17 Ms. Njambi Kinyungu -
• Ms. Njambi Kinyungu reported that the workshop had been an opener and had learned a lot. She intends to research on UA for her PhD studies.
Annexes


Beacon Mbiba
Urban and Peri-Urban Research Network (PeriNET)

1. Introduction and Settings of Urban Agriculture

1.1 Trends in urban agriculture research

This workshop’s focus on the political economy of urban and peri-urban agriculture (UA) is a significant step towards a better understanding of the phenomenon and clearer possibilities for its management. Available literature shows that over the past ten years, there has been rapid growth in interest and activity on this subject. From the initial isolated research done by social scientists in the 1970s and 1980s (as outlined by Mougoet, 2000), the 1990s saw a rapid expansion in research activities and increased programme attention by development institutions (e.g. IDRC, FAO, UNDP, UNICEF); by International Governmental Organisations or IGOs (e.g. DFID, SIDA, GTZ); by various NGOs (e.g. SGUA, RELMA, ENDA), by national governments and departments (especially in Tanzania, Lesotho, Zambia and more recently South African cities of Port Elizabeth, Kimberley, Cape Town and Durban; see Jarlov, 1998.

Since the 1990s, urban and peri-urban agriculture activities have progressed from comprehensive descriptive documentation of practices such as Freeman (1991) to project work with farmers (as in the Dar es Salaam Urban Vegetable Project and Olson, 1996) and attempts at planning and policy integration (Mbiba, 1998, 1999c; Lee-Smith, 1998; Baker, et al. 2000). IDRC features quite significantly in some of these initiatives both in Africa and worldwide. More recently, linkages with training initiatives (IAC, 2000-2001; Gundel and Butterworth, 2000) including the IDRC hosted Agropolis research-training awards and methodological tools for UA are emerging as new growth areas for the subject. In all this, only few studies (such as Webb, 1996) have made an explicit critique of UA. Instead, the work has largely glorified the potential benefits of UA and at the same time criticise planners, planning and policy makers as major obstacles to the realisation of these benefits. Mbiba (1998) is of the view that the perceptions behind this criticism are unfortunate in that they are largely based on poor understanding of urban planning and urban political economy as well as the diversity of urban social relations in different parts of the world over time. The neglect of political economy analysis relative to the attention given to design, environmental and linguistic concerns is linked to a weak theoretical base for UA; an omission we have to rectify from now on.

1.2 Political Economy; the land, policy and planning dimensions

For an academic with an interest on UA, political economy entails an analysis of the aggregate societal and institutional relations that impinge on the production, marketing and consumption of both food and non-food products that are produced from urban and peri-urban areas (however these are defined). While we can identify some general recurring patterns in East and Southern Africa (ESA), we have to be aware that there is a great deal of regional variation and local diversity in the character and direction of these social relations.

This paper will take a broad view of political economy with the hope to capture key scale and sectoral variables that make UA a contentious subject. It will emphasise that the political economy of UA is anchored on distribution, control and access to the use of land assets/resources. Competition and conflict around this resource range from micro household levels through community-neighbourhoods, to macro national and international domains. It is within this range of scales that the political economy of UA has to be understood.

In East and Southern Africa, whatever you do, you can only ignore the land issue at your own peril. Local people will use whatever they can to bring home this point. Recently, when some scientists in Kenya ignored this important dictum, 300 (three hundred) women took the drastic measure of undressing themselves and then confront the scientists ... only then did the later get the point.


In addition to contests around the land resource, there is also an ongoing ideological cum theoretical contest. Earlier calls for theory (Mbiba 1995, 1998, 1999c) inspired by Sanyal (1986) have been echoed elsewhere although in reality little has been done to theorise UA. Clearly, such theorisation is needed to distinguish UA from rural agriculture (Mougoet, 2000); to guide policy and planning. This implies an understanding of the various conflicts that underpin urban development and which urban policy seeks to manage. Simply put, political economy also has a lot to do with the control and ownership of planning and policy making processes and outcomes.

Therefore, a discussion of the political economy of UA and emerging research questions must be grounded in and be preceded by a debate on some theory of urban areas and urban planning. First, location is an important component in that relative to rural agriculture, urban agriculture utilises land resources where intense conflicts and interests prevail both among uses and users; for example the rich versus the poor, built development versus UA, golf and other recreational activities vs. UA. In a way, Mougoet (2000) and Richter (1995) appear to underrate this characteristic. The range of spatial scales and potential candidates for political economy analysis are displayed on Figure 1.

1.3 Paper outline

This paper will briefly outline some traditional and current approaches of the city and city planning and simultaneously identify how these conceptions feature in the ESA literature on UA. These are basically four, viz.; the ecological model, the new urbanism, the collaborative or communicative model and the just city perspective derived from a
political economy understanding of urban areas. Various strands within this domain including extensions of Sanyals’ work will be sketched. At the end, more space will be given to the political economy perspective; a view with a concern on ‘who gains’ and ‘who loses’ and ‘how’ in the capitalist development of our cities. Once again, such gain or loss has to be gauged vis a vis access, control and use of resources especially land. The political economy of UA is basically about power relations and conflicts associated with control and use of this resource.

Leading on from this understanding, of urban areas, the paper will suggest some questions for future research together with the mode through which these can be implemented. As pointed out elsewhere (Mbiba, 1998), the fortunes of UA are outside rather than within it. Therefore, both research, policy and project work should lead to (a) a better understanding of different contexts within which UA occurs and (b) mainstream urban and peri-urban agriculture activities into existing institutions and ongoing activities. Our network of researchers and institutions that house them, can be, (with slight modifications) very adequate vehicles through which to pursue new research and to engage with practitioners at local, city and national levels.

2. Theoretical Perspectives: Cities, Planning and Urban Agriculture

Throughout history, conceptions of the city and of planning have ‘zigzagged between an emphasis on outcome’ or what the city should be and an emphasis on process (the methods of achieving desired visions). Perspectives of what the city is (or is not) and the social and political forces that underpin its dynamism appear as critique of the traditional models and is hardly used as a starting point for city planning. At the end of their comprehensive research reviews of the ‘urban crisis’ in ESA, researchers have called for an understanding of cities that takes politics more seriously (see Halfani, 1996 and McCarney, 1996). Therefore this section will present an overview of the four dominant approaches to planning indicating views of the city upon which they are founded plus an emphasis on how UA literature exhibits aspects of each. However, in practice, there are inter-linkages in these conceptions and approaches than is evident from sketches like Figure 2.

2.1 The Ecological, Environmental Systems View of the City and Planning

Perhaps the most enduring view of the city is one that portrays it as a system of interrelated parts akin to the biological or ecological systems. A favourite of transport planners, it also has sympathy from those who put emphasis on health and environmental aspects of the city. Indeed original city planning in Europe and the British Empire enclaves in Africa (Kenya, Harare, Lusaka etc) was anchored on a view that saw the city as a biological system with inputs, internal processes and outputs. Planning was based on improved sanitary standards with the goal to create a healthy disease free environment albeit for a social minority of European origin. Open spaces were seen as an ecological part of the system that would act as ‘lungs’ to purify and extract pollutants from the city environment.

The UA literature exhibits this ecological systems thinking. For proponents, UA is considered ‘an effective tool to slow down the loss of biodiversity’ (Asomani-Boateng and Haight, 1999; Smit, 2000) through nutrient and waste recycling as well as improvement in the nutritional and health conditions of its residents. For example,
Asomani-Boateng and Haight, (2000) are convinced at the potential contribution of urban agriculture for solid waste recycling on condition that urban planners put in place appropriate policy responses. With legitimacy derived from Agenda 21, this conception of urban areas and approach to UA partly inspires major urban management programmes such as in Lusaka and Dar es Salaam (Urban Vegetable Promotion Project). There are hopes that city gardens will not only ‘green and beautify’ the city (Jacobi, et al. 2000) but also significantly improve nutrition status and strengthen community spirit.

However, achieving such disparate objectives remains a debatable. Webb (1998: 8-9) supports the view that UA’s popularity with donors and development practitioners has much to do with perceptions that the phenomenon meets environmental criteria of sustainable development discourse. It is seen as an industry that could enhance sustainable urbanisation through waste recycling, use of derelict space and so on.

Despite the zeal associated with the environmental school, serious reservations remain that relate to health risks for consumers and ecological limitations identified (e.g. by Mazambani, 1982; Mosha, 1991; Mlozi, 1996). A good deal of these risks arise from air pollution and use of polluted industrial waste water (Jacobi, et al. 2000: 1) Bowyer-Bower and Drakakis-Smith (1996) with respect to Harare and Mlozi (1996) on Dar es Salaam have elaborated on these risks together with those of soil erosion, disturbances in the hydrological systems and destruction of general landscape aesthetics (for a summary see Mbiba, 2000: 292-293). The 2000 RUAF/FAO e-conference discussions confirmed that other practitioners beyond Africa share these risk concerns and that definitive answers are still to be found.

2.2 ‘New Urbanism’ – the Design, Engineering and Architectural Perspective

With time, the urban planning tradition broadened from mere sanitary concerns to ideal visions of spatial design typified by the ‘garden city’ concept of Ebenezer Howard, through to architectural design emphasis symbolised by the Le Corbusier tradition. The initial social reform motivations in the garden city concepts were soon overtaken by design, market and profit considerations. Although the garden city movement has elements in today’s green belt (Britain’s planning sacred cow) and can be associated with the environmental perspective, it is the design utopia that links it to architecture and engineers. In Africa, the design of new towns (for example Lilongwe, Dodoma, Abuja) and the many district growth points/service centres (for example in Zimbabwe and Zambia), reflect this grand design ideal. A key feature is the large space reservation previously criticised for promoting urban sprawl and economic waste.

‘New urbanism’ emerges partly as a critique of this urban sprawl and the underlying design principles. The view has an emphasis on a ‘compact, heterogeneous city’ (Fainstein, 1999). Within the context of IMF economic austerity measures and World Bank market related motives to achieve ‘more for less’, densification of land use in Africa’s cities has become a major urban policy. Resultant programmes have a goal to use previously large open spaces. The large spaces previously available for UA have disappeared or are disappearing fast. This goes beyond ‘in-fill development’ witnessed in Dar es Salaam (Briggs and Mwamfupu, 2000); in Nairobi (e.g. in Karen, Lengata, around Yaya Centre and so on) or in Harare’ Warren Park North, Matidoda Park, Borrowdale Brook and so on (Mbiba, 2000: 286-287) to local level design of ‘on-plot space.
World Bank and donor inspired projects have proceeded on a condition or demand for smaller plot sizes in new low income residential schemes so as to get more houses for less financial investment and with less demand on land. As summarised by Webb (1998) for example, in Lesotho the plot sizes were reduced from 1000m$^2$ to 400m$^2$; in Zambia, they went down to 324m$^2$. In Zimbabwe, the minimum plot sizes were reduced from 300m$^2$ (pre-1992) to 150m$^2$ (Mbiba, 1995).

But these prescriptions have been highly contested both socially and politically, leading in Zimbabwe to a policy reversal in 1997. The general thrust in the UA literature is that design and economic imperatives in the new urbanism militate against urban agriculture and economic benefits associated with it. It has been criticised by those who see the home space as a ‘multi-layered’ production, consumption and reproduction space that is not merely a place to sleep. The reduced space standards are considered detrimental to children and women’s needs; the two groups who spend most their time there. The social and political contest on this issue arises from the disproportionate application of policy i.e. its implementation in low-income communities and less so in high income low density areas.

2.3 The Communicative-Collaborative Perspective

The communicative-collaborative model is more explicit as a procedural approach on how planning should be done rather than as a theory of socio-economic relations the city. While it acknowledges the existence of divergent social-political groups in the city, it goes on to put emphasis on possibilities for consensus building in resolving problems. Attention is heaped on the pragmatics of planning especially the role of the planner (mainly in central government or local authority departments). It underplays the issue of social conflict and contradictions that are endemic in the peripheral capitalist cities of ESA. The assumption is that with negotiation, problems in the city can be resolved and progress made; hence the spotlight on the planner and the kind of leadership he or she provides (Fainstein, 1999).

In this conception, the demand is that of a planner who brings consensus among stakeholders and achieve this without imposing his or her own technocratic, bureaucratic and paternalistic blueprint as in the case of the new urbanism and grand design spatial planning. The assumption is that the planner has to be a good listener and learner. In practice, development planning inspired by this approach is characterised by a search for partnerships and ‘best-practices’ where stakeholders are supposed to have made it; a key plank in approaches of international multi-lateral and bilateral development organisations since mid 1990s. Thus within this development agency discourse, the search for UA best practices is not surprising.

However, critics have been quick to observe that the ‘participatory’ ideas in communicative-collaborative planning have created more practical problems for the poor; more meetings – meetings - meetings – leading to burn-out and disillusionment among participants as nothing ever seems to get accomplished (Fainstein, 1999). Gender burdens have been placed on women are incorrectly perceived as ‘unemployed’, always at home and can therefore have time to attend such platforms. In some cases, such as in district development committees, forums have been mere talking shops or platforms to tame political discontent rather than avenues for tangible delivery of services.
Even more critical is the observation that the communicative approach assumes an even distribution of powers among all stakeholders. In reality, the ability to participate is mediated by assets at the disposal of each potential participant (information, access to expertise, access to finance, organisation and institutions, physical assets such as land, human resource such as education, health status and so on). Such assets symbolise power whose distribution exacerbates inequalities. Without such power, community involvement or participation will not influence outcomes, hence can be deemed useless (McFarlane, 1993). The theory that we need for UA is not a procedural one (how to) but one which explains the existence and characteristics of the phenomenon. It must dwell on the power relations that characterise urban areas and to locate UA within it.

If one were to take a purely collaborative approach to UA, the research questions would include:

- In what places and under what conditions has UA been incorporated into urban planning processes? What aspects were incorporated, with what institutional frameworks to tackle the issue access to land and its control?
- In what places have the above worked or failed and why?
- Are there cases where UA farmers have negotiated for land and failed or succeeded? What were the crucial structure-agency determinants of success or failure in each case?
- What opportunities are there for replicability and transferability of experiences from the above.

2.4 The ‘just city’ and political economy perspective

A brand of the contemporary just city movement many will identify with is that described by Fainstein (1999) as that of ‘radical democrats’. This calls for a radical form of participation that goes beyond stakeholder involvement as in communicative planning to one that can be seen as governance by civil society. It takes a conflictual view of society and considers that for positive change to happen, those excluded from power should fight for it.

Probably, the Karen-Lengata Residents Association in the south west of Nairobi could be a good example of such radical democracism (see Mbiba and Kinyungu, 2001). In the 1990s, various NGOs and civil society groups in Nairobi banded together to push for reform at City Hall. This was in response to perceived poor governance manifest in the physical decline of the urban environment and deterioration in service provision (water, refuse removal, housing, electricity, health etc). The reform efforts culminated in the ‘Nairobi We Want Convention’ of 1993. But despite these efforts, the urban crisis has got worse and not betters. Responses by urban residents have ranged from despondence, self-provisioning through violence and radical democratic actions.

Karen-Lengata Residents took up this radical path where instead working in partnership with City Hall, they resolved to ‘ditch it’. Through court action in 1998, they obtained an injunction restraining City Hall from collecting rates from the area until service delivery has improved. Meanwhile the residents collect rates into a special rate account set up for that area. Residents of other working and middle class areas have started initiatives along similar lines. Although this view of the just city seeks greater control of decisions by residents, the modalities through which this is achieved still favour those
with power; financial resources to sponsor court action, information and alternative ways of service provision in the interim.

Therefore, from another angle, this is a perspective that puts faith in human agency’s capabilities to bring about change no matter what the structural constraints maybe. The theme of agency in peri-urban transformations pervades most peri-urban studies. For example, in the analysis informal land acquisition dynamics (Kironde, 1998); groups responses to economic opportunities in the peri-urban areas under conditions of structural adjustment programmes in Tanzania (Briggs and Mwamfupe, 2000) and in Zimbabwe (Moyo, 1997). The agency role of politicians, financiers and professionals is also an implied theme in studies of peri-urban land invasions in Nairobi (Gatabaki-Kamau, 2000; Gitau, 2000).

In contrast to the above pragmatic ‘just city’ dimension is a more normative analytical political economy perspective. Its focus on and demands for equity takes the form of a critique of the capitalist city. Policies and planning are criticised for being captive of business interests (Fainstein, 1999). Rather than prescribe a methodology, political economy analysis provides a critique of existing programs and activities. The key questions posed by this approach are on who dominates and who benefits from ongoing activities (e.g. UA) with a focus on groups defined largely in terms of economic interests and more recently by gender, race, age etc.

In the past, political economy analysis tended to brand everything with an economic growth focus as negative capitalist accumulation. Emphasis was on constraints imposed on the local level by economic, political and social structural conditions operating at the global level. Little consideration was given to the way in which the same structures could enable agency actions at state, community and household levels. This perpetuated a conceptual failure to see possibilities for a just city in which the state can be entrepreneurial as well as distributor of welfare. Secondly, it has led to a dogmatic concern for the poor which misses out on the inter-linkages that exist between poor groups and upper income groups. In particular, political economy analysis has marginalised the middle class. For different reasons and from different analytical standpoints, donor driven projects also display this obsession with poverty alleviation in which the middle classes and the elites have no role; or if they do, are seen as villains aligned to global structural forces at the detriment of the local poor.

Yet no matter how much we try to exclude the middle class and elites from poverty reduction projects/programmes, they will always find their way in! There is abundant documentation in the housing sector (the so-called downward raiding of houses initially targeted for the low income), cases in drought food relief and more recently in all the ‘Social Dimensions of Adjustment’ programmes. The middle class and elites cannot be excluded because of the nature of our societies where positive, reciprocal inter-relations exist at the household, family and community levels. Beyond this, networks and client-patron relations put the poor in vulnerable positions once the donors disappear. In our societies, under normal circumstances, the middle class and those who make it into the elites league have an obligation to support the welfare of the poor.

The point is that the middle class and elites should not be seen from a negative angle but rather as ‘social capital’ at the disposal of communities. The simple message for UA
programs/projects is that while acknowledging the differential nature of our society, we have to proceed in a way that:
(a) Embraces entrepreneurship and economic growth or wealth generation simultaneously with concerns for equity.
(b) Capture our elite and middle class as a resource (or social capital) that has a contribution to make towards poverty alleviation and increased urban food security. The role of these groups in any projects should be factored into project conception and not be left to chance; the interests and aspiration of the middle class have to be captured.

2.5 Enter Development Theory

Related to the ecological –environmental sustainability discourse is a development dimension theory of UA (Sanyal, 1986) which according to Webb (1998) has been imposed on urban areas by development institutions without much empirical analysis of the claimed benefits. He suggests that this popularisation came at a time of increasing doubts on the viability of the ‘development as growth paradigm’ dominant up to the 1970s. The critique argues that in UA, development institutions have found a ‘new life’ – linking the phenomenon to poverty alleviation, urban nutrition, environmentalism, informal sector employment and gender issues. While there is some validity in this analysis, we have to remember that UA remains a component of urban land use.

However, the critique by Webb (1998) moves us back to the basic question theoretical questions of what UA represents and how we should interpret it (Sanyal, 1986). Even as a survival strategy, researchers concur that the poor do not benefit much (Tinker, 1994; Mbiba, 1995; Mlozi, 1996 etc.). Early economic development theorisation was framed within the context of the informal sector and heavily influenced by the ILO’s focus on labour. An extension of Sanyal (1986) is presented elsewhere (Mbiba, 1998) where the basic analysis is derived from either modernisation or dependency theory. In both instances, the focus was on intra-urban agriculture activities, on subsistence and not on ‘for market’ production. Issue such as land were not considered in this scheme.

Both perspectives are presented in Table 1 noting that both have strong foundations in the economic view of the city. Secondly, they use different arguments to arrive at the same conclusion that rejects urban agriculture; different methods but consensus on the conclusions! Today the situation is different; we appear to have different methods and different conclusions making it difficult to get a consensus for the way forward.

For modernists, UA in its subsistence form is symbolic of rural backward habits; is practised by recent rural to urban migrants; it damages the urban environment, aesthetics and should be discouraged through destruction without compromise. On the other hand, for the new Marxists UA represents a means for labour to reproduce itself; a burden which should be borne by the capitalists rather than labour. Thus supporting UA is tantamount to support of exploitation of labour; making labour work twice namely at the factory first and then at home. New Marxists argue that if labour were remunerated adequately at the work place, then there would be no need to engage in UA. Further, participation in UA weakens the capacity of labour to fight capital as energies are spent in struggles to survive and in intra labour fighting for trivial resources such as land for UA. Despite rejection by both groups of theory (most of who are present today) urban
agriculture has flourished. The graphic description with which Sanyal described the activity is very apparent in every city and settlement throughout Southern Africa.

Sanyal’s work and subsequent research by others has dealt with some aspects of these two perspectives; rejecting some components and accepting others. Unlike the modernist view, it has been demonstrated that UA practitioners are older city residents, are propertied households, the middle and upper income groups rather than the poor of the poorest, destitute, lodgers or recent immigrants to the city. Secondly, rejection of UA (or informal sector in general) has not worked. Instead, official attitudes have been softened and now the vacuum relates to policies on how best to exploit the sector’s potentials and integrate it with the rest of the economy. We now recognise that, like any other economic activity, UA has both negative and positive externalities. How to accommodate it while minimising the negative externalities is the arena of contradictions in most situations now. Aspects of these theoretical perspectives will be invoked in subsequent sections that deal with the peri-urban domain.

Table 1: Different Theories, Same Conclusion: How about Practice?

<table>
<thead>
<tr>
<th></th>
<th>Modernisation Proponents</th>
<th>New Marxist View</th>
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<tbody>
<tr>
<td>View of the City</td>
<td>City as a symbol of economic development; to be clean, organised and formal</td>
<td>City as an arena of exploitative economic relations with the local level playing out global capitalist forces and relations. Accumulation by a few proceeds through exploitation of the majority (labour). Rather than pay labour adequately, capitalists shifts the burden to the labourers so that they maintain themselves.</td>
</tr>
<tr>
<td>Response to UA</td>
<td>UA represents backwardness, a rural culture and lack of integration into systems of advancement</td>
<td>UA is ‘extra market means’ for labour to reproduce itself. It maintains the capitalist status quo and increase the vulnerability of labour.</td>
</tr>
<tr>
<td>Verdict on UA</td>
<td>Reject UA and the informal sector generally. Blame the poor and those participating in such activities for damaging the economy, the environment and the city.</td>
<td>Reject UA and informal sector activities generally.</td>
</tr>
<tr>
<td>Action and Policy</td>
<td>Destroy UA; destroy all informal activities including squatter settlements, shebeens, pirate taxis, street hawking, and affirmative shopping e.t.c. No compromise. More recently, where destruction fails, formalise them.</td>
<td>Mobilise workers to demand their fair share of benefits from the workplace; seek greater equity in the capitalist system of economic relations. The solution for UA and other informal activities is outside rather than within the sector.</td>
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1. The Land Dimension

1.1 Introduction

Writers and commentators on the needs and prospects of UA have put across an array of obstacles or constraints that range from lack of policy support, lack of knowledge, credit, negative attitudes or perceptions from sections of the public. However, one would agree with Webb’s (1998: 4) assertion that land remains one of the most controversial issues
associated with UA. and that several themes are prominent in the UA land relationship, namely:

(a) the potential that urban land holds for UA
(b) the potential that UA holds for diluting, solving or exacerbating the rural land problem.
(c) reduction of plot sizes and associated implications for UA
(d) the notion that UA can be practised on small pieces of land etc.

A 1998 experts workshop on UA in East and Southern Africa (RELMA, 1998: 29) also identified ‘land tenure problems and conflicts over the use of scarce urban land’ as one of the five priority areas that needed closer research attention.

Land is important not only because it’s a resource of fixed supply, but also because it is a robust resource whose access and control gives the beholder power. By robust asset/resource (Mbiba, 1999) we mean that its value can be transformed from one mode to another, be transferred from place A to place B and from time T1 to time T2. Agriculture is an activity which can within a short time (e.g. one year) transform land into food resource or cash from sale of produce. The intrinsic value of land as well as output from it can be converted into monetary value for immediate use elsewhere e.g. in Europe, America, and Honolulu. It is this value that makes its control and access a highly competitive affair.

Probably, the beast approach to a fruitful discussion of the political economy of land issue is to utilise the basic spatial typology of UA as generally agreed in the definitions (Mbiba, 1995; Mougoet, 2000; Asomani-Boateng and Haight, 1999; etc) that identify:

(a) intra-urban agriculture that be either on-plot or off-plot.
(b) peri-urban agriculture.

The conflicts and challenges associated with each domain differ and so too are the actors involved. The categorisation between peri-urban and intra-urban types of agriculture and the significance of land within each of them is endorsed by Grossman et al. (1999: 2) who note that, for off-plot UA, “urban gardeners have to be satisfied with small patches of land but competing land uses may threaten their existence and cause harsh legal conflicts and even crop destruction”. There issues of official policy which may not be very clearly understood as well as eviction by developers, by built environment plus other uses that can play higher rents for the space.

1.2 Urban Agriculture and the Intra-Urban Land Question

At it’s the lowest level, this involves agricultural activities on small spaces around the house or property (backyard, front garden, roof-tops, verandas etc) now commonly defined as on-plot UA. At the institutional level, the dominant focus in the literature is on the health-environmental problems (plus nuisance) likely to emerge from on-plot agriculture especially where livestock rearing is involved. Otherwise neighbours and policy makers seem not to have problems with this sector of the industry.

However, as briefly outlined in the discussion on the ‘new urbanism’, land for on-plot agriculture is highly contested. Webb (1998) and others argue that there is a weak empirical base to support the notion that UA can be practised on small pieces of land to generate significant levels of output for the market. An earlier section of this paper has already explained how design standards championed by engineers/architects and cost recovery imperatives of structural adjustment programs all militate against UA. This has been seen as an arena of ideological, empirical, theoretical, political, gender and generational struggles that seem to be won by those with power.
The next intra-urban domain is the off-plot agriculture; that which utilises open spaces within the defined boundaries of the city. These are highly contested spaces or resources. It is a domain where complex problems of lack of land are intertwined with lack of access although Mougoet (1994b: 111) considered that ‘the lack of access to land is a greater problem that lack of land’. A general perception is that these lands are public land and should be available anytime for anyone. While some of the land may be public (state or local authority owned) and appear vacant, proponents of UA have to be reminded that ultimately somebody (person or institution) has ownership and/or control over it. It is this somebody who will have the final say on whetherUA can proceed on the land.

As Webb (1996: 5) put it, there has to be a correction of ‘the myth of urban open space’ there is nothing like a no man/woman’s land. Open or vacant is context specific and dependant on the eyes of the beholder. There is no open space and we have to look to ownership, access dynamics, tenure niches, values and the identities people attach to these lands. We should however note that the idea of ‘no man’s/woman’s land has led to serious historical disasters that are root causes of some of Africa’s complex contemporary conflicts from as far north as Somaliland through the Great Lakes Region, the Great Rift Valley belt, the Zambezi, Limpopo, Vaal Basins and all the way to Cape Town.

The research questions that could be asked include:

- What are the patterns and dynamics of intra-urban land ownership and how do these impinge on UA?
- Through what mechanisms and channels (and with what effect) do actors get access to land for UA or are excluded from it?
- In a given local context, what are the preferred access and ownership arrangements for the utilisation of intra-urban land?
- Given observation that individualistic patterns of control appear to prevail over collective approach to land use, should there be an increase in the ‘on-plot’ land space at the expense of the off-plot?
- Should there be formal institutionalisation of ownership of current individualistic control of off-plot public lands?

The literature intra-urban agriculture clearly shows that the open spaces are contested spaces, that empirical evidence is not conclusive as to the economic viability and environmental safety of UA products emanating from these spaces. Further, it is seen more as subsistence production and survival strategy where benefits from comprehensive promotional support will remain doubtful. Despite this, there is doubt that as noted by Mougoet, 1994: 5) even if ESAP were to end now and employment conditions improved, UA would persist. The question is, what factors explain the persistence of UA today and in the future? In the future, it will be explained to a large part by the commercial and profit motive; a dimension whose viability is more guaranteed in the peri-urban areas.

2.3 Peri-Urban Agriculture and the Land Question

2.3.1 ‘Food for the cities’ and the constraint of peri-urban land conflicts
Writing with specific reference to future policy for Harare, Mbiba (2000: 297) concluded that:

In spatial terms, the strategy should be centred on peri-urban areas where land is more readily available. The target for policy and programs should be to increase food production and make it available, affordable and adequate in both quantitative and qualitative terms throughout the year.

To this food for the cities initiative would be added clear land use guidelines protecting undue conversion of agricultural land to built development. However, although land may appear abundant in the peri-urban areas, this is not always the case. Certainly, it is not readily available due to similar problems of ownership and control that affect intra-urban land. Peri-urban areas suffer not only from social contests for control and access but also from pressures of urbanisation and globalisation. Urban growth in terms of population increase puts high demand for settlement land, services, refuse dumps and so on.

In all countries of East and Southern Africa, peri-urban landowners have been quick to realise that building rental rooms is more profitable than using the same plots for agricultural production. Thus one can observe both a formal and informal real estate market in the region. Informal activities are not an exclusive domain of the low income and the poor as evidence from Nairobi and Harare will show. Land invasions take place with facilitators from professionals and elite groups; often with one elite group colluding with the poor to dislodge a regime of old elites (see Gtabaki-Kamau, 2000, on peri-urban land invasions in Zimmerman and Mathare Valley north east of Nairobi). Presently, private landowners and developers are converting peri-urban coffee farms into high-class residential areas such as Runda Estate (north of Nairobi). This happens initially outside official land use plans. Thereafter, by coercion, corruption or some form of administrative fiat, the developments are ‘regularised’. Harare has its own share of such cases including the unresolved issue of the Highfield petrol filling station development and the widely reported peri-urban land occupations variously caricatured as ‘land grabs’ and so on.

The literature on UA is generally oblivious to these land related socio-political pressures and concentrates more on those arising from sprawling built development. For example, the major publication on peri-urban agriculture in Africa by Grossman et al (1999) did not cover any of the above issues of land aspects and the political economy of UA. Instead, it focused on ecological issues, incomes and survival strategies of the poor, marketing and the role of producer associations as vehicles for policy lobbying.

### 2.3.2 Globalisation, urbanisation and contests for peri-urban land in ESA

The contest in and pressures on peri-urban land that impact on UA arise also from globalisation, the related commercialisation of activities in the peri-urban areas (be they formal or informal). Palmer (1996) concurs that with the advent of IMF/World Bank forced Economic Structural Adjustment programmes (ESAPS) and since the 1980s, the whole of Southern and Eastern Africa has been opened up for globalisation forces leading to greater land based conflicts especially around towns (Palmer, 1996). Globalisation and liberalisation of national economies has witnessed the increase in western oriented production and consumption activities such as horticulture in Kenya, Zimbabwe and South Africa (Moyo, 1997; Barret et al. 1999); conservationist and eco-tourism...
programmes in Mozambique, Zimbabwe, Namibia, South Africa. These market activities are highly integrated with the world economy and require ready/easy access to urban-based infrastructure and institutions. Consequently, peri-urban locations with access to airports, market facilities and general infrastructure are the most desirable/appropriate activity areas leading to heightened competition for land there.

At the local level, the city’s ecological footprint is also most visible in the peri-urban areas through activities such as sand mining, timber and wood extraction, dumping of urban wastes, informal settlements and construction of dams to supply city with H.E.P and water. Impoverished urban workers increasingly use their knowledge and urban derived resources to access peri-urban land for income generating ventures (Simon, 1995; Mbiba, 1999b) especially on land under communal tenure. An emerging trend throughout the region is therefore one of increased commercialisation of peri-urban land uses and greater commodification of land rights. Even lands under communal tenure are being privatised and fenced off (Palmer, 1996:3; Simon, 1995). This points to the need for greater attention on the ‘elites’ in Africa; not only from the view of ‘villains’ but as positive agents in the development process.

There is general agreement that ESAPs in Africa have exacerbated socio-economic collapse and poverty; with studies concentrating on the low-income groups (Gibbon, 1995). Yet, as amply exposed by Munijin (1995) with respect to the middle classes, ESAPs have seriously affected managerial, bureaucratic, business and political elites as well. One view suggests that in promoting ESAPs, one primary objective of the IMF and the World Bank was to undermine the national influence of these elites (Tacoli, 1998) since they were considered an obstacle to perfect operation of market forces. With ESAPs, the socio-economic security of these ‘elites’ is no longer as guaranteed as was the case before the 1980s.

For these groups, peri-urban areas are potential/alternative ‘theatres of opportunity and accumulation’. As observed by Swindell et al. (1999) in the case of Nigeria, such opportunity and profits are possible in the commercial agricultural sector. Using their authoritative resources (such as local knowledge, social networks, and information), abundant cheap labour and allocative resources (such as savings, pensions, property assets, and loans) they can earn high rewards from investment in the urban hinterland and regional markets. Expectations of economic benefits from such activities need to be better understood and inform policies that attempt to tackle Africa’s land question (Moyo, 1995; 1997) and phenomena such as urban-rural linkages and continued maintenance of communal land rights by the urban upper classes (Mbiba, 1999b:181-198). The challenge for governance and sustainable livelihoods in the urban periphery is to go beyond a focus on the poor per-se and to investigate networks that link the various actors in a given locality.

Another feature is the increase in large peri-urban mining activities for example in Uganda and Zimbabwe. In addition, construction of large dams in the peri-urban zones to meet urban water requirements (Mbiba, 1997, 1999a; Mbiba and Kinyungu, 2001) not only displace local communities but create conditions conducive for intensive commercial agricultural production. The result is a greater competition for land in the peri-urban zone; a process whose impacts on local communities remain a neglected research and policy domain despite its critical importance as a determinant of local political conflicts.
Recent research shows that envisaged economic benefits arising from these activities have to be balanced against the loss of land and livelihoods by local communities and other vulnerable groups particularly women and the rural poor (Maxwell et al. 1998). Despite its negative colonial derived attributes as highlighted by Cheater (1990) and Simon (1995) communal land remains a significant source of livelihood and is a ‘safety net’ for the majority urban poor (Tacoli, 1999; Curtis, 1995; Smit, 1998; Potts and Mutambirwa, 1999; Mbiba, 1999b). The loss of and exclusion from access to this resource has significant implications for poverty and poverty alleviation programmes in the region. Integrating peri-urban communal lands into the global economy without exclusion of local communities is an issue requiring closer policy attention throughout Southern and Eastern Africa.

Between 1990 and 1997, almost all countries in the region instituted Land Commissions or Land Bills of one form or other in a bid partly to improve land tenure governance. Ensuing debates have shown that urban and peri-urban lands are largely excluded from these initiatives which remain largely rural biased. However, peri-urban land conflicts are widespread and poised to increase and women remain the greatest losers (Palmer, 1996; Maxwell et al. 1998). The later is a dominant feature despite a growing wave of urban-based gender focused lobby groups and research in the region. At the same time, corruption and lack of both central and local government capacity (even in South Africa) are critical obstacles to accountable and sustainable peri-urban land programmes. There are issues of local capacity and unresolved questions of how to deal with traditional systems and cultures, gender relations and centre-local relations in a sensitive and sustainable way.

However, evidence from West Africa shows that where capacity exists, good governance can minimise the loss of land and livelihoods in the urban periphery such that local communities in those areas participate in and benefit from the new globalisation related activities. Where this is not possible, conflicts lead to greater environmental degradation, poverty, civil strife and even wars.

Consequently, there is need to create a forum for debate of peri-urban land management in Southern and Eastern Africa and mainstream this into the traditional land question. Such a debate should be based on a grounded knowledge of the profile, patterns and processes of peri-urban land dynamics in the region. This should capture both structural and agency dynamics (local versus global) that impinge on peri-urban land and highlight relationships or linkages which can be useful frameworks for any micro or sectoral initiatives. There are very significant regional and city wide variations as well as common threads which should be identified and shared to provide lessons for other contexts, for regional research, policy and advocacy initiatives.

The objective of the research agenda would be to gather and collate information for use as a knowledge base in debates on peri-urban land in Southern and Eastern Africa. It will/should sketch the dominant theoretical perspectives on peri-urban land development and identify major themes around which existing and future peri-urban land management debates could be pursued. Such themes include peri-urban land markets, land values, land disputes, land use, and tenure, institutions and governance.
Implicit in the literature are two dominant interpretations of the meaning and implications of contemporary peri-urban dynamics in Africa. These are the modernisation and dependency derived perspectives and Structuration.

2.3.2 Modernisation, dependency, Structuration and the research questions.

Modernisation theory views peri-urban change (e.g. commercialisation of agriculture, commodification of land rights) as a positive process which leads to transformation of the local economy. As outlined by Palmer (1996), these World Bank/IMF sponsored approaches consider communal tenure as backward, wasteful and an obstacle to entrepreneurial endeavour. The theory argues that benefits to households will increase as their activities change from agrarian subsistence to modern ones integrated with the world economy. Western style individual title would increase security and credit worthiness. Similarly, the entrepreneurship and emerging markets are supposed to broaden the tax and revenue base for local authorities such that resources for service provision and infrastructure become more available. Therefore, individual, family and corporate benefits would translate to community and national benefits in the long term.

The research questions would focus on entrepreneurial peri-urban activities including entrepreneurial urban agriculture and to explore concepts like market maturity of any selected sector (housing, land, food marketing etc).

According to the dependency theory derived perspectives, rapid urban growth, commercialisation of peri-urban activities and land markets are considered destructive to local household livelihoods and institutions. On the basis of empirical evidence, this view argues that local households and institutions are ill-equipped in terms of resources, (knowledge and skills) to enable effective participation in the emerging local economy (Palmer, 1996). This is largely due to persisting structural inequalities and the selectivity of globalisation forces. Under these conditions of diminished capacity, a few local and international individuals or institutions dominate and monopolise the local economy (Moyo, 1997). Corruption and unaccountability are said to be a prevalent associated features. Central governments are either complicit or weakened by the logic of prevailing globalisation forces such that affected communities have no one to protect their rights.

Consequently, the loss of institutions and livelihoods leads to greater poverty, landlessness, destitution and proletarianisation. The rapid changes are taking place within a poorly developed administrative and governance structure. The changes also overwhelm those institutions that do exist. The result is a breakdown of governance, rise in corrupt practices, marginalisation or exclusion of the majority from the new economic opportunities. Increased poverty and environmental degradation are inevitable. From a social movement dimension, the bulk of affected peoples in Africa are left out from the rising tide of ‘grass roots’ movements and activism against globalisation. This contemporary activism is ‘elitist’ in character, its methods and language selective vis-a-vis the African communities. Our challenge is to bridge the activism gap and to understand how affected communities restructure their institutions and livelihoods within the context of these world driven changes.

The third perspective, Structuration, argues that both processes (positive trickle down and negative underdevelopment) do take place but the magnitude and direction in any
given context depends largely on the extent to which actors (both local and global) respond to the challenges; the question of structure-agency interaction. Recent studies in west African context such as that of Ghana have concluded that in cases where leadership is well informed and willing to act in the best interest of the community, the increase in the value of land arising from commodification of peri-urban activity can have a positive impact on the community (Maxwell, et al. 1998: 28). However, where this is absent, loss of land and livelihoods will occur. This points to the need for investigation and investment in local capacity building and governance.

The point to underline is that “although capitalism is the dominant mode of production in Africa, it has so far failed to replace pre-capitalist social and cultural formations” (Mabogunje, 1994: 31). Consequently, agency within an African context is circumscribed by structural forces from two main sources, viz.: globalisation forces and process on one hand and the socio-cultural influences on the other. These have to be recognised and their influence evaluated when dealing with the political economy of land.

Structuration considers that in response to globalisation forces, structural conditions (e.g. in the political economy and culture) can be either constraining or enabling. The challenge is to investigate how such constraining or enabling processes operate at the local level. Such an investigation would have as its goal an improvement in the governance of peri-urban change so that the new livelihoods provide both basic needs and economy to the peoples affected. It should be a framework to resolve the conflicts associated with localisation of globalisation forces in Africa.

2. Reflections on Research Frameworks and Approaches

2.1 Focus and modalities

Our deliberations on the political economy of urban and peri-urban agriculture with special reference to the land dimension are an explicit recognition that the problem with or for UA is not agriculture as such but the context within which it is done. The way forward has to follow tow inter-related strands viz;

**Focus 1**: that there is need for research on intra-urban agriculture issues e.g. how to increase productivity, production techniques, marketing techniques etc.

**Focus 2**: that urban and peri-urban agriculture’s success will be dependent on the context and diversity of local dynamics especially around land, governance and institutional success to resolve associated conflicts.

Although these tow are complimentary, Focus 2 calls on social scientists (lawyers, planners, sociologists, economists, anthropologists, linguists, historians, gender experts, administrators etc.) to improve our knowledge on the context within which peri-urban agriculture will operate. In doing so, both diversity and difference at local and regional level s should be explored.

Secondly, the approach should try to marry new research modalities and motivations with existing ones and to boost medium to long term research capacity for local /regional research, dissemination of research results and policy influence. These points will be elaborated on below.

2.2 Research Frameworks, Approaches and Capacity Enhancement
In the field of urban agriculture and African research in general, there has been a tendency by both local states, NGOs and international development institutions to undermine rather than enhance the research capacity in university institutions (Stren, 1994). A detailed review will however show that IDRC is among the few international institutions that have pursued development research with a commitment towards local ownership and capacity building. Its AGROPLIS awards scheme initiated about four year ago is a recent testimony to commitment for training can capacity building in African research centres. The research proposal emerging from our ongoing debates should offer opportunity for IDRC to broaden and consolidate ideals behind Agropolis for the rest of us to build on that initiative.

Most researchers do not want to be accountants; they want resources to use for research activities and to invest time on those activities, to publish, to engage in academic debates and dialogue with practitioners and policy makers. In MDP we have a regional institution whose links with governments and local authorities in the region are well known and respected. With IDRC support, the MDP has a window of opportunity to link up with regional and international researchers to pursue research whose results would inform and strengthen its dialogue with practitioner partners in the region. MDP does not need to do research itself but should have the right links to good researchers.

We have experiences of working different structures for dispensing with research resources that include:
(i) giving full budgets to each individual researcher
(ii) giving budgets to selected universities or research centres
In our current deliberations, we have the opportunity to link up MDP with a network of researchers where MDP could play the role of a ‘clearing house’ for research resources as well as act as linch-pin between researchers and policy makers in the region. Since 1998, researchers in the ESA region have realised the importance of collective research efforts and regional research capacity building on urban and peri-urban transformations. The Urban and Peri-Urban Research Network (PeriNET) emerging from this initiative has several researchers whose with interest on urban and peri-urban agriculture. Although its research agenda is much broader that UA, it covers the most significant contextual issues that impinge on UA viz; peri-urban land, governance, globalisation, livelihoods etc. There is significant common ground that IDRC and MDP could tap on.

We have to consider options of how PeriNET members can collectively and formally incorporate a research-training component to boost post-graduate research in the region. Obviously, we are not saying that IDRC should put all its resources in PeriNET or that all participants be members of PeriNET. We are urging IDRC and MDP to consider a more formal relationship with PeriNET as one potentially beneficial component of operations to pursue innovative action oriented research on urban and peri-urban change in ESA. Our collective experience shows that capacity building through training and networks is a winner since the more of us there are that take this debate to different places, then the more mature and effective that debate becomes. We have already seen it with UA since the early 1990s.

Beyond the academic value, this work has political, economic and policy relevance at both local and international levels. It pursues sustainable human settlements issues noted in Agenda 21 and in the UNCHS (Habitat) report, 1996. The central role of land in the urban-rural linkage continuum and potentials for economic development is a theme
recognised in the World Bank Report (1999) and recommended for further attention by other donors and development institutions such as DIFID, SIDA and UNDP. Consequently policy makers and other key actors would find the research of interest. This increases the chances of wide utilisation of the results during and after the project as well as enhanced conditions for future partnerships between research, funders and policy makers.

2.3 Recap on research questions

2.3.1 The Contextual questions

Throughout the paper, research questions were posed (see also the text boxes). However, this section will revisit some of those. As recognised by PeriNET, in the context of rapid changes associated with globalisation and commercialisation in Africa, peri-urban areas are major zones of conflict and opportunity with regards to;

- land demands and tenure transitions
- economic production activities including horticulture
- demands for housing and other material inputs by urban dwellers
- environmental impacts of the above (the ecological footprint)
- cultural identity, diversity and transformation of African peoples.

The socio-economic and political dilemmas in Africa generally and its peri-urban zones in particular are anchored on land. Consequently, the first phase research objectives of are multi-fold, viz.:

- on the basis of secondary data, to gather and synthesise the impacts of globalisation on peri-urban lands in Africa
- to isolate key dilemmas associated with the above and identify ‘best practice’ cases to resolve them.
- in partnership with selected city authorities and local institutions, carry out primary research with a view to develop mechanisms through which peri-urban land transformations could proceed in a sustainable manner i.e. equitable, promoting economy and cognisant of future needs.
- to explore the extent to which local culture could be used as a resource for conflict resolution in the general governance of peri-urban lands.

Resources permitting, it would be ideal to utilise cases from large cities as well as small urban settlements; from all sub regions of Africa i.e. Francophone and Anglophone West, East and Southern Africa; Lusophone and Arab Africa. For Peri-NET the debate and dialogue with practitioners will take a cluster ‘cluster approach’ where by seminars and workshops that use regional research results are brought to bear on selected cities with a view to influence resolution of prevailing local development problems.

2.3.2 Entrepreneurial urban and peri-urban agriculture

A key plant of the research challenge is to address poverty issues and opportunities for employment. The production of agricultural produce for the market in urban and peri-urban areas of ESA is widespread but yet poorly researched. With the label entrepreneurial urban and peri-urban agriculture (partly as used by Kaufman, J. and Bailkey, 2000), the research objective is to investigate the nature and characteristics of entrepreneurial urban and peri-urban agriculture and to highlight ways the operators have overcome constraints related to land water and institutional repression if any. This is an
objective couched within thin the modernisation theme and using the a communicative-collaborative approach.

It will identify the way activities are organised, the type of agriculture practised, production techniques, organisation and marketing channels. Thirdly, the studies will draw lessons for replication in terms of land use planning, urban economy and general food security for cities. Within the chain from farm to city, what opportunities exist for greater employment generation? What is the constituency of consumers for the various products from peri-urban areas.

2.3.3 Institutional conflicts

Peri-urban areas are zones that usually lie under rural administrations but whose functionality is largely urban. When confronted with negative or costly issues, the urban authorities do not want to be involved. However, where it happens that employment is likely to be created or where opportunities for increased tax revenue are envisaged, then the urban authorities will use everything in their power to take away such activity from their rural neighbours. Central governments are complicit in this game where rural people and their institutions end up as losers. The research question seek to examine existing arrangements for dispute resolutions of peri-urban land conflicts especially where investments are concerned and identify how best local knowledge could be used to enhance resolutions that benefit local livelihoods and institutions.

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Alice Kinyungu Njambi

1.0 Introduction

Kenya’s rapidly growing population grew from 10.94 million in 1969 to 28.686 million in 1999. Table 1 provides details of population characteristics.

Table 1: Urban and Rural Population (1948 - 1999)

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
<th>Urban as % of Total</th>
<th>Inter-censal Growth rate Total Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>0.286</td>
<td>5.12</td>
<td>5.406</td>
<td>5.3%</td>
<td></td>
</tr>
<tr>
<td>1962</td>
<td>0.671</td>
<td>7.91</td>
<td>8.636</td>
<td>7.8%</td>
<td>3.4% 6.6%</td>
</tr>
<tr>
<td>1969</td>
<td>1.082</td>
<td>9.861</td>
<td>10.943</td>
<td>9.9%</td>
<td>3.4% 7.1%</td>
</tr>
<tr>
<td>1979</td>
<td>2.309</td>
<td>13.018</td>
<td>15.327</td>
<td>15.1%</td>
<td>4.0% 7.9%</td>
</tr>
<tr>
<td>1989</td>
<td>4.3</td>
<td>17.148</td>
<td>21.448</td>
<td>20%</td>
<td>4.0% 8.6%</td>
</tr>
<tr>
<td>1999</td>
<td>9.996</td>
<td>18.69</td>
<td>28.686</td>
<td>34.8%</td>
<td>3.3% 13.2%</td>
</tr>
</tbody>
</table>

Source: RoK (2001)

Kenya's economic performance has deteriorated from a GDP growth rate of 5% in the late 1970s to barely 1% in the late 1990s. This has in turn led to budget deficits, poor balance of trade, increasing poverty, high levels of unemployment, and deteriorating standards of living for the majority of Kenyans. The implementation of SAPs in the late 1980s did not provide much hoped for/expected reprieve to the country's economy. Things just got worse. Today, 56% of Kenya's population are living below the poverty line on an income of 33 shillings per person per day and cannot afford food, safe water, health care, shelter and education (Economic Survey, 2000). The situation is worse for the urban population with an incidence of poverty of 29%, and who require 1490 shillings per capita per month (NPEP, 1999).

Agriculture and agricultural based activities form the backbone of Kenya's economy. This importance is shown by the foreign exchange earnings from exports be they of cash crops, horticultural and floricultural nature; as a source of employment for both skilled, semi-skilled and unskilled labour; as the base for agricultural based industries; and for feeding the people of Kenya.

The demand for Kenya's agricultural sector to meet the increasing demands for employment, food production and foreign exchange earnings continues to take place against an ever increasing population as well as a high rate of urbanization (see Table 1). The following processes are also evident:

i. Urbanization is leading to most of Kenya's high agricultural potential areas changing their user to urban land-uses such as residential, commercial and industrial development. Between 1975 and 1978, the Ministry of Lands expropriated 840
hectares of high potential agricultural land for the expansion of Eldoret town (K'akumu, 2000);

ii. Conversion of customary land tenure to individual freehold land which has continued to be further subdivided into smaller land portions below which viable agriculture is no longer possible;

iii. An increase in rural urban migration especially by the young and energetic rural population who leave the rural homes in search of 'white collar' jobs in the urban areas leaving behind the 'tired and old' to continue tilling the land;

iv. Poor environmental management whose effects have become more pronounced since the late 1980s in the from of droughts, floods and soil erosion, soil degradation, deforestation, drying up of water sources such as rivers, pollution of both surface water such as rivers and streams, as well as underground water brought about by soil erosion and siltation;

v. Globalization of capital has also had negative and positive effects on Kenya's agricultural sector, especially since the late 1980s. This has been in the form of increased investments in floriculture and horticulture for export purposes. Agricultural land which had previously been under food, livestock and cash crop cultivation was converted into this new use, thus further decreasing the area under food production. Thus today, land in the peri-urban areas of Nairobi, Nakuru, Naivasha, Thika, Nyeri, Athi-river, Kiambu (where most of the 20% of the high potential agricultural land in Kenya is found) is under export agriculture.

Kenyans in general have always been eager to own land. Thus, land is acquired for various purposes ranging from psychological, socio-economic, prestigious, and traditional reasons. Purchase of land for purposes of speculation has always been rife in Kenya from the colonial days when land speculators would acquire land in areas which they knew were soon to be designated for urban use (King'orioh 1980; Yahya 1979). After independence, this practice was soon taken over by wealthy indigenous Kenyans who would fence off 'vacant' land (which was public land) and then put in the necessary machinery to ensure the eventual alienation of such land to them. This land would be put for sale when the market prices were reasonably good (Yahya 1979).

The availability of land for whatever purposes is determined by various factors. These include the location, zoning, the value of land, purpose, availability of savings/money, the type of land tenure, legislation, the land use policy (relating to planning, allocation, distribution) and the political will to implement it.

The land use policy has well laid out mechanisms for both the rural and urban land. Unfortunately, the implementation of these mechanisms is often prone to misuse by influential people such as politicians and other 'well connected' people, including professionals who influence and interfere with the laid down mechanism for land allocation and distribution. (King'orioh, 2000). Thus, various difficulties are faced in the implementation of master plans, such as in the expropriation of land, compensation, proposed land use versus the 'preferred' use by the land owner. The official mechanism for land use has become entangled in 'mafia' type of dealing, is no longer transparent, and has helped create the feeling of amongst Kenyans that owning land is so difficult.

This has resulted in artificial land scarcity. Hence, a Kenyan who is desperate for land especially in the urban area, is almost ready to 'do anything' including 'mafia type tactics' in order to own land. Other Kenyans who might already own many portions of land are
just 'land hungry' and often want to own land for speculation purposes. Thus, the land allocation and distribution in Kenya is characterised by:

- Most Kenyans have access to both rural and urban land. This is often through purchase, or inheritance;
- Political heavy handedness on the land use policy and planning, often encouraging allocation and distribution of land along ethnic lines, politically correct people;
- Ethnic cleansing, through government instigated clashes aimed at violently removing 'un wanted' groups from a particular area be it rural or urban. Such vacated land is then allocated mostly to the regime's psychophants and their supporters;
- The land information system (the records at the Ministry of Lands) have been tampered with. This in turn has brought a shadow of doubt as to the reliability/security of a Title Deed. It is now common to find several title deeds for the same parcel of land (Obala, 2000);
- 'Land grabbing' by the wealthy and politically well connected. The land allocated is Trust land under local authorities which has been set aside as public open space; for recreational purposes, 'jua kali' /informal sectors; for public purposes such as health clinics, toilets, etc. So far, at least 300 cases of land grabbing with supporting documents are known (Operation Firimbi, 1999);
- Illegal occupation of well located land, for housing by the middle to high income groups, such as in Kahawa Sukari. Such settlements are legalised later;
- Land in road reserves, catchment areas, is being subdivided and allocated for permanent development such as housing;
- Instances where the well connected gain Temporary Occupation Leases (TOL) from the government or the local authorities, are then leased by the allottee to someone else for a much higher rent, have become common;
- The eviction of the urban poor, from their squatter settlements by police who often have the 'silent' support of the government. Evictions are often violently carried out using beating or 'mysterious' fires. Such evictions often follow a notice made to the squatters (by a person who has been allocated the land).
  - This has in turn led to the mobilization of these communities into Muungano wa Wanavijiji (Federation of the Urban Poor) in Nairobi; the Pamoja Trust which have been set up for purposes of fighting for the land rights of the urban poor in Nairobi,
  - The Green Belt Movement, a local NGO set up to protect the environment through out Kenya, has been very active in creating public awareness on land issues through their 'top Grabbing Public Land' campaign; and
  - The continued marginalization of the urban poor from owning land since they are neither economically or networked endowed.

1.1. Urban Agriculture in Kenya

Urban agriculture takes place in Kenya and takes the form of subsistence farming (by at least 70% of the urban poor population who are composed mainly of women) as well as by the middle and high income groups who practice farming for subsistence and commercial purposes. Subsistence agriculture by the urban poor is often characterised by 'illegal' cultivation on vacant land, lack of agriculture extension services, lack of use of inputs, low yields, lack of good land husbandry, and insecurity of tenure. On the other hand, farming carried out within a 'properly fenced area' within the urban area is characterised by access to agriculture extension services, use of inputs such as fertilisers
or manure, diversity in crop and livestock production ranging from fruits, vegetables, flowers and grade cattle, poultry and security of tenure.

Some of the characteristics of urban agriculture are captured in various research findings:
- Almost 60% of the urban population grow part of their food;
- At least 29% (Lee-Smith et al, 1987) and 26.9% (Foeken & Owuor, 2000) grow these food within the urban area;
- While 50% of the 1576 households (studied by Mazingira Institute 1985 study) kept livestock, only 17% kept them in the urban area. The 1999 Nakuru study by Foeken and Owuor (2000) found that 20.4% of the 594 households kept livestock;
- Most urban farmers are women;
- 66% of the households without access to urban land would like to have access to land where they can grow their own food. Such households hoped to get this land through being allocated idle/vacant land (66%) while 12% indicated that they would buy their own land;
- Urban dwellers felt that it was the responsibility of the central government and municipal authorities to ensure that such vacant land was made available for farming;
- The nature of access to urban land does affect the use and the user/cultivation rights;
- Both the Mazingira and Nakuru studies point to the lack of rents or fees for the use of land for farming both on-plot or off-plot;
- Lack of access to land as well as harassment by local authorities are only minor problems for the urban farmers (especially the poor);
- The demand for land for urban farming, especially by the urban poor, will continue. Urban farming will continue to be important in their survival strategies; and
- Urban land use policy, urban development planning, and legislation as well as local by-laws consider urban farming illegal and a nuisance. Such legislation includes the Public Health Act, the Local Government Act, the Physical Planning Act, and the Government Lands Act.

Urban agriculture plays an important role especially in improving the food security situation of poor urban households. Despite its importance, the government has continued to treat UA as an illegal land-use and has adopted a laissez faire attitude towards it.

2.0. Urban Land Markets and Sub-Markets In Kenya

2.1. Urban Land Markets

A land market, whether formal or informal, exists when a buyer or seller meet, resulting to an agreed price (which reflects the land value). This value is a measure of the intensity of demand and competition for urban land.

Different land markets exist for specific land uses such as housing, business, commercial, industrial, recreation, jua kali/informal sector, schools/education purposes, religious purposes, agriculture (livestock, floriculture, horticulture, cash crops, food crops, trees). Issues which are important to the urban land market in Kenya include:
- Land tenure type (customary, public and private);
- Ownership rights/control of land rights;
- Location;
• Zoning (the legal land-use allowed under the urban land-use policy; indicates the plot sizes, the density of development allowed);
• Quality of the soils; availability of water resources; access to infrastructure such as roads, water and sewerage reticulation; access to employment, commercial, health, recreation, social services, etc in a given urban area; and
• Land values.

The urban land market is greatly determined by the implementation of a land-use planning policy for purposes of ensuring sustainable urban land management in Kenya. The urban land market in Kenya is dependant on the implementation of Kenya's land use planning policy, which is based on Britain's. Thus, most of the spatial planning concepts as well as land use planning tools and instruments were borrowed and adopted from the colonial power (Olima, 2000). Some of the relevant statutes include the Town Planning Act (Cap 134), the Government Lands Act, the Land Planning Act, the 1996 Physical Planning, and the 2000 Environment and Management Act.

The existence of urban land markets and sub-markets in Kenya is determined by various factors:

1. Land types based upon ownership: government land, public land/trust land, private land (individual, corporate, cooperatives, or land buying companies).
2. Land rights as determined by the various laws of Kenya. They include freehold, leasehold and customary.
3. The manner of obtaining the land i.e. is the land bought in the open market; in the informal market or through squatting or invasion on public or private land.

Urban land markets in Kenya can be divided into:
1. Formal open markets, where private or public land is made available to willing buyers or leasees at a certain already determined market value.
2. In the case of private land (leasehold), transactions take place on an individual to individual basis, or through a registered estate agent where lease agreements are drawn. The land-use type is as specified/depends on the location, zoning and intended use by the lessee. Sale or lease prices are usually determined by the location, zoning, land-use types, soil types, infrastructure, social, health services, neighbourhood type, and the general economic environment.
3. In the case of government land, land which is available for freehold or leasehold should be advertised (as per the Government Land Act) to the public, for application. An auction should be held during which the highest bidder (over the reserve price) is allocated the land. This system has now become 'informal' due to the fact that the Commissioner of Lands as well as the politicians and other influential and politically correct members of the society have encouraged the proliferation and disregard to adhere to these requirements. Thus, information regarding the availability of government land is only disseminated to the 'politically correct' or persons who 'talk nicely' (in the form of offering bribes commonly known as kitu kidogo to the land officers) who either apply for the land themselves, or encourage their friends to apply for the allocation of government land either on a 33 year lease (for town areas other than Nairobi), or for a 99 year lease for Nairobi, or for an outright conversion to a freehold. In most cases, the persons to whom the 'reliable' information is disseminated also part with some money as reward for the connection. The effects of this practice have been: (a) ‘Land grabbing’ of public land including forests and catchment areas,
road reservations for commercial development, public open space, land set aside for education purposes, for health facilities, for markets, recreational and religious purposes. Such lands is often converted into other more economically rewarding uses, and are often sold at prices which are many times above the market prices. (b) Decrease in land available for public utility (c) Further marginalization of the poor, who often lack the necessary networks.

4. Corporate land and land belonging to land-buying-companies is often subdivided into smaller individual freehold units. In the case of land-buying companies, the land so sub-divided is allocated to individual members or share holders of the land-buying company.

The number of units that a member is eligible for is dependant on the number of shares that an individual had paid for. Members are then given their title deeds, thus giving them the option to sell or not to sell to members of the public.

Land buying companies provide one of the strategies through which women are able to purchase and own land in Kenya (Gitau - Karirah, 2000)

2.2. Urban Land Sub Markets

These include other land markets where land is mainly brought to the market in an informal way. It is characterised by a high level of secrecy especially with regard to information dissemination. The informal land market is characterised by:

1) Existence of knowledge/information about a certain portion of land which is either government, public (under local authorities) or private land.
2) Usually, the 'informer' who could be a politician, a government official, or an opinion leader, or just a well connected individual decides on the target group. Often, this person has already determined the reward expected for the information.
3) The targeted persons often belong to the urban low income group and cannot afford the financial requirements of the formal land market.
4) Political patronage is used as a strategy to provide or obtain security of tenure; and to determine ownership rights (including the possibility of letting out all or part of the plot or dwelling; the right to operate home-based enterprises; the ability to benefit from valorization; and the potentiality of using the property to obtain formal credit (Majale, 1998)
5) The prevalent land tenure types (for informal settlements) has been leasing and squatting. Recently, persons who had acquired land for housing informally, and which have been upgraded are being granted 99 year leases by the government.


Most of the research undertaken on the urban land market has been based around the issues of housing, slums and squatter settlements, informal settlements upgrading, especially for the low income groups.

Urban agriculture is a new area within the Kenyan research community. The little research undertaken on urban agriculture has been set at providing essential information to show that urban farming does exist, it plays an important role in the urban economy,
and that there is a need to recognise it as one of the land uses within the context of urban land management and sustainable urban development.

In the search for information related to land markets for urban agriculture, there are certain research on human settlements which provides a good insight into how the formal and informal land markets operate. These include:

1. A relationship exists between the informal land submarkets and the wider formal urban land market and this varies over time and location
2. There are a range of different submarkets through which the marginalised urban population can get access to accommodation (read land for urban farming). This is in the form of informal land subdivisions, or informal rental housing. The informal rental market which operates within the unauthorised settlements leading to the exclusion of the very poor who cannot afford to pay rent (Kariuki, 2000)
3. The informal housing market is formed following a number of steps as analysed in a 1994 study by Professor Yahya and Nzioki on ‘Taming Delinquent Markets: An Analysis of Unregulated Housing Markets in Kenya’. The resulting steps depend on a spontaneous unplanned development, or situations where virgin green field land is formally subdivided and distributed without following the statutory procedures (especially the case where land is bought and subdivided by a land buying company).
4. The existence, survival and expansion of a submarket depends on the availability of certain inputs such as enterprise, the desire to take risks, finance, security of tenure, local support systems, amenities, domestic conveniences, personal security. Submarkets emerge as offshoots of bigger and established structures.

Research into urban land markets and submarkets in Kenya has tended to be limited to the question of housing and the informal squatter settlements. Most research has continued to have a bias towards Nairobi as the area of study. Research in other towns namely Mombasa, Nakuru, Kisumu, and other smaller towns are generally few.

Specific research into urban land markets and submarkets for urban agriculture is non-existent. The lack of information in this area is further worsened by the fact that there has been little research on how various income groups gain access to land for agriculture purposes. Common knowledge exists as to how the relatively well off buy their land, often through estate agents, inherited property, or persons who get to know of intended sale of agricultural land through their networks.

This can possibly be explained by the fact that urban agriculture has barely received any recognition as an important land-use type especially for the marginalised urban population. For this reason therefore, a market situation per se has never existed (in the form of exchange of money in form of rent) as the urban poor have always tended to have relatively easy access to vacant land (open spaces, road reservations, railway line wayleaves, public/government land, privately owned land).

In the case of land to be used for urban agriculture by the marginalised urban population, the perception about the proposed use, urban farming, which is often seen as being subsistence and an informal activity) often means that the applicant is given the land for free, or pays a very minimal fee. In some instances, the land owner plays the role of ensuring access to land by the marginalised groups for their survival, and sometimes as a
way of ensuring cleanliness around areas of operations (Maina of Kenya Railways, 2001).

The previous studies related to urban farming (Mazingira Institute, 1985; Freeman, 1987; Mwangi, 1995; Foeken and Owuor, 1999), none of these studies have delved into the urban land market and submarkets as it relates to urban agriculture activities especially for the urban poor.

3.2. Patterns of Land Access and Use for Urban Agriculture

Past research on urban agriculture has provided good information on the patterns of land access and use quite comprehensively. The studies by Mazingira Institute (Lee-Smith et al 1985); Freeman (1987); Foeken & Mwangi (1995) and more recently Foeken & Owuor (1999) show that there are substantial differences depending on the location and ownership of the plot and that there are three categories of urban agriculture: on-plot agriculture, off-plot cultivation and peri-urban agriculture.

i) On-plot agriculture - where farming is practised on the plots around houses and is characterised by:
- the size of the plot determines the average number of crops grown, as well as the type of livestock kept, if any. According to the Nakuru study, the average crops cultivated in 1998 was 4.3, while an average of 6.7 crops were grown in the larger plots;
- the practice of using farming inputs such as compost manure is common;
- crop cultivation is mainly for self consumption;
- in high density squatter settlements, especially in Nairobi, backyard farming is non-existent. (Mwangi, 1995);
- lack of space discourages households from keeping livestock.

ii) Off-plot cultivation - is conducted by roadsides, riversides, under utility service lines such as electricity, on swampy ground, railway way leaves, vacant land and other public open spaces. These plots are used for food crop production, are often characterised by insecurity of land tenure, possibilities of theft, distance from residence, production is uncontrolled and often illegal, good land husbandry practices is almost non-existence; and limited use or lack of use of inputs to increase production. The urban poor are the main 'beneficiaries' of these plots but yields from these plots are very low.

iii) Peri-urban agriculture takes place between the urban fringe and the rural area. Research on land access and use for peri-urban agriculture has been minimal. Peri-urban agriculture is characterised by: (a) Previously land under rural agriculture being brought under urban boundaries as a result of the expansion of the boundaries/area of jurisdiction under an urban local authority. A good example of this is Nairobi. (b) Most of the agricultural activities are on-farm, while off-farm practice is common where peri-urban farmers lease land from other land owners for purposes of growing fodder especially for livestock.

3.3. Review of Research on Formal and Informal Strategies Through which People Access Land for Urban and Peri-Urban Agriculture
3.3.1. Urban area

Research on strategies through which people access land for urban and peri-urban agriculture has been minimal. The research has focussed on land ownership and has tended to ignore the process of land acquisition for urban agriculture.

Past research carried out to determine the formal and informal strategies and relationships through which urban residents access land for residential purposes. These are characterised by:

- Informality;
- Political patronage;
- Secretiveness (e.g. information is disseminated only to those persons sharing the same problems, similar needs, aspirations, income levels);
- Length of stay in an area or living within a certain community, thus building upon the element of trust, as well as establishing networks. According to Mwangi's study in Korogocho and Pumwani /Eastleigh surveys in 1995, 'one has to be firmly settled in the city in order to obtain a plot, and should generally have the right personal network through which land can be acquired';
- Ethnicity - people from the same tribe/ethnic group tend to develop trust with each other, they also share similar traditions and customs, share a form of brother hood, and thus tend to look out for each other especially in schemes that can benefit their 'own';
- Identification of a vacant portion of land, which is also strategically located, often in environmentally condemned areas such as land under electric power lines, in river valleys or along river beds, in swampy areas (vleis), road reserves; land surrounding sewerage treatment plants; or land contaminated by industrial effluent.
- This identification is often carried out by an 'interested party', such as a politician, a business man, or a professional. These persons are well informed on land ownership (especially public land), the supply and demand for land, and the levels of affordability by their targeted groups.

In other instances, privately owned land may become 'invaded' by well to do people (as happened in the 1970s invasion of land belonging to an absentee land lord, political pressure was used in forcing a sale, leading to the development of a residential area known as Zimmerman.(Gatabaki-Kamau, 1999).

3.3.2. Land for urban agriculture

In the case of land for urban agriculture, the process is basically informal in that no application is made to the local authorities, or the Government of Kenya (through the Ministry of Lands) to allow the land to be used for agriculture. Discussions were held with officials from the Ministry of Lands and Settlement (Land Administration), and certain local authorities (Nairobi City Council, Limuru Municipal Council) who are mandated to hold Trust land on behalf of the public; the Department of Physical Planning and the Kenya Railways Corporation. They indicated the following:

- Since urban agriculture is prohibited and is often considered a nuisance, neither central government nor the local authorities receive applications proposing to use identified vacant land for farming;
Urban farmers, do not apply for permission to the local authorities to use land for farming, instead they simply identify vacant land which they prepare for tilling and planting. Crops grown depend on the season, necessity, finance, labour, and consideration of security;

The Ministry of Lands provides Year-to-Year leases (under a Temporary Occupation License TOL) but this is often for land which is used for purposes other than agriculture.

The TOL can be converted into a 99 year lease (in the case of government or trust land within Nairobi, Mombasa and other larger towns. It can also be converted into a 33 year lease in the case of land in other towns other than Nairobi. However, no permanent developments are allowed under this lease.

### 3.3.4. The Kenya Railways 'Cultivation Lease' Policy

The Kenya Railways (KR) is a parastatal which owns all the land found along the Kenyan side of the Kenya-Uganda railway. Indeed, at the time of the construction of the railway, an allowance of 3.4 kilometres of land was set aside for the railway line. This land is divided into station area and operational area (composed of a 100 metre wide wayleave on either side of the railway line. The Kenya Railways allows its workers to farm (usually crop cultivation) the land within the station area and residential area (called 'landhies'). Some of these workers also farm along the operational area at the mark of 30 - 100 metre point from the railway line. Since 1960, crop cultivation along the railway line has been in existence and is practiced especially by the low income employees. Few applications to use the KR wayleave for farming were received from the general public as far back as the 1960s. However, during the late 1980s, the KR started receiving many applications from the public, requesting the use of KR wayleave land for crop cultivation. As a result, the Estate Management department developed a system of leasing out land for farming purposes to non-railway staff/public. This is done in the form of 'cultivation lease agreements'. The application process involves the following steps:

- Identification of vacant land under the ownership of Kenya railways;
- Application letter is submitted to the Kenya Railways headquarters in Nairobi and the applicant is required to indicate the specific location of the land applied for;
- The application is forwarded to the Estate Manager for recording and consideration;
- The estates manager then refers the application to the Regional Civil Engineer for vetting. This is done by establishing the actual location of land applied for, and the region it falls under;
- The regional civil engineer then refers the application to the 'men on the ground' i.e. the Permanent Way Inspectors (PWI) to evaluate on the suitability of the area applied for;
- Upon their being no objection by the engineering department, the estates manager then draws the terms of the lease agreement which include the size of the land (normally between 1 - 2 acres), the duration of the lease (normally for one year and is renewable) and the level of fee / rent to be charged. Such fees depend on the agricultural potential/productivity of the land: High potential areas, a fee of 1000 shillings per acre per annum; Medium potential areas, a fee of 500- 600 shillings per acre per annum; and Low potential areas, a fee of 300-400 per acre per annum.
- Crops to be grown are limited to the low lying, seasonal crops;
- Lease is renewable upon the expiration of one year, and happens automatically when rent which is due is paid;
• Inability to renew the lease (by virtue of paying rent that is due) is taken as an indication that the lessee has stopped crop cultivation and that such land can be let to another applicant; and
• This process takes place for all railway land in the urban, peri-urban and rural areas through out the country.

3.3.5. Peri-urban areas

Formal strategies involve one's participation in the formal land market often through estates agents and real property development companies, cooperatives, and land-buying companies, through information prided by land brokers and agriculture extension officers, or at clubs or places of socialising. Often, such land is zoned for residential cum farming or as agriculture. The common land tenure is usually freehold or long leases of 999 years as given under the crown Land Ordinance of 1920. The 999 year leases have since been converted into freeholds.

• The people participating in the formal land market are at least in the medium to high income groups, often have accumulated own savings which they use for down-payments, or are able to obtain mortgage facilities through their employers. Transactions can either involve only an individual, or it may involve a group composed of persons with similar socio-economic characteristics and aspirations who come together to pool resources to buy urban land whose prices are often beyond the reach of individuals (the land is usually of large extent), which is then subdivided upon acquisition.
• Land between the urban fringe and the peri-urban areas is also expensive and is usually affordable by investors enjoying global finance.
• People from the lower income groups are only able to access peri-urban land, as it is relatively affordable compared to urban land. This is done either taking cooperative loans.
• Alternatively, individuals form a 'land-buying' company for purposes of purchasing land (usually land of thousands of acres), with each member contributing a certain amount of money.

Government of Kenya Settlement schemes also form an important source and access to both rural and peri-urban land for agricultural purposes especially for the economically marginalised:
- Settlement schemes are usually targeted at the poor who stand a very low chance of ever owning land in their life time;
- Settlement schemes also form one of the strategies of improving agricultural production as well as national food security by making sure that as many Kenyans as possible are able to earn their living from agriculture;
- As a result, government has over the years obtained funding for the development of infrastructure such as reticulated water, rural roads, electricity, social and education facilities, as well as agricultural extension services;
- The settlement schemes land has over the years, undergone land adjudication leading to the beneficiaries having title to their land. The implications of this has been the development of a land sub-market whereby land is sold to other relatively well-off persons who want to settle in the rural areas. Indeed, ownership of land in the peri-urban areas by the rich has become fashionable (Kariuki, 1977). They are able to pay prices above the real market value and this has led to increased marginalization of the originally targeted poor population;
Most of these schemes now form the land reserve for peri-urban agriculture, available for the more wealthier population. This is due to the fact that title deeds are available and this makes it easier for the 'settlers' to sell the land (which had been given to them by the government free of charge) to a willing buyer. The prices quoted are often the market prices at the time, with the final price paid depending on the reason why the 'settler' is selling/level of vulnerability (Author's own experience, 1998) and

Thus, settlement scheme land in Kenya is now populated with a much wealthier population than the original beneficiaries.

4.0. The Level of Integrating Knowledge of Issues Relating to Urban Agriculture into Urban Policy, Planning and Legislation in Kenya

Currently, Kenya cannot boast of having implemented any changes to the existing urban development policy, physical planning and legislation as it relates to urban agriculture. There has not been any official recognition of the role that urban agriculture plays in both the local and national economy, which could have prompted a change in urban policy.

There have been incremental changes in the conceptualisation of urban agriculture, especially urban farming by the poor as being illegal and of no economic consequence.

- This approach has benefited from the implementation of the Green Towns Project in over 30 towns in Kenya. The preparation of Environmental Plans takes cognisance of the importance of urban agriculture, and the suitable areas for this are planned for during the preparation of these plans. (Munyua & Wambugu, 2001)

- The preparation of the Nakuru Strategic Plan under the implementation of Localizing Agenda 21, during which the Nakuru people identified the need for land for urban farming, which was taken into consideration when preparing this plan has provided better insight to the planners on how to deal with integrating urban agriculture into future strategic plans.

- In some instances, some urban local authorities, such as Nairobi City Council set aside land for urban agriculture purposes when requested to do so. There has been only one such incident when in 1988 the Undugu Society of Kenya obtained official permission to use the land bordering the Nairobi river for purposes of cultivation.

- Land use planning continues to be based on zoning regulations dating from the colonial period. Little has changed with regard to developing an urban land use policy which is implemented in such a manner as to be flexible enough to allow for the changes and new demands on urban land. According to Olima (2000), Kenya's land use planning has resulted in improper use of land and irrational land-use patterns in its urban centres.

- According to Olima (2000), the urban planning and development approach has been unable to solve the problems relating to: availability of, and access to land; land ownership; land tenure systems; efficient land use; rational land development patterns, land and environmental management, and socio-cultural relations.

- Planning has continued to operate as if no changes have taken place. Thus planning has shown a lack of sensitivity to the needs of the population, so that instead of being the 'vehicle for objective redistribution of resources', planning has played the entire opposite role.
5.0. Significant Gaps In Research, Review of Research Opportunities and Capacities in Kenya

5.1. Significant research gaps

1. Dynamics of urban land markets and submarkets for urban and peri-urban agriculture:
   - There is need to carry out research on the types of urban land markets and submarkets for urban and peri-urban agriculture: We need to understand what determines the success or failure of an individual's attempt to access land for agriculture in the urban and peri-urban areas?
   - Since existing research indicates the absence of rents for both residential and vacant land occupied for farming by the urban population, especially the urban poor, does this mean that there is no 'market' for such land? Or does a market exist in other forms other than the payment of rents/fees in monetary terms and if so, how is the non-monetary value arrived at? How do the urban poor identify a portion of land, and proceed to occupy it despite the uncertainty/insecurity of the farming venture? Do they depend on protection and good will through political patronage or ethnic affiliation and what is the protection fee?
   - What are the types of land tenure for both urban and peri-urban land used for agriculture especially for the marginalised groups? How does this affect access, control and use of such land?
   - What would be the implications of official recognition of the land markets and submarkets for the urban and peri-urban agriculture?
   - What has been the effect of change of use of land zoned for agriculture to other more financially rewarding land uses? How has this affected the availability of land for urban and peri-urban agriculture in terms of access, price/value, and hence affordability and land tenure, in terms of outright purchase or granting of lease?

2. Research into the formal and informal systems through which the urban poor access land for urban and peri-urban agriculture; What strategies do the urban poor employ in order to obtain land for farming; How do these strategies affect access to land along gender differences.

3. Research into the role that urban agriculture plays in the national and local economy in terms of food security, nutrition, employment creation, resources utilization and management.

4. Research into the implementation of all legislation related to urban agriculture, and in particular, the Public Health Act, the Local Government Act and the Agriculture Act. What are the by-laws which have been developed by the urban local authorities in order to deal effectively with issues revolving around urban agriculture? In what ways has the development of Environmental Plans in various urban local authorities affected the way urban agriculture is conceptualised within the context of sustainable urban development by both the councilors as well as the officials?

5.2. Review of Research Opportunities and Capacities

1. On-going research project on farming by urban dwellers in Nakuru. This is a joint undertaking by the University of Nairobi (Department of Geography, Department of
Urban and Regional Planning, and the Centre for Urban Research) and The African Studies Centre, Leiden the Netherlands.

Phase one of the project was conducted between June-July 1999 and had two major objectives:
- to collect basic data on farming by the people of Nakuru Town; and
- to provide the Nakuru municipal authorities with information on urban agriculture which can be used in the process of town planning in the context of the Localising Agenda 21 programme.

Phase two will have two main follow-up studies on:
i) An in-depth survey on urban farming practices in Nakuru Town;
ii) A study on the impact of urban farming on the food security situation and the nutritional conditions of the households involved in urban farming; and
iii) Minor, albeit more specific studies dealing with various other topics related to urban farming in Nakuru:
- Comparison between a group of households taking part in an urban agriculture programme of the Catholic Diocese of Nakuru and a group of urban farming households not participating in such a programme
- The environmental aspects of urban farming, in particular the pollution of crops;
- Institutional urban farming, in particular by the primary and secondary schools, and
- The legal and institutional aspects of farming in the town
iv) a larger (Ph.D.) study will deal with the rural farming activities by the people of Nakuru town.

2. The Environmental Management Unit in the Department of Physical Planning in the Ministry of Lands and Settlement has been involved in the implementation of the Green Towns Project which promotes sustainable urban development. The principles are implemented through the development of Environmental Plans which are then implemented in the form of action plans which are integrated into Local Authorities Development Programmes as has happened in Eldoret, Nanyuki and Migori towns (Duchhart & Grootenhuis 1993 as quoted by Foeken & Mwangi 2000).

So far, 30 towns have participated in the Green Towns project whose official responsibility has recently changed (2000) from the Ministry of Local Government and is now a government funded programme in the Department of Physical Planning (Munyua, 2001).

Environmental planning includes the designation of 'green zones' especially in ecologically and environmentally fragile areas such as along rivers, swampy areas, wetlands, and places prone to soil erosion such as along sloppy road sides, and other open spaces. In these areas, crop cultivation is discouraged. Instead, the physical planners, local authority personnel, the community, community leaders, agriculture extension officers, and Ministry of environment personnel, land officers, etc work together to identify areas which are suitable for specific types of agriculture. Through out the planning process, conscious efforts are made to obtain a consensus on the direction towards which the town should grow, away from areas of high agriculture potential. The Naivasha Environment Plan, finalised in 2000, is a good example of this thinking. (Munyua, 2001).
The environmental plans are now generally considered as the 'base map' upon which future physical development plans must use as their point of reference. This has been achieved through adopting an integrated and participatory approach to planning whereby the local authorities, the community, government officers in the ministries of lands, agriculture, health, public works, etc participate throughout the planning process. The officers involved in environmental planning have been holding workshops to sensitize fellow planners on the need to consider the environment and issues of sustainable development when preparing physical plans (Munyua & Wambugu, 2001).

At the same time, the environmental planning activities have helped draw attention to the fact that urban farming contributes both positively and negatively to an environmentally sustainable urban development; and that urban farming is important to the food security, nutrition and survival of the urban poor. There is now a growing need to have an official recognition of urban farming. Such official recognition could be in the form of changing the effective by-laws by local authorities, as well as in pushing for a policy on urban farming. In the context of achieving sustainable urban development.

For these reasons, the unit intends to:

i) Explore the implications of an official recognition of urban farming on the urban environment and sustainable urban development. How will this affect access to land for farming by the urban poor? How do we ensure that land so zoned for urban agriculture especially in areas that are accessible to the urban poor are not taken over by wealthier and land hungry people? How do we ensure that such a policy does not create problems of illegal allocations, the rich buying out the poor and eventually resulting in 'public land grabbing' (Operation Firimbi, 1999)

ii) Develop a comprehensive and well researched report about urban agriculture, its importance and role in the national and local economy, and in poverty reduction especially for the urban population; and argue the case for the need to officially recognize it, and even develop an urban agriculture policy.

iii) The report will be used to sensitize planners and officials who are involved in the soon to be developed (the first) National Land - Use Policy for Kenya. This report will also be used to garner support for the inclusion of a policy on urban agriculture in the national land-use policy.

Opportunities exist in providing already existing data and recent research findings on urban agriculture. Further and more specific research can be carried out for purposes of providing information for input into the preparation of the Kenya's national land-use policy such as:

- The significance of urban farming within the context of Kenya's agricultural potential
- The processes, both formal and informal, of accessing land for urban agriculture
- How much urban and peri-urban agriculture is really taking place? What form does this farming take e.g. in terms of intensity?
- The nature and scope of the different types of urban and peri-urban agriculture
- The recommended portions of land which are adequate for the different types of farming in line with agri-ecological zoning. How can this factor be developed into a land-use plan? (Mugambi, 2001)
- A review of experiences of organizations with programmes set up to promote urban agriculture especially for the urban poor, such as religious organizations, CBOs and NGOs
- The nature of the institutional framework within which an urban agriculture policy would be implemented; What would be the implications on the institutional capacities at both the national and local levels.

- Strategic Planning Unit of the Department of Physical Planning, Ministry of Lands and Settlement. This unit is responsible for the preparation of land use plans which act as guidelines on future land development.

The Nakuru Strategic Plan 2000 - 2015 is the first strategic plan to be prepared by this unit. The unit is now in the process of preparing the Nairobi Metropolitan Strategic Plan - which will plan for land use within the city of Nairobi as well as its environs. The preparation of this plan is being carried out in conjunction with the Ministry of Local Government (Directorate of Urban Development), and only just recently incorporated the Nairobi City Council's Forward Planning Unit (Waruguru, 2001)

- Preliminary contents of issues to be addressed by the new metropolitan plan do not include land use planning with regard to urban farming and peri-urban agriculture.
- No serious thinking has been given to the role of urban agriculture in planning for sustainable and environment friendly urban development. As far as planners are concerned, urban farming remains an illegal land use
- Planning officials have not given much thought to the effects of urban farming on urban ecosystem, mobilization, utilization and management of resources, and sustainable urban development
- Planners have often dismissed urban farming, especially by the 'road side farmers' as a mediocre activity which does not deserve much consideration during land use plan preparation.

Opportunities arise in terms:
- Dissemination of previous research findings which have been carried out on urban agriculture
- A Rapid Assessment Joint research (to include the Ministry of Agriculture) on the prevalence of urban farming, the patterns of access to and use of land for urban farming, the extent to which lack of official recognition of urban farming has been detrimental to the city's management of its infrastructure and environment, health outbreaks, soil degradation, pollution of surface, rivers and under ground water; lack of control on how land is used, etc)
- Findings of this research can be disseminated during the meetings of all Stakeholders due to take place as from May-June 2001 (Gachoki,2001).
- Nairobi City Council planners can be supported to carry out a detailed analysis of the nature of change of use applications received to change the use from agriculture to that of non-agriculture use (this should be done in such a way as to draw useful conclusions as to the effect of urbanization on agriculture..)
- The Land Administration unit in the Ministry of Lands and Housing, responsible for vetting all applications for change of use throughout the country, could also be asked to carry out an analysis of these changes as part of their input into the preparation of the new Nairobi Metropolitan strategic plan.

ii) Preparation of the Ngong Town Strategic Plan is also being undertaken.

Ngong town has one of the fastest growing peri-urban farming communities, and is made up of a very affluent population.
- There has been a change in land ownership on this once un-occupied and little
developed government and trust land. The affluent have replaced the economically
less well-off communities (who occupied already subdivided and adjudicated land),
or the pastoralist Maasai community.

3. The Nairobi Province Agriculture and Livestock Development office, of the Ministry of Agriculture and Rural Development:

The following activities which have a bearing on the development of an urban agriculture policy in the future are taking place:

i) The Ministry of Agriculture and rural development has embarked on up-dating the 1992 National Food Policy, so as to take into consideration the changes that have taken place since 1992, as well as the new challenges arising from poor national economic performance, increasing poverty, and effects of globalisation amongst others.

This update will be carried out through involving all the stakeholders in discussing the way forward towards achieving the goals and objectives of the national food policy of achieving national food security. The ministry has adopted the 'stakeholder participation concept' as a result of the realisation that people at the grass-roots have practical experience and insights which are crucial in both the development and successful implementation of policy.

ii) Since 1996, the Nairobi Province Director for Agriculture has been actively advocating for the need to have, first and foremost, an agriculture extension kit specifically designed for use in the urban areas. The previous kits were developed with rural agriculture in mind, but it has been found that these rural kits are unsuitable for urban farming. This became the first project embarked upon by the agriculture officers to develop an urban agriculture extension kit.

iii) The Nairobi provincial office mainly serves urban and peri-urban farmers. Interaction with these farmers has helped the agriculture office realise and acknowledge the important role of urban farming in the local economy, as well as in fulfilling the objectives of the national food policy. This is seen in light of the increasing challenges brought about by increasing population, increasing poverty, malnutrition, poor harvests, environmental degradation, decrease in potential agricultural land especially in the growth of food crops). Thus, there is a need to officially recognise and support urban agriculture as an important strategy in the revised national food policy sessional paper.

iv) A comprehensive report on the importance of urban agriculture and the proposal for the ministry to embark upon the preparation and implementation of an urban agriculture policy was recently submitted to the ministry's directorate of Agriculture and Livestock Development for discussion and further input.

- The department intends to forward this proposal for an urban agriculture policy during the stakeholder consultations at the provincial level (Mugambi, 2001). Already, certain initiatives geared towards this have already taken place. For example, the provincial agricultural extension officers have produced a comprehensive report on urban agriculture in the Nairobi province which has been forwarded to the directorate at the Ministry Headquarters for discussions and further input. Also, in-house sensitisation workshops, aimed at changing attitudes have been
held. During these sessions, the concept of urban farming, the need to recognise and provide agriculture extension services to the on-plot and off-plot/roadside farmer in Nairobi have been emphasised.

Opportunities exist in:

i. Joint research on the nature and types of urban agriculture taking place within the Nairobi province, and the role that this plays in food security, the local and national economy.

ii. Sharing of research findings on urban agriculture, and preparing a joint report on the need to include urban agriculture as a strategy in the new food policy, to be recognised under the proposed National Land Use Policy.

iii. Joint research on access, control, and use of land for urban farming by the urban poor and how their activities can be brought into streamline agriculture.

4. The Kenya Institute of Organic Farming (KIOF) - started in 1986, with the objectives of promoting organic farming as a farming method which promotes sustainable land use, as well as to advocate for recognition of organic farming as a form of agriculture in terms of the Agriculture Act.

- In its early stages, KIOF's activities were targeted towards the rural farming community. Today, KIOF's services have been in demand especially from the lower income urban population who want to grow their own food in an intensive way. Organic farming methods, such as the use of compost made from domestic waste, often lead to improved soil fertility and increased output, at a very low cost. Organic farming has become particularly popular as prices of inputs such as fertiliser have continued to rise amidst decreasing incomes.

- KIOF has been responsible for the introduction of and training farmers, including Agriculture Extension officers in organic farming and is instrumental in developing mechanisms to help generate food for the low income groups.

- KIOF has been carrying out training for various organizations such as CBOs, women groups, religious organizations, and NGOs who are supporting urban agriculture especially in Nairobi (Kayole, Kimathi,) and its environs.

Research opportunities exist in the proposed KIOF research on access to, and control of land for organic farming in the urban, peri-urban and rural areas. The proposed study will also look into gender aspects of access to and control of land.

6.0. Research Issues that Could be Addressed in Subsequent Research

1. The nature and types of urban agriculture (crop cultivation and livestock keeping) practiced by various income groups.

2. The effects of UA to the urban ecosystem, in terms of use, distribution and management of resources especially on basic services such as water.

3. The nature of land markets and sub markets for land for urban agriculture.
4. The implications of an official recognition of UA as a form of land use to the access, control, and use of urban land by the urban poor. Do the urban poor see such official recognition of their urban farming activities as an important survival strategy.

5. Legislation and by-laws currently in place affecting land use in urban and peri-urban areas, and what loop holes exist which can be exploited to support urban agriculture.

6. Future research on UA should be inclusive. Hence the need to have planners, land administrators, valuers, agriculture officers, public health officers, engineers, all involved.

7. Development of a data bank on organizations involved in, or supporting UA in Kenya for purposes of getting support for an 'urban agriculture' agenda.

7.0 Potential Partners in Future Research Initiatives:

1. Mr Samuel Owuor, Lecturer in Urban Geography, Department of Geography, University of Nairobi.
2. Ms Theresia R. Munyua, Physical Planning Officer - Environmental Management Unit, Department of Physical Planning, Ministry of Lands and Settlement
3. Tom Ondongo; Ruth Waruguru & James Maina, Forward Planning Unit - Nairobi City Council
4. Mr P.K. Mutugi, and Juliana Mutua, Strategic Planning Unit - Department of Physical Planning, Ministry of Lands and Settlement
5. Mr O.A. K'akumu and Ms Jacinta Muthoni Gitau, Lands Officers, Department of Lands, Ministry of Lands and Settlement, Nairobi.
6. Mr Michael Gachoki, Physical Planning Officer - Development Control Unit, Department of Physical Planning, Ministry of Lands and Settlement, Nairobi.
7. Engineer J.I. Onyango, Kenya Railways Headquarters, Nairobi
8. Prof. Peter Ondiege, Planner/Economist - Department of Urban and Regional Planning, and Housing and Building Research Institute, University of Nairobi.
9. Mr Andrew M. Mugambi, Nairobi Province Director of Agriculture and Livestock Development, Nairobi.
11. Association of Local Government Authorities in Kenya (ALGAK)

References


1.0 Introduction

The world population is escalating and is expected to double over the next 25 years. As more people in Africa move to the cities because of the urban pull-factors, ruralization of urban environment is happening, and Tanzania is not an exception. In Tanzanian towns, however, urban dwellers are turning urban centres into rural-like places by practicing urban agriculture (UA). Raising livestock, a major component of UA is predominant and has been associated with serious environmental damage, which is a threat to public health. Public attitude and beliefs supporting environmental protection will never hold much credence until we establish how the public specifically views their actions (existentially) in relationship to everyday environmental situation (Noe and Hammitt, 1992, p. 205).

To discuss the political economy of urban agriculture in Tanzania the paper is divided into seven sections. Section one provides an overview of the undertaking of UA globally followed by that pertaining to Tanzania. Section two examines agricultural development in Tanzania then an explication of land tenure and the evolution of land policies in Tanzania. This is followed by criticisms of the New Land Policy. Section three presents the two UA by-laws from Mbeya and Morogoro and thereafter offers shortfalls and criticisms of the by-laws. Section four gives answers as to why UA by-laws are not effectively enforced. In section five the paper explains a research proposal called the establishment of UA model projects, and section seven concludes the paper.

1.1 Overview of Urban Agriculture

Defining UA is problematic because of the varying contexts in which it takes place, the resources involved, and the people undertaking it. For instance, "Tinker (1994, p. x) defines UA as the growing of food crops and fruits and also the raising of animals, poultry, fish, bees, rabbits, snakes, guinea pigs, or other stock considered edible locally." Smit et al. (1996, p. 1) give a broad definition "as an industry that produces, processes, and markets food and fuel.....on land and water dispersed throughout the urban and peri-urban area....." Yet, Mougeot (1994, p. 1) defines UA as the "production of food and nonfood plant and tree crops and animal husbandry (livestock, fowl, fish, and so forth), both within (intra-) and fringing (peri-) built-up urban areas." We define UA as the raising of animals such as dairy cattle, poultry, pigs and goats, and growing of vegetables and field crops in areas designated urban by the United Republic of Tanzania under the Town and Country Planning Ordinance CAP. 378 of 1956 reviewed in 1991. The aforementioned definitions show that UA is diverse, omnipresent, thriving, and sometimes a profitable activity in cities all over the world, both for low- and high-income people (Bakker et al., 2000; Deelstra, 1987; Gutman, 1987; Kleer, 1987; Yeung, 1988; Bills, 1991; Smit and Nasr, 1992; van der Bliek, 1992; Bohrt, 1993; Gardner, 1994; Smit et al., 1996; Cosgrove, 1998; Foeken and Mwangi, 1998; Quon, 1999). UA activities vary enormously, both within and between countries, as well as throughout urban socio-economic status.
UA is practiced for different reasons and purposes than in developing countries. Studies suggest that a wide range of people are engaged in UA for different social, economic, and cultural reasons (Wade, 1987; Freeman 1991; Mlozi et al., 1992; Smit and Nasr, 1992; Diallo, 1993; Egziabher et al., 1994). A decade ago, O'Connor (1983) perceived UA to be an important part of small-scale enterprises. For instance, in Africa, UA is for food, economic survival and is practiced everywhere (Khouri-Dagher, 1986; Ngwa Nebasina, 1987; Rakodi, 1988; Gbadegesin, 1991; Freeman, 1991; Drakakis-Smith, 1992; Mlozi et al., 1992; Mlozi, 1995a, 1995b, 1996, 1999; Maxwell and Zziwa, 1992; Rogerson, 1993; Drakakis-Smith et al., 1995; Mbiba, 1994; Binns and Lynch, 1998). Farming in urban and peri-urban areas in contemporary African cities takes a variety of forms reflecting land access, water availability, and the potential for bringing resources into the production process (Ellis and Sumberg, 1998, p. 214).

1.2 Urban Agriculture in Tanzanian Towns

In Tanzania, people of all SES are now undertaking UA everywhere in towns and cities (Mosha, 1991; Mvena et al., 1991; United Republic of Tanzania, 1991; Mlozi et al, 1992; Sawio, 1993; Mlozi, 1994, 1995a, 1996, 1997a, 1997b, 1999). The rise of UA, however, has positive and negative sides, especially the raising of livestock. The rise of urban agriculture, has its negative side. It is increasingly recognized that it has "negative impacts on the population and the urban environment and poses new problems for planning" (Rogerson, 1993, p. 37). In Tanzanian cities, urban animal agriculture includes the raising of dairy cattle, chicken for eggs and broiler meat, goats and pigs of which most of their activities are damaging the urban environment. Several studies on urban agriculture show that the practice of urban animal agriculture in most Tanzanian cities is for poverty alleviation. For instance, in the city of Dar es Salaam, Mlozi et al. (1989) found that in 1985 there were 3,318 head of dairy cattle and they grew to 7,105 in 1988. In 1993, Mlozi (1995) found that the dairy cattle in the city had increased to 9,081. Several studies (Sawio, 1993; World Bank, 1994; Mlozi, 1995b, 1996) and evidence gathered in Dar es Salaam, Mbeya and Morogoro cities suggest that some urban dwellers increased dairy cattle mainly to lessen the economic hardship.

Urban dwellers' real income decline is a paramount reason for the increase of UA. Studies show that the decline of people's real income is severe among people in medium-high and high quality housing areas (Mans, 1994; Bukuku, 1993; Maliyamkono and Bagachwa, 1990). It is in these areas that most urban animal agriculture that damages the urban environment is practiced in spite of their elitism (high SES, high formal education attainment, have economic and political power). Few people in low-income areas undertake urban animal agriculture that causes serious damage on the urban environment. Few animals are raised because of small sizes of plots. All these activities of raising animals are to alleviate poverty. Recent studies (Mlozi, 1995b, 1996; Sawio, 1993) support this contention as they show that poverty alleviation is the paramount reason for raising animals in the urban centres. Levels of poverty differ among urban dwellers who live in four different residential areas based on the income (low, medium, medium-high, highest).

In urban areas, grouping of the chief residential areas by plot-size densities show four distinct groups. (1) The low-density areas with big plot-sizes typically measuring 4640 m². They are inhabited by people of the highest SES who raise livestock that include crossbred dairy cattle, exotic crosses of chicken for eggs and broiler meat, and a few goats. These
people also grow vegetables and field crops. (2) In between are the low- and medium-density. (3) The medium density areas measure from about 1750 to 2400 m². Here, people of quasi-medium SES or mid-level status live, they raise fewer livestock and cultivate crops in smaller plots than the above group. (4) There are those in the medium-density areas with plot sizes measuring about 900 m². Here, people of medium SES live and raise fewer livestock and crops compared to groups (1), (2) and (3) above. (5) There are the high-density areas in which plot sizes measure about 300 m² and in the majority. These are inhabited by people of lower SES who usually do not raise livestock such as dairy cattle, but rely on raising few improved laying and broiler chicken and growing few stands of crops. However, some urban dwellers can have a house plot in the unplanned 'squatter' areas of a town with different plot-sizes as described in the five categories above, and their UA activities would vary considerably.

2.0 Agricultural Development in Tanzania

Land is the backbone of agricultural development in Tanzania. Agriculture is the main economic activity in a country in which over 80% of the population live in rural areas. Small scale subsistence and unsustainable agriculture still dominates the Tanzanian economy and industrial production is small, with a relatively slow growth rate.

During the pre-colonial times, land tenure in then Tanganyika was based on the traditional law and culture. Each ethnic group had chiefs and headmen controlling and allocating land to members of the tribe. During the colonial rule the same system of land allocation continued at the local level with some exceptions. The German administration introduced plantation agriculture altering the traditional land tenure system. Prime land was allocated in freehold, mostly to settlers (MULHUD, 1995). In 1895, the German administration passed the Imperial Decree regarding the creation, acquisition and conveyance of land whereby all land in Tanganyika was declared as Crown Land vested in the German Empire. This decree, among other things, facilitated the alienation of land from tribal areas to give way for the establishment of plantation agriculture. During this era, urban and peri-agriculture did not exist because towns were small.

Then Tanganyika became a British protectorate in 1919 after the end of the First World War, and enacted the Land Tenure Ordinance Number 3 of 1923 (commonly referred to as Land Ordinance Chapter 113). This declared all land in Tanganyika as public land and introduced the concept of "rights of occupancy". According to this act, rights over or in land were placed under the control of the British governor to be held, used or disposed of as rights of occupancy for the benefit of the indigenous people of Tanganyika (MULHUD, 1995). In 1928, the British redefined "the right of occupancy" to include the title of native community lawfully using or occupying land in accordance with customary law. Contrary to this, the Village Land Act and the Land Act of 1999, redefine "the right of occupancy" as a title to the use and occupation of land and includes the title of a Tanzanian citizen of African decent or a community of Tanzanian citizens of African decent using or occupying land in accordance with customary law (URT, 1999). This clause has positive implications for peri-urban agriculture because urban dwellers can acquire and own land for farming in the suburbs.

Immediately after independence in 1961, the new government passed the Free Titles Conversion and Government Lease Act of 1963 through which all freehold titles from the colonials were converted into leaseholds. The traditional functions of the Chiefs, which
included the allocation of land were rendered obsolete by The African Chiefs Ordinance (Repeal) Act. No. 13 of 1963 which officially abolished Chieftaincy in Tanzania. Later in 1969, the leaseholds were further converted into Rights of Occupancy. Also, the Act made it compulsory for land owners to pay land rent to the government and empowered the President of Tanzania to revoke any right of occupancy whenever it was considered necessary to do so. This was necessary for the government to have more control over land because the freehold titles entailed the exclusive possession of land rights in perpetuity. Here, the owner was allowed to subdivide the land or lease it again, there were no land development conditions and the government had no right to interfere with the legal occupation of the land. For urban agriculture, this was a positive move because low-income urban dwellers could use the undeveloped land, open space to grow crops, a case of *amaranthus* vegetable growers in the City of Dar es Salaam. In peri-urban areas, urban dwellers went out and cultivated unused land (i.e. sisal estates in Dar es salaam, Morogoro, Tanga) that belonged to foreigners most of whom had died or their relatives were outside the country.

In 1992, the government passed another act to abolish all customary land tenure rights and encouraged village land allocations by the state, which issued title deeds to demarcated village land. As such, most public land can be leased to villages by the state and the villages can then allocate the land to individuals. Also, this has helped most government elite to survey and obtain title deeds on tracks of land in peri-urban and rural areas sometimes without the consent of villagers living on the surveyed land. As NCSSD (1995) notes that this land ownership situation has resulted in insecurity of tenure especially in rural areas, partly because of the bureaucratic nature of village land demarcation and titling procedures. However, in urban areas statutory rights of occupancy for a specific period of time is the most common form of tenure.

In 1995, the government yet issued another policy called "The New Land Policy" and addresses some key problems related to land in Tanzania. These include, first, development of secure and stronger property rights on land for small and medium holders. Second, recognition or establishment of property rights over natural resources on public lands. Third, modification of the present system of government land allocation so as to recognize the rights of groups that use the uncultivated land--especially pasture and natural woodlands and reflect the market value of land. Pertinent to urban and peri-urban agriculture, the policy clearly stipulates that active land markets exist in urban and many rural areas. Also, landless exists in peri-urban and other densely populated areas, and that village titles are not legally mortageable and subtitles will not be able to serve as security for credit because there is no market in those titles. It further reminds that village councils should respect customary rights in making decisions on land use.

In 1999, the government issued a Village Land Act and important for peri-urban agriculture are four ways that urban dwellers can own land located in a village. First, through the "right of occupancy" as earlier defined. Second, through the "deemed right of occupancy" meaning the title of Tanzanian citizen of African descent or community of Tanzanian citizens of African descent using or occupying land under and in accordance with customary law. Third, through the "derivative right" meaning that a right to occupy and use land created out of a right of occupancy and includes a lease, sub-lease, a licence, a usufructuary right and any interest analogous to those interests. Fourth, through the "disposition" meaning that in relation to right of occupancy any sale, mortgage, transfer, grant, partition, exchange, lease, assignment, surrender or disclaimer and includes the creation of an easement, usufructuary
right or other servitude or any other interest in a right of occupancy or a lease and any other act by an occupier of a right of occupancy or lease whereby his/her rights over that right of occupancy or lease are affected and includes an agreement to undertake any of the disposition so defined.

Also, the government enacted the Land Act of 1999, and among other things, pertinent to urban agriculture, it gives clear definitions of peri-urban and urban areas. Urban area is defined as an area within the jurisdiction of an authority established or deemed to have been established under and governed by the Local Government (Urban Authorities) Act, 1982 through Act No. 8 of 1982, and Local Government (District Authorities) Act, 1982 through Act No. 7 of 1982. Peri-urban area is defined as an area which is within a radius of ten kilometres outside the boundary of an urban or semi-built up area or within any large radius which may be described in respect of any particular urban area by the Minister (URT, 1999). The Act fully recognizes the presence of peri-urban agriculture by defining "unexhausted improvement" on the land. "Unexhausted improvement" means any thing or any given quality permanently attached to the land directly resulting from the expenditure of capital or labour by an occupier or any person acting on his behalf and increasing the productive capacity, the utility, the sustainability of its environmental quality and includes trees, standing crops and growing produce whether of agriculture or horticulture nature. Similar to other past Acts, here too all land in Tanzania is public land vested in the President as trustee on behalf of all citizens.

It has further been noted that the existing land legislation and institutional set up for land tenure are inadequate to deal with dynamic changes, such as the change over to a market-oriented economy, privatization, increased urbanization and population increase (NCSSD, 1995). Incentives for more efficient use of resources, including investment for land improvement and development are lacking. For example, in urban areas most urban dwellers farming in the open space, undeveloped areas cannot develop them because the land does not belong to them. Those wanting to farm in peri-urban areas where they face many problems such as lack of developed infrastructure, theft, lack of credit, presence of conflicts with villagers, and lack of government support. To date, the main feature in the Tanzanian land tenure system is state ownership of land. All land is controlled by the state which in turn grants rights of use and occupancy to different segments of the society including individuals, villages, companies, parastatal organizations and various investors. Formal land markets are, therefore, non-existing (NCSSD, 1995).

Much of the land in rural areas is "owned" under the customary land tenure system and the village title deeds where land administration was initially controlled by local chiefs and later on by village governments. However, in principle, the land is still owned by the state and the state can revoke customary ownership rights and the village title deeds. In summary, land tenure during the colonial period reflected the interests of colonialists to get land and thus it was a justification of force and not rights/justice. After independence, the post-colonial state inherited and further sharpened the authoritarian character of the land law. The law was not meant for the construction of legitimacy; rather its main function was to control and regulate.

2.2 Criticisms to the New Land Policy

The New Land Policy continues to vest the ultimate ownership and control over all lands in the President as has been the case since the early colonial period, during which time it
allowed the colonialist to alienate "native" land (Monela et al., 1999). The effect of this is that the ultimate owner of all lands is the President and not the people. This has negative implications for peri-urban agriculture because if the President sees fit can revoke land title deeds to urban dwellers farming in peri-urban areas. In reality this means that the executive arm of the state monopolizes all control of land and has ultimate decision making over the administration, allocation and disposition of all lands in the country.

The executive arm, through the Ministry of Lands and its bureaucracy have the exclusive power to make all important decisions over the allocation, use and development of land without being required by law to consult people's representative organs such as the National Assembly and Village Assemblies. Also, the state monopoly of radical title will significantly undermine democracy as a whole and transparency in government administration thus creating conditions for continued abuse of power, corruption and lack of public and open accountability. Some of these issues are common in urban building plots where double allocation is common undermining UA activities in the undeveloped plots.

Although the New Land Policy claims to address gender equality, its procedures in reality discriminate against the female gender in particular among small holder farmers and pastoral communities on the issue of ownership and control over land. Also, it enables male owners with certificates to sell off their land or use it as a collateral without consulting all adult family members, be they male or female. This has negative effects on the extent to which peri-urban agriculture can be undertaken and its long-term benefits to families. The policy does not give equal participatory rights to women in important decision making process over land, an in the dispute settlement machinery. Furthermore, The New Land Policy stipulates three stages of dispute-settlement, that is, the primary court, the district court and the land division of the High Court. However, the proposed machinery of settling land disputes is not significantly different from the existing one in which most people have lost confidence because of five main reasons. First, decisions taken are always against the weak and the downtrodden. Second, It takes too long and is inefficient. Third, It does not hold hearings in places where the disputed land is situated, and conducts its hearing in a language that is incomprehensible to most people. Fourth, is an expensive affair and therefore inaccessible to the large majority. Fifth, it breeds corruption and nepotism. All these issues appear to affect the efficient undertaking of urban and peri-urban agriculture in Tanzanian towns, hence affecting the well being of the people.

The land policies reviewed above provide us an understanding that the use of land in Tanzania has been a complex issue and continues to be so. Recognizing the usefulness of the potential conflicts that could happen in urban areas, in 1928 the British colonials enacted the first urban by-laws, and among other things, the ones regulating the growing of crops and raising livestock in urban areas. First, the by-laws were enacted to prohibit people of African descent to grow crops and raise livestock in urban areas. Second, were to prevent urban agriculture activities in urban areas, which increased the presence of malaria-causing mosquitoes, especially crops that are one metre high. Third, were to maintain a cleaner urban environment and sustain the urban aesthetic by preventing people of African descent from growing crops in most of the towns' open space. After independence, most of these by-laws became moribund and the government encouraged urban dwellers to undertake UA. But, later most town and municipal councils found it necessary to revive the by-laws to regulate UA for their smooth running of towns. As the proceeding section indicates the current UA by-laws despite several revisions have not been effective in regulating UA activities. The next sections, therefore, presents the two
types of by-laws on UA from two towns (Mbeya, Morogoro), one for regulating crop cultivation and the other for livestock raising, and thereafter presents an analysis of their shortcomings.

3.0 Urban Agriculture By-Laws

Two types of by-laws of two municipalities (Mbeya, Morogoro) for regulating crop cultivation (Mbeya) and livestock (Morogoro) are provided to allude the extent to which government support is strong for UA. Similar by-laws are present in all other Tanzanian town councils and municipalities, and likewise UA by-laws are contravened. However, most urban dwellers break by-laws and town/municipal councils have not effectively been able to enforce them. The next section points out salient clauses that most urban dwellers break the by-laws.

3.3.1 Regulations of crop cultivation

By-law No. 3 reads "No person shall plant or cultivate any crops in any of the areas indicated in the 1st schedule appended to these by-laws." Most urban dwellers cultivate and plant crops such as maize, beans, vegetables in these areas making the whole exercise a mockery. Also, for the case of by-law No. 6, section 1, No. 7, section 1, 2 (ii), and (iii) urban dwellers break, and councils/municipalities cannot enforce them. By-law No. 8 is not adhered to and councils cannot enforce them as stipulated. Some urban dwellers use improved agricultural practices not because of heeding the by-laws but due to them having money to buy agricultural inputs (fertilizers, seed, insecticide, fungicide). Although UA by-laws are there and clearly stipulate the penalties for defaulters, rarely they are implemented basically because of the Tanzanian socio-cultural-political milieu. For example, it is common to see crops of all varieties planted in the town and municipal administrative wards, and along road reserves, river banks, public open space including children play-grounds, and surveyed plots rendering the by-laws "toothless." Also, by-laws do not specify the type of crops and size of plots that can be put under crops in urban areas. Urban planners and policy makers have not utilized the available research findings on UA because of lack of organized efforts to educate them.

3.3.2 Regulation of livestock activities

The By-laws define animals as those consisting of cattle, donkeys, goats, horses, mules, pigs and sheep, but leave out improved chickens, local chickens, pheasants and ducks most of which are now raised in urban areas. By-law No. 3 reads "No person shall keep any animal within the urban area unless he shall have first obtained from the Town Director a permit in the form of Schedule "A" hereto." Most urban dwellers keep animals in urban areas without having permits. Also, by-laws Nos. 5 and 6 are never enforced, which require urban dwellers to remove manure, liquid filth, and other animal waste. The new by-laws do not specify the number and type of animals that urban dwellers should raise in the different density areas. Some of these caveats require the kind of research that this paper advances.

4.0 Why are Most UA By-Laws not Enforced?
This is a complex question that requires an analysis of complex situation of the country and its urban inhabitants. In Tanzania, several urban agriculture studies show that the government and the city council explicitly condone the undertaking of UA for several reasons (Mosha, 1991; Mvena et al., 1991; Mlozi, 1995a, 1996; Tesha, 1996). First, studies show that most people raising livestock are senior government and the ruling party officials and break the city councils' by-laws with impunity. Second, most people raise livestock to earn money from milk, eggs and broiler meat sales (Bongole, 1988; Sawio, 1993; Mlozi, 1995b; Mvena et al., 1991). This income is greater than average annual wage that a person earns from formal employment (Mlozi, 1995a). Mlozi also found that other reasons for undertaking urban animal agriculture was to get manure. In the city of Dar es Salaam, most of the manure was sold to people growing *mchicha* and other people applied the manure in their small household vegetable plots and in the peri-urban farms.

For example, the importance of dairy cows in supporting the urban socio-economic problems cannot be overemphasized. For instance, Mlozi (1995, 1996) found that in the city of Dar es Salaam, of the 616 responses, 341 (54.5 percent) indicated that people undertook UA (dairy cows, chicken, few crops) because of economic hardship. The study found that a person milking only four cows earned an estimated annual profit of T. Shs. 876,000 (US$ 1825). At the end of 1993, this income was 12 to four times more than the annual average salaries of low- and high-income earners. Also, Mlozi found that during 1993, in urban wards of Dar es Salaam, estimated annual profit from milk sales produced by 5,449 cows was T. Shs. 1.2 billion (US$ 25 million). The huge profits earned from keeping livestock made most people ignore the aspects of environmental damage. In another survey of 174 university students at Sokoine University of Agriculture, Mlozi (1999) found that on an average of 76.5 and 61.4 percent of the interviewees agreed that urban dwellers undertook urban animal agriculture because of the reasons nested at the individual and government levels respectively. To answer the above posed question the following section examines the salient four levels at which reasons for undertaking UA reside.

4.1 Government Level

Government policies have partly contributed to the emergence and intensification of UA in urban areas and its aftermath of urban environmental damage. During the 1970s and 1980s, the government faced with a poor economy issued policies encouraging people to undertake urban agriculture. This was for urban dwellers to attain food self-sufficiency, to grow food to offset sky rocketing inflation. Government and political leaders time and again told urban dwellers to raise livestock and produce their food in their backyards and other open space. Policies behind this included *Siasa ni Kilimo* (Politics is Agriculture) of 1972 and *Kilimo cha Umwagiliaji* (Irrigated Agriculture) of 1974. Others were *Kilimo cha Kufa na Kupona* (Agriculture for Life and Death) of 1974/1975 and *Mvua za Kwanza ni za Kupandia* (First Rains are for Planting) of 1974/75. Yet others included the National Economic Survival Programme (NESP) of 1981-1982, the National Food Strategy of 1982, the National Livestock Policy (NLP) of 1983, the National Agricultural Policy (NAP) of 1983, and the Structural Adjustment Programme (SAP) of 1983-1985, and the National Economic Recovery Programme (ERP) of 1986-1990s.

4.2 Ministerial Level: Unevenness of Extension Services
At the ministerial level, UA in urban areas has been partly encouraged by agricultural extension or non-formal education offered to urban dwellers. Agricultural extension (livestock and crops) "is an educational with a dual goal: it brings information and technology to farmers and teaches them how to use it to improve their productivity; and it enables farmers to specify their own needs and provide feedback on the effectiveness of extension in meeting them" (Saito and Weidemann, 1990, p. 1). In the 1970s, the government in a bid to fulfill the above policies, set up an urban agriculture extension service under the Ministry of Agriculture and Food (MAF). Currently, MAF uses its urban-based Agriculture Extension Officers (AEOs) to promote the raising of livestock and growing of crops in towns. AEOs visit urban dwellers and impart modern skills and knowledge (nonformal education) about agriculture (livestock and crops) so that their production will increase.

4.3 Town/municipal/city Council Level

The council's laxity in enforcing the bylaws has partly encouraged most urban dwellers to raise livestock in urban areas. It was early in the 1980s, when government policies of encouraging urban agriculture, especially livestock keeping, started to have negative effects on the operations of most urban councils and the physical urban environment. In 1982, to curb the latter, town, municipal, and city councils with government approval re-enacted the moribund bylaws of 1949 for controlling animals in their urban areas. Also, most councils have inadequate fiscal and human resources to apprehend defaulters.

The lack of city communities' initiatives to rise up and protest against urban individuals who keep livestock has also contributed to the environmental degradation. There is little evidence of group resistance from neighbours and/or communities. The 'Not in My Backyard' (NIMBY) attitude (Brion, 1991) and the primary assumption that public opposition would be a main impediment to people keeping livestock that might damage environments of others, is not evident. Also, the availability of markets for the products encourages UA activities in towns. This is partly due to the continued rise in demand for UA products. This is triggered by an annual 2.8 percent urban population growth both from the rural-urban migration, and internal growth. Livestock products (milk, eggs, broiler meat) are filling a need. UA products are sold to consumers and the town institutions (schools, hotels, hospitals, bars, cafeterias, and restaurants) and these are explicitly encouraging UA activities. For instance, Mlozi (1999) found that of 174 interviewees surveyed at SUA, 45.7 percent indicated that urban dwellers undertook urban animal agriculture because reasons nested at the town/municipal/city councils. Mlozi and Msangi (1999) reported similar findings.

In the towns the intensity theory and the urban industrial hypothesis both support the proliferation of UA activities. The intensity theory, developed by von Thünen (Kellerman, 1983), predicted that there is more intensity of input use in agricultural areas that are closer to market centres. The urban industrial hypothesis (Shultz, 1953) holds that the degree of economic organization near the centre of the matrix economic development offers opportunities that tend to enhance agricultural production possibilities.

4.4 Individual Level: Meeting Human Needs

Mlozi (1995) found that most urban dwellers in the city of Dar es Salaam were aware of the urban environmental damage due to their animals and yet continued to raise them partly to
meet their human needs. People of higher status vigorously pursue this motive despite the fact that they are more aware of these damaging effects. Maslow (1954) maintains that people cannot be concerned about the higher human needs for recognition (status), achievement, and self-realization until the lower basic needs for survival, safety, and belonging have been met. Here, high human needs include paying for 'superior' social and economic goods such as buying a reconditioned car or pick-up truck, building a 'modern house', buying a video recorder or a television set.

For instance, Mlozi (1999), surveyed 174 students at SUA found that an average of 131 (76.5%) mentioned that urban dwellers were encouraged to raise livestock in towns because of reasons that resided at the individual level. Of the ten reasons at the individual level, an average of 125 (90.1%) interviewees mentioned the six reasons as the ones encouraging urban dwellers to raise livestock. These were, in order of importance: to earn money to subsidize salaried income; to earn money to buy food for the family; to earn money to subsidize income from informal sources; to earn money to pay for children’s school fees; and to earn money to create future savings. With the exception of one reason, i.e. to provide food for the family, the remaining five reasons for undertaking urban animal agriculture were around the aspect of earning extra money implying that most university students agreed that urban dwellers undertook urban animal agriculture to mostly earn money. These findings are congruent with those of Mlozi and Msangi (1999), Mlozi (1995a, 1996, 1997), Sawio, 1993; Sumberg, 1999) who found that raising livestock in Tanzanian towns was important because most urban dwellers earned money from the activities. This aspect has made it difficult for town councils/municipalities to enforce by-laws for mitigating UA in towns.

5.0 Specific Research Issues

5.1 Proposal for UA Model Projects

5.1.1 Rationale for UA Model Projects

In Tanzanian towns, urban dwellers will continue to practice UA because of the prevailing socio-economic, cultural and political situation, and policies condone the practice. Now, urban agriculture is moving into the peri-urban areas because of the retirees who resided in the urban areas. Here, too the Land and Village Acts of 1999 support activities of urban and peri-urban agriculture respectively. Urban agriculture is not destructive per se and this has partly helped the thinking of urban planners and policy makers to formulate policies, laws and guidelines for supporting UA and peri-urban agriculture. But, the current urban agriculture is not environmentally friendly, sustainable and destroys the ecosystem. Urban agriculture has several advantages that include the provision of food, income, jobs, recreation and leisure. Other advantages include learning opportunities, and efficient resource use.

These UA models will be small projects because of the nature of urban agriculture. The model projects will rely upon the urban dwellers available space/buildings/time and resources. The projects could also be set in the urban and peri-urban localities. Ideally, these projects will be set in the urban areas, in spite of their densities. Both livestock and crop model projects will be initiated. Because of the lack of space and the population densities, small livestock model projects (chicken, rabbits) will be encouraged in the medium and high density areas. Large livestock model projects (dairy cattle, goats, pigs,
sheep) will be encouraged in the low and quasi-medium density areas. Crop model projects (field crops, vegetables) will be encouraged in all urban density areas, but urban dwellers' preferences will be considered.

5.1.2 Philosophy of UA Model Projects

The philosophy of the UA Model Projects is to develop technologies for UA through:

a) Examining the role women, youth, retired, and the formally unemployed urban dwellers play in UA with a view to improving their activities through the use of urban resources to maximize their income.

b) Assessing ways for increasing urban food production on the household plots, surveyed but the not built-up areas, in the public open space, not surveyed open space, in the wasteland and in the valleys.

c) Educating town planners, councilors, policy makers and the public on policy formulation affecting UA for economic benefits of the activities.

d) Efficiently looking for ways of disposing of urban wastes (i.e. through recycling) from UA activities for the beautification of towns.

e) Fostering learning among urban dwellers about UA with a view to improving the urban environment using the Urban Agriculture/Livestock Extension Officers.

f) Convincing urban dwellers, town planners and policy makers that UA activities can exist in urban areas without damaging the urban environment.

g) Determining the economic number and type of livestock to raise in different density areas within urban areas.

h) Assessing the effective and efficient ways that Urban Agriculture/Livestock Extension Officers can use to impart knowledge and skills to urban dwellers about UA.

i) Determining the economic combinations of types of livestock and crop varieties to grow in different density areas in urban areas.

The setting of UA model projects would be on two areas:

a) House plots where one can raise crops/cows/chickens profitably, and or grow vegetables/field crops profitably.

b) On open space and in the valleys within the town/city.

6.0 Potential Partners

Potential partners in the model projects would be urban dwellers who are currently undertaking UA and those willing to join through availing their space/buildings/time and resources. Other partners would be foreign research centres, Non-Governmental Organizations, town councils, and universities (i.e. Sokoine University of Agriculture, University of Dar es Salaam). Also, community based organizations would be approached and asked to help the projects. The government of Tanzania would be asked to render help through, among others, the Tanzania Commission for Science and Technology.

7.0 Conclusion

Urban agriculture is diverse, omnipresent, thriving, and sometimes a profitable activity in cities all over the world, both for low- and high-income people. In Tanzania, people of all SES are now undertaking UA everywhere in towns and cities. Here, urban animal agriculture includes the raising of dairy cattle, chicken for eggs and broiler meat, goats and
pigs of which most of their activities are damaging the urban environment. Several studies on urban agriculture show that the practice of urban animal agriculture in most Tanzanian cities is for poverty alleviation. Urban dwellers' real income decline is a paramount reason for the increase of UA. Studies show that the decline of people's real income is severe among people in medium-high and high quality housing areas. It is in these areas that most urban animal agriculture that damages the urban environment is practiced in spite of their elitism (high SES, high formal education attainment, have economic and political power). Few people in low quality housing areas undertake urban animal agriculture that causes serious damage on the urban environment. Few animals are raised because of small sizes of plots.

Land is the backbone of agricultural development in Tanzania. Agriculture is the main economic activity in a country in which over 80% of the population live in rural areas. Small scale subsistence and unsustainable agriculture still dominates the Tanzanian economy and industrial production is small, with a relatively slow growth rate. During the pre-colonial times, land tenure in then Tanganyika was based on the traditional law and culture. Each ethnic group had chiefs and headmen controlling and allocating land to members of the tribe. During the colonial rule the same system of land allocation continued at the local level with some exceptions. The German administration introduced plantation agriculture altering the traditional land tenure system. Then Tanganyika became a British protectorate in 1919 after the end of the First World War, and enacted the Land Tenure Ordinance Number 3 of 1923 (commonly referred to as Land Ordinance Chapter 113). This declared all land in Tanganyika as public land and introduced the concept of "rights of occupancy".

Immediately after independence in 1961, the new government passed the Free Titles Conversion and Government Lease Act of 1963 through which all freehold titles from the colonials were converted into leaseholds. Later in 1969, the leaseholds were further converted into Rights of Occupancy. In 1992, the government passed another act to abolish all customary land tenure rights and encouraged village land allocations by the state, which issued title deeds to demarcated village land. In 1995, the government yet issued another policy called "The New Land Policy" and addresses some key problems related to land in Tanzania. In 1999, the government issued a Village Land Act and important for peri-urban agriculture are four ways that urban dwellers can own land located in a village. Also, the government enacted the Land Act of 1999, and among other things, pertinent to urban agriculture, it gives clear definitions of peri-urban and urban areas. Much of the land in rural areas is "owned" under the customary land tenure system where land administration was initially controlled by local chiefs and later on by village governments. However, in principle, the land is still owned by the state and the state can revoke customary ownership rights. The New Land Policy continues to vest the ultimate ownership and control over all lands in the President as has been the case since the early colonial period, during which time it allowed the colonialist to alienate "native" land. The effect of this is that the ultimate owner of all lands is the President and not the people.

Presentation of two types of by-laws on UA from two towns (Mbeya, Morogoro) for regulating crop cultivation and the other for livestock raising show the extent of government and town and municipal councils support for UA. However, the by-laws are partially enforced. Reasons for not to fully enforce the by-laws reside at four levels: government, ministerial, town/municipal council, and the individual. To address the political economy of urban agriculture in Tanzania, a research proposal for establishing
UA model projects is advocated. The UA models will be small projects because of the nature of urban agriculture. The model projects will rely upon the urban dwellers available space/buildings/time and resources. The projects could also be set in the urban and peri-urban localities. Ideally, these projects will be set in the urban areas, in spite of their densities. Both livestock and crop model projects will be initiated.

References


A. Nuwagaba and G. Atukunda

Abstract

The important thread that runs through this paper focuses on the role of urban agriculture in urban and Peri-urban areas in Uganda. The paper commences with a historical perspective of urban farming, the changing character of urban farming and the micro and macro-economic rationality of farming activities to the overall wider urban economy.

The paper proceeds with the nature of the urban land markets both formal and informal that are available for urban farming activities. The paper discusses the patterns of land access for farming and the urban regulations that provide for urban farming. It is however argued that land accessibility constitutes to be the most profound impediments to the growth of urban agriculture. The next section deals with the contradictions in African City formation, the role of urban planning and the growth of farming activities within the context of the planning and urban standards of a proverbial modern city. It is contended that the formation of a modern European city is dialectly different from the unfolding of an African City. This implies the need for revisiting the planning principles and values of an African city based on African mores and value systems. The paper asserts that urban agriculture constitutes both Micro and Macro economic rationality, which makes an important departure from a perception of urban Agriculture as a survival strategy. The farming is engaged in by both the urban poor as well as the middle class civil servants and business population hence the need for more attention to the growth of this sector. However, urban farming is still construed in some quarters as an ‘illegitimate’ economic activity in the City. This misconception is easily discernible from the fact that urban agriculture still lacks explicit legal backing but despite all these impediments, the farming activities have continued to grow. The paper closes with identification of the research gaps and proposition of major research issues for urgent investigation.

1.0 Introduction

The paper presents the crucial role of urban agriculture in harnessing economic development process. It is divided in seven chapters commencing with urban agriculture on a global perspective. Borrowing heavily from various cities in the World, the paper presents urban farming as a critical resource in the wider urban economy. In Uganda, urban farming fills the void that was left by the dearth of the formal economy in early 1970s and early 1980s. Perhaps no where in Uganda is the land issue as sensitive as in Buganda region and especially in Kampala City. While the issue of land is admittedly a

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7 This region holds Kampala, the Capital City of Uganda. The Executive head or King of this region is referred to as the Kabaka.
‘hot-potato’ throughout the country, the case in Kampala city boarders on the sentimental. The reasons for this phenomenon are easily discernible from the historical perspective of the Buganda land management regime. The paper illustrates that urban agriculture is a progressive process, which needs integration in urban development planning. The major research issues are identified and recommendations for research presented.

1.1 Land Management and Tenure

Before the colonial government advanced in Uganda, the customary tenure system was the prominent system of land management. With the advent of the colonial administration, there occurred a structural change in land administration. The major structural change took place in Buganda region where the Kabaka (king) entered the famous 1900 Buganda agreement with the colonial state that saw the structural transformation of land rights among the three parties; the Buganda peasants, the King and his royal aristocrats and the Colonial state. The major elements of the agreement were the subdivision of all land in Buganda into crown land and Mailo land. Crown land was gazetted and reverted to the British Crown and in essence to the colonial government. Mailo land, on the other hand, was dished out in form of freehold to the kingship, the chiefs and some notables under the mailo system (Nuwagaba A and Kisamba-Mugerwa 1993).

The mailo holders acquired title certificates including land parcels (hibanjia) occupied by peasants became tenants. These developments were later enshrined in the subsequent land laws e.g. 1903 Crown Lands Ordinance that allowed the colonial state to acquire any land for government purpose. Similarly, the ‘Busulu’ and ‘Envujjo’ law was introduced where the ‘tenants’ were required to pay Busulu (taxes) and Envujjo (part of crop harvest) to the new landlords.

The immediate implication of the structural transformation of land management was that land effectively turned into a commodity. The commoditisation of land meant that land parcels could effectively be exchanged for money at the will of the individual holding the land rights. At the same time, the structural change meant the emergence of a landless class composed of tenants operating at the mercy of the newly acquired landlords.

In some areas, the peasants-turned-‘tenants’ did not know their new landlords as some land parcels were allocated to persons hailing from areas different from those of the so-called tenants. It is mainly this factor that gave rise to the concept of ‘absentee landlords’. This means that the landlord holds the ownership of a particular land parcel usually through holding a land title. However, the tenant does not own a land title for the land he/she occupies. This is the central problematic of what has been termed the ‘land management impasse’ in Uganda. The implication for this impasse has been the failure to develop the land effectively hence stifling the rapid growth of activities such as urban farming.

Until 1968, Kampala and Mengo were two separate municipalities. Kampala was the commercial capital of the former Uganda Protectorate largely planned and built by the

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8 The land was allocated in Square-mile blocks hence the word mailo is a Luganda vernacular configuration of the English word mile.

9 Bibanja holders-Which literally means land rights but without registered title of a land parcel.
colonial power; while Mengo was the capital (Kibuga) of the Buganda Kingdom. In Mengo, mailo tenure prevailed (constituting approximately 60% of the total land area (Nuwagaba A and Kisamba-Mugerwa 1993) while Kampala largely consisted of Crown land. Crown land was converted to public land under legislation enacted just prior to independence in 1962. Crown land reverted under the jurisdiction of the Uganda land Commission. The Uganda land commission was given the mandate to lease out such land parcels for 99 years. Similarly, a large part of this crown land reverted to local urban authorities, which also were given the mandate to lease out the land parcels for 49 years.

The other forms of tenure constitute freehold- a form of private land, which is held under the jurisdiction of institutions especially religious establishments and other non-governmental institutions. As a result of this tenure difference, Kampala was subjected to deliberate planning while Mengo was undergoing un-orderly development with holders of bibanja rights on mailo land sub-dividing them into plots for new tenants. The rapid un-controlled sub-division of mailo holding in Mengo was banned in 1960.

Since independence in 1962, there have been various changes in legislation and land management regimes in Uganda including the 1975 Land Reform Decree but the current land management, tenure and legislation do not deviate sharply from the previous arrangement. Despite the 1975 declaration that all land was to turn into public property, the Uganda Land Commission continued administering two files; the Mailo (free hold) file and the Leasehold (public land) file (Makerere Institute of Social Research 1994).

The major reason for this apparent defiance was the political volatility of the appropriation of land from the ‘bonafide’ private title owners to the government (Nuwagaba 1997). In 1964, government enacted the local urban Authorities Act, which mandated Kampala City Council (KCC) with the sole authority to oversee development control within the city. The major issue of concern here is that the city took on the responsibility for city planning and allocation of land leases of publicly owned land. It is however crucial to note that by 1968, Kampala City had extended to include Mengo where most of the land had remained under private ownership. Yet, Kampala City Council as an urban authority has to plan and control development in all these areas under its jurisdiction. In practice, the population in the areas continued with their private (mailo) holding and user rights. The major question posed by this arrangement is that the mailo title holders do not have enough resources to develop the urban land parcels they hold yet they are not willing to dispose them off to potential developers. As we shall illustrate in the proceeding section, this phenomenon has fuelled urban farming in Kampala City.

2.0 Urban Agriculture in theoretical perspective

The views advanced for the emergence of Urban Agriculture are varied. The Marxian view propounds that Urban Agriculture is a survival strategy of the urban poor as a means through which they are forced to bear the social cost of capitalistic development. City managers on the other hand have suggested that Urban Agriculture is a rural cultural

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10 This decree declared all land in Uganda to be public land. The decree was meant to de-commoditise the land holding rights and to free the government from the obstacles of accessing land. The decree virtually removed the private land holding rights and placed all the title rights in the hands of government. The new Uganda Constitution (1995) Article 237 repealed this decree; which reinstated private-land-holding rights.
artefact of a recently urbanised population—a remnant of bush life (Sawio 1993). These views are however inconsistent with informal sector advocates who recognise Urban Agriculture as a form of market rationale—micro entrepreneurship responding to economic incentives in the local economy.

The foregoing views on Urban Agriculture can be classified in two major categories. These include; “adaptive strategy” by city dwellers as a response to the survival threatening economic circumstances. This view seems to perceive Urban Agriculture as a progressive coping mechanism and possibly an indicator of growth. Yet the city planners' view seem to perceive Urban Agriculture not as a sign of resourcefulness but decay (Maxwell 1993). It is these two opposing levels of conceptualisation of urban agriculture that have shaped the response to the growth of Urban Agriculture in most African cities in general and Uganda in particular. To the mainstream and traditional Urban Economist and Planner, Urban Agriculture presents a contradiction of the common image of the city because it detracts from the ideal and hence it has been viewed negatively.

2.1 Evolution of Urban Agriculture in Uganda: Historical and contemporary view

Urban farming is becoming an omnipresent, complex and dynamic feature of urban landscape and socio-economic reality in Africa, Asia and Latin America. It constitutes both cultivation and rearing of animals. It is being carried out in back yards, roadsides utility-rights-of—way, vacant plots, institutional estates and flood plains (Mougeot 1993). For more than 20 years, there have been two different forms of agriculture in the city of Kampala. There is increased use of vacant land within the city for farming on a small scale, and continued farming of land within the expanded boundaries of the city (Maxwell 1995). There are three different time periods when large numbers of people began farming in the city. The first group includes those people that were already farming before their areas were incorporated into the city. The second group began farming in the mid 1970s, the period of severe political and economic problems. The third began in the late 1980s, the period that corresponds with the beginning of SAPs and improved security in the city, making possible economic activities that were too risky to carry out prior to 1986 (Atukunda and Maxwell 1996). Municipal bylaws dating from the colonial era ban cultivation in the city (with the exception of vegetable gardens and flowers) and permit the keeping of livestock only with the consent of City Council.

Urban farming as a 'survival strategy' of the urban poor started in the 1970's. This period was characterised by political turmoil and the concomitant economic crisis (Nuwagaba and Mwesigwa 1997, Maxwell 1995, Nuwagaba and Kisamba-Mugerwa 1993). By 1976, the Ugandan economy had virtually atrophied. There was total collapse of the economic infrastructure with GDP Per capita having plummeted from the previous US $ 470 to US $ 120. Similarly, there was virtual dearth of the institutional structure including the collapse of local urban service delivery (Nuwagaba and Mwesigwa 1997). Meanwhile, urban population growth remained on course. For instance during the period 1970-1980, the population of Kampala grew at an average 3.14 % per annum (Background to budget 1987, Nuwagaba 1999).

The major implication of such galloping urban population amidst dwindling capacity of the urban economy was the growth of both open and disguised unemployment and urban poverty (Nuwagaba 1997). It is amidst this euphoria of looming urban population crisis that the urban poor population devised means of survival through engaging in various
survival strategies, such as petty commodity trade, artisanship including carpentry, metal fabrication and urban farming.

2.2 Land Markets and Sub-markets

A land market evolved in Uganda during colonialism with capital penetration and commoditisation and individualisation of land. For example, by the time the allotment of mailo land was completed in 1909, over 3,700 titleholders had been recognised and by 1926, these had multiplied to 10,000 primarily because of inheritance or sale (Mamdani 1976). In Buganda therefore, the land market developed immediately with the 1900 agreement as a result of introducing individual land rights by privatising land tenure to title holders.

Both formal and informal land markets exist together. In Kampala, transactions in land are overwhelmingly in mailo land through sub-division and as shall be seen later, it is in only in a few cases that accessing land for agriculture does not involve direct cash payments whether formal or informal. The various ways in which urban farmers access land for farming not only confirms the reason commonly given for engaging in urban farming but also indicates that there is high demand for land for household level subsistence agriculture.

2.3 Access to Land for Urban Agriculture

The major mode of access to land in urban areas in Uganda and Kampala in particular is purchase. Land is primarily purchased for housing. However, agriculture takes place on all tenure categories of land. No land is exclusively purchased for agricultural purposes. Means of accessing land for urban farming have not generally changed since the very first study of urban agriculture in Uganda was carried out (Maxwell and Zziwa 1992). Agriculture continues to be carried out on all forms of land tenure and still, the great majority of farmers use land they do not own which they access through certain arrangements with someone (in most cases a previous user). Only about 30% of the farmers use land they own (Nuwagaba and Kisamba-Mugerwa 1993). Owning land in Kampala refers to either holding a land title or holding the land in the form of a kibanja (purchased long-term user rights from another owner/title holder).

There exists various ways in which land is actually accessed for urban agriculture. Some can be referred to as formal and others as informal (Maxwell 1995). The most common form of agricultural land usage on private land is simply the owner of the plot cultivating his or her own land. However though, owners of land often permit others to cultivate unused land through lending arrangements, and in some instances squatters often simply cultivate unoccupied land. In spite of the Land Reform Decree of 1975, the system of bibanja holding of land continued. Bibanja holders occupy much of the privately owned mailo land and in fact, a lot of agriculture is carried out. Cultivation on public and institutional freehold land is also common in Kampala. This occurs extensively on land that is occupied by customary tenants (this is land that was already tenanted prior to the 1900 Buganda Agreement). Cultivation is also carried out on idle land that is not yet leased out, and on land that is leased out but where no development has been effected yet and on undeveloped or illegally occupied freehold land. Besides the customary tenants on public land, access to such land for the other three cases may be through arrangements such as buying use rights, borrowing or squatting.
Informal land access through squatting was/is largely facilitated by the fact of the declining capability to effectively manage land especially public land in the 1970s. On the other hand it was facilitated by the presence of privately owned land lying idle for speculative purposes. An informal land market has thus emerged among users (squatters) of such land. However though, the informal land market of selling and buying use rights play an important role in availing opportunities for accessing land for urban agriculture. Among various forms of *bibanja* holding, primary land use is mixed. Holding land in the form of *bibanja* is mostly associated with the lower income groups who do tend to rely on food from farming to a greater extent than those farming land they own. *Bibanja* accessed through sub-dividing and selling without the owner’s permission is used mostly for agricultural purposes although some put up semi-permanent houses.

The studies on urban agriculture in Kampala indicate that about 10% of the urban farmers had firm security of tenure on the land they farm and slightly over 40% had absolutely no security of tenure. The rest of the farmers had fairly firm security of tenure (Maxwell and Zziwa 1992, Maxwell 1995). However, comparing results from both studies, it is clear that since 1989, there has been a slight decrease or loss of security of tenure on farmed land, especially land that was held informally. The reasons as pointed out by Maxwell 1995 include among others:

- Land owners have began to build rapidly on land that previously sat idle
- Demand for urban land continues to grow
- The population in the city continues to grow.

### 2.4 Implications of Land tenure system on patterns of land access for Urban Farming

The previous urban authority’s legislation (1960s-1980s) translated in harassment of urban farmers constituting cutting down of crops and manhandling of those practising agriculture in the City. However, despite all this harassment, urban farming remained ‘resilient’. The population continued their cultivation as well as animal raring. The major point of strength for urban farmers has been the fact that most of the urban farming takes place on land that is held under *maïlo*-cum-private land holding rights.

Table 1 shows the distribution of urban farmers according to the land tenure/access categories.
Table 1: Frequency of Land Access /Tenure Categories (by Land Parcel) in Kampala City

<table>
<thead>
<tr>
<th>Access/Tenure Category</th>
<th>Enumeration Area</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Luwafu</td>
<td>Kiswa</td>
<td>Najja</td>
<td>Total</td>
</tr>
<tr>
<td>1. Owner occupancy (Titled mailo)</td>
<td>Purchased: 1</td>
<td>-</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Inherited: 2</td>
<td>-</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2. Owner occupancy (Leased Public)</td>
<td>Purchased: 3</td>
<td>2*</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Inherited: 5</td>
<td>2*</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>3. Rented:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4. Bihanja/Kibanja (Used by holder)</td>
<td>Purchased: 2</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Inherited: 7</td>
<td>-</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Grant/Customary auth: 7</td>
<td>-</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>5. Sub-divided bibanja (Sold without owner's permission)</td>
<td>Mailo: -</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Public: 21</td>
<td>-</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>6. Borrowed:</td>
<td>23</td>
<td>8</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>7. Purchased use-rights:</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>8. &quot;Squatted&quot; (Occupancy without permission)</td>
<td>Purchased use-rights: 3</td>
<td>17</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>79</td>
<td>33</td>
<td>24</td>
</tr>
</tbody>
</table>


*Leases have expired, land ownership in legal question.

Note: At the time the data indicated in the above table was collected, land in Luwafu area had been converted from Kabakaship mailo since 1966 to Public land administered by KCC and since 1993 it is now again mailo. Kiswa area is largely Public land held under leasehold. Najja area is mailo land.

The major issue that is discernible from the table is that most of the urban farmers are carrying out agricultural activities on land held under private mailo land tenure. Most of the agricultural activities take place on borrowed land parcels as indicated by a frequency of 34 and on owner occupancy (titled mailo) as indicated by a frequency of 12 i.e. 7 and 5 in the table. As already alluded to, this form of land tenure provides the most appropriate environment for one to access such land. The land belongs to individuals who can rent, lend or grant temporarily user rights to the individuals carrying out the farming activities. Public land also provides an opportunity for use without permission.
The above phenomenon mainly results from the ‘absentee land lordism’ where the de-facto-owner of a land parcel can sell the land user rights\(^{11}\) to a third party. The land held under leasehold on the other hand does not facilitate such farming activities as the local urban authority can grant the lease of a particular land parcel to prospective developers without notice to the tenant farmer (Nuwagaba 2000, Mbiba 1995). This means that the latter stands to lose any crops that could be on the garden. Similarly, accessing leasehold land parcels is an up-hill task since acquisition of such parcels are usually riddled with complex bureaucratic processes. The problem is exacerbated by KCC, which may not be enthusiastic to grant leasehold for a proposed land parcel for agricultural purposes. This is because leasehold certificates are granted on condition that within specific period, the leaseholder will develop the land short of which the granting authority may withdraw it to another prospective developer (Ministry of Lands and Urban Development 1993). Further more, the granting of leasehold goes with the payment of a premium\(^{12}\) and ground rent as required by the land management legislation (Nuwagaba and Kisamba-Mugerwa 1993). However, it should be reiterated that while Kampala City Council can enforce legislation against any ‘misuse’ of leasehold land parcels, it lacks sufficient sanctions against those on mailo-cum-privately owned land.

This means that though land is located within boundaries of Kampala City, Kampala City Council as the local urban authority lacks sufficient pragmatic jurisdiction over enforcement of development control on the land it does not own. While it is clear that the local urban authorities Act (1964) granted the authority for effecting development control on all land in the urban centres to the local urban authorities, it has remained an up hill task to enforce legislation against urban farmers who carry out their activities on land that is privately owned. This issue has become complicated as Kampala City Council has also found it difficult to plan for the land that is privately owned. An official of Kampala City planning office during an investigation on developing a sustainable Kampala Urban Sanitation Programme (KUSP) retorted;

“The major problem of planning for Kampala City is the structural composition of the city. A greater part of the city has since time immemorial been in private hands while only a small proportion has been public land. Now, tell me how do you plan for the land you do not own?”

This issue of dualistic composition of Kampala City needs to be put into clear perspective. While the main part of the city i.e. the Kibuga where mailo land prevails remained unplanned and expanded without any development control, the other part of the city (Public land) developed under standard urban development planning regulations. The original Kibuga areas are concentrated with slums while the planned areas constitute well laid out settlement patterns and well constructed dwelling units. (Ministry of Housing and Urban Development 1993). It is mainly in Kibuga areas that urban farming takes place (Nuwagaba and Mwesigwa 1997).

\(^{11}\) These user rights may however not necessarily mean the real ownership rights over the land. It may not even constitute tenancy rights. The rights over such a land parcel may derive from the period of occupation on such land.

\(^{12}\) These payments are made periodically. Defaulters of ground rent and premium are liable to lose the lease.
According to van Nostrand J. Associates Ltd. (1994), the dualism continues to exist, in the form of what is described today as either the informal versus the formal, or traditional versus modern sectors. The tensions that exist between these two sectors are, and will continue to be symbolised by the physical planning controls, or lack of controls, which Kampala has adopted for itself. The 1994 Structure Plan of Kampala sought to elaborate on these tensions and ambiguities by working with the city rather than against it. However, though the structural plan remains the most authoritative document, not even an inch of the structural plan has ever been implemented.

Another issue that has worsened the situation has been cheap populism among politicians in Kampala City has complicated the overall urban governance structures and processes. As reiterated by one of the officials of Kampala City Council Planning office;

“Various people have labelled Kampala City Council as inefficient and inept in executing their duties. They have accused us of failure to enforce building regulations. Others have said that Kampala has been turned into an ‘urban village’ as the city is now dominated by farmers who graze their cattle and cultivate everywhere including along the main roads. However, the real problem is the practice that has engulfed the urban governance structures in our city. Our politicians fear to encourage the promulgation of laws and enforcement of regulations, which may antagonise the local populations, cum-the electorate. Once you do that, then you can be sure to lose the next elections’ (KCC official Planing Office, KUSP, FGD August 2000).

As indicated in the foregoing, it remains a fundamental question to discern the difference between urban politics and urban management. The latter constitutes a purely technical process that ought not to be politicised. If an urban wetland is compromised for development through draining and cultivation of crops simply because the urban farmers command a significant proportion of political support to the politician in-charge of a given urban area, then the whole urban development super structure is plunged in jeopardy.

2.0 Changing Character of Urban Agriculture

The foregoing views on Urban Agriculture have been undergoing serious change. While the 1970s had viewed Urban Agriculture as a survival strategy of the poorest of the urban poor, the 1980s and 1990s have experienced drastic change in character of urban farming. The farming activities have increasingly gained credence not only among the urban poor but also by a significant proportion including both the low and medium income earners. Table 2 shows the reasons for carrying out urban farming.
Table 2. Reasons for Engaging in Urban Cultivation (n=150)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needed food</td>
<td>137</td>
<td>91.3</td>
</tr>
<tr>
<td>Needed income</td>
<td>44</td>
<td>29.3</td>
</tr>
<tr>
<td>Needed to diversify income</td>
<td>16</td>
<td>10.7</td>
</tr>
<tr>
<td>Had unused land</td>
<td>11</td>
<td>7.3</td>
</tr>
<tr>
<td>Hobby/custom</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Unemployed</td>
<td>9</td>
<td>6.0</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>230*</td>
<td>153.3**</td>
</tr>
</tbody>
</table>

*Respondents gave more than one response hence total n>150
**Similarly, total % is >100
Source: Maxwell and Zziwa 1992 Pg.

From the table, it is apparent that the need for food was the major (91.3%) cause for urban farming. However, of significant importance is the need for income as revealed by 29.3% who needed to improve the level of household earnings and 10.7% who carried out Urban farming purposely to diversify their household sources of income. As inflation soars amidst increasing chances of unemployment and declining real wages, it becomes imperative to provide the household with a buffer against the high rate of inflation. The aim is to reduce the gap between wages paid in formal and informal sectors and the cost of living in the city.

City planners and national policy makers have now recognised the central role of urban agriculture in the wider urban economy. Although in some respects Urban Agriculture is seen as putting Valued Environmental Components at risk, it is on the other hand recognised as one among other forms that creates the potential for sustainable use of the environment for the benefit of Kampala (van Nostrand J Associates Ltd.1994). There has been a growing tendency to legitimise urban farming activities in Kampala. The city enforcement officers have ceased harassment of local people who cultivate around the city (Nuwagaba and Mwesigwa 1997). This progressive tendency is best described in the recent pronouncement of the Resident District Commissioner, Kampala who retorted;

'It is very important that government has planned to modernise agriculture in the country…it will be an opportunity for all Ugandans not to suffer from food insecurity…I appeal to city residents to start practising urban farming and for those who already started to improve on their gardens’ (The Monitor News Paper, Wednesday 17, 2001 Pg. 14).

The benefits of urban farming do not only accrue to the urban farming households but to the whole urban economy (UNDP 1996 Pg. 164). Urban farming is a survival strategy that provides both nutritional and health benefits to the farming households as well as other urban households. The advantage of urban farming has been the proximity of urban markets hence low transport costs of many perishable products.

What is still ironic is that while the local urban authorities have not developed substantive legislation legalising urban farming, it has largely been accommodated and recognised as an economically viable activity in the city. Consequently, the city enforcement officers have refrained from official harassment although there is not yet any legally promulgated provisions for protection of those engaged in urban farming. The only provisions available are the broad policy enactment in the Local Government Act.
Section 39 and 41 which empowers local authorities to enact ordinances and laws as need arises. Apart from granting guidelines for enacting ordinances, there is no substantive provision in the 1997 Local Government Act for streamlining urban farming. In the same vein that Kampala City Council has attempted to promulgate an ordinance entitled, ‘The Urban Agriculture (Kampala City) ordinance made under Section 39 and 41 of the Local Government Act 1997.’ The ordinance is aimed at licensing, control and regulation of urban agriculture and to provide other related matters.

4.0 Integration of Urban Agriculture in urban planning: The missing link.

As already alluded to in the foregoing analysis, most governments have in the past perceived urban farming as a marginal activity. Farming activities have for too long been regarded as temporary activities for a recently urban in-migrant population (UNDP 1996). It is because of this stance that a cross-section of local governments in various countries had resorted to limit the growth of the sector. However, some municipal authorities have begun to recognise the role of urban agriculture in the over all functioning of the wider urban economy. In Mexico, Buenos Aires and Jarkata, agriculture departments have been established to co-ordinate research and extension services in the cities. Similarly, in Dodoma in Tanzania, the capital development authority supports agriculture as a viable activity while in Mozambique, urban farming is officially recognised as the municipal government is a land-owning partner in the ‘green belt’ farming co-operatives of food and employment for urban residents (Holmberg 1992). Table 3 shows the global trend of urban Agriculture within National urban planning structures.

Table 3: Selected government organisations active in urban agriculture

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Location</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water authority</td>
<td>Mexico city</td>
<td>Provides irrigation and overseeing of Peri-urban farming</td>
</tr>
<tr>
<td>Port authority</td>
<td>Calcutta</td>
<td>Leases land and lagoon to co-operatives</td>
</tr>
<tr>
<td>High way authority</td>
<td>Indonesia</td>
<td>Leases right-of-way to urban farmers</td>
</tr>
<tr>
<td>Municipality</td>
<td>Munich</td>
<td>Produces fish in sewerage lagoons</td>
</tr>
<tr>
<td>Municipality</td>
<td>Maputo</td>
<td>Acts as land-owning partner with women’s food production co-operatives</td>
</tr>
<tr>
<td>Municipality</td>
<td>Buenos Aires</td>
<td>Created urban Agriculture agency</td>
</tr>
<tr>
<td>US Military</td>
<td>United States</td>
<td>Leases land on bases to farmers</td>
</tr>
<tr>
<td>National government</td>
<td>Tanzania, Peru, Panama,</td>
<td>Recently adopted policies that favour urban agriculture.</td>
</tr>
<tr>
<td></td>
<td>Italy, Japan, China,</td>
<td>Have very long-standing urban agriculture policies and agencies.</td>
</tr>
<tr>
<td></td>
<td>Singapore, Netherlands,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
<td></td>
</tr>
</tbody>
</table>

Source: Urban Agriculture network, UNDP 1996: Pg. 143

Table 3 shows that activities have been integrated in the over all urban planning structures and national policy. In most countries, contrary to the previous situation in Uganda, local urban authorities have taken both regulatory and facilitating functions.

13 The situation has been undergoing change. Local urban authorities are increasingly recognising urban farming.
4.1 Urban Governance and Urban Planning: The Quest for an African City.

A major problem of urban planning in Africa in general and Uganda in particular has been the issue of governance. The concept of governance has been employed drawing on Goran Hyden’s (1989) conceptualisation where it means ‘the contribution of both the state and civil society and the explicit rules and structures which sustain and protect the civic public realm’.

The management of urban centres in Uganda is structured along the anglophonic lines, which conceptualise a city as a modern social configuration especially meant for a white-collar oriented population. This conceptualisation relegates rural areas as blue collar ‘territories’ where agriculture-mainly using rudimentary means constitute the major economic activity. Farming was therefore regarded as ‘taboo’ in urban centres. It is from this conceptualisation that municipal authorities in Uganda took regulatory approach rather than facilitating role as regards urban farming activities. The authorities hence borrowed the concept of ‘city’ without evolving a sufficient ‘critical mass’ for its sustenance. A case in point is the 1964 Urban Authorities Act that vested power for urban development control in Kampala City Council yet the Act was based on standards which were not only difficult to enforce but were based on value systems that were out of tune with the needs of the local urban population.

Since 1962, Kampala City Council established an enforcement division within the City-Planning Department whose main functions were premised on ‘keeping the image of the city’ (Nuwagaba 1997). This stance was adhered to despite the growth of urban poverty amidst the galloping urban population (Mwesigwa 1987). For example, despite the growth and vibrancy of urban farming since early 1970s, Kampala City Council harassed residents engaging in ‘illegal’ activities such as farming. They cut down crops within the city and confiscated animals grazing in the city boundaries (Sawio C.J 1993, Nuwagaba 1993). Ironically, this sharply contrasts with the modern cities (Munich, Buenos-Aires and Austin), where urban farming is legalised and provided with support facilities such as extension services. The idea is not to have ‘a city of gardens’ or a ‘garden city’, but rather, to systematically accommodate agriculture as part of the viable activities that can take place in the city without compromising its ‘normal’ functioning. There are three critical issues, which any urban planner ought to ponder: Who plans the city? In what image? and For what purpose?

For the period 1970 to 1989, the policy pursued by the local urban authorities to crack down urban farming activities did not only represent unrealistic policy effort but they revealed the maximum degree of ‘mea-culpa’ among city authorities in regard to the reality of the urban problematic in African Cities in general and in Uganda in particular. It ought to be realised that a city operates like a biological organism with interrelated crucial components. The dysfunction of a particular component may jeopardise the functioning of the whole system. Maxwell (1993) showed that urban farming sector represents 60% of Kampala’s household food basket. It is this factor that has facilitated the metamorphosis of the urban farming sub-sector despite persistent onslaught by city authorities. Urban Planners need to internalise the concept of an ‘African City’ rather

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14 The act provided inter-alia; for enforcement of anti-urban farming laws, and maintaining standards for ‘a modern’ City, (Urban Authorities Act 1964 Pg. 108)
than continually taking refuge in models of development that are out of touch with the African reality. It is imperative that the image of an African City reflects the local value system and recognises the socio-economic configuration of the potential beneficiaries of the plan. Similarly, the urban plan must aim at generating a sustainable urban development structure through balancing population and sustainable economic activity. The contention here is that; while most European City developed out of industrial growth, production, and employment based on market rationale; the African cities were mainly a result of mere creation of convenient administrative centres with no viable economic base to sustain the so called urban inhabitants. This later gave birth to an urban population with out an economy to provide real wages hence disguised and open unemployment. Urban agriculture evolved as a result of this contradiction.

5.0 Research studies conducted and Gaps in the field of urban farming.

5.1 Introduction

This section presents a critical review of the Urban Agriculture research projects that have been carried out in Uganda. The review analyses the themes addressed by the various researches and how urban Agriculture was portrayed. For each study, a description of the focus, issues addressed and a summary of the findings are presented. The section then ends with the identification of research gaps focusing on the dynamics of urban land markets and sub-markets; patterns of land access and use and urban policy, planning and legislation.

5.2 Economic Policy for Reconstruction and Development (Uganda Commercial Bank 1987)-5 year plan-1987-91)

The study mainly focused on housing and settlement development but does not provide any clear statement about the management of the problems of urbanisation. It is ironic that by 1987, despite the rapid growth of informal sector especially urban farming, the sub-sector still has little impact on urban planning process (Maxwell D 1995).

5.3 Urban Farming in Africa: The Case of Kampala, Uganda 1992 (Maxwell D and Zziwa S)

The study was an inventory of urban agriculture activities in Kampala and a description of the nature and institutional legal environment under which it is practised. The study was carried out basing on background knowledge that little was formally known about urban agriculture in Africa let alone Uganda. The purpose of the study was to learn about the practice and why; what do the farmers produce and how much. The results showed many urban farmers as migrants and the vast majority of them engaged in some other form of employment or income generation as well. Similarly, 71% of the urban farmers in the sample were women. Urban farmers were found among all income groups in the city. Majority of respondents gave ‘source of food’ for the household as the major reason for urban farming. The other reason for farming was cash income. The study raised, but did not resolve the institutional questions about land access for the two thirds of urban farmers who did not own rights to the land they farmed.
The study also attempted to evaluate the official reasons for the legal status of urban farming, particularly in the context of the re-organisation of local administration from a system of local chiefs to a system of popularly elected local councils\textsuperscript{15}.

5.4 Kampala Urban Study (KUS 1993)

- The study which included the preparation of a new Kampala Structure Plan of 1994 was commissioned under the auspices of the World Bank. The main objective of the study was to provide an understanding of the growth and development of Kampala City and to outline policy alternatives for sustainable urban development. The major outputs of the project was to enhance the infrastructure rehabilitation and financial capacity of the city (Maxwell 1995 Pg. 82). The major issues that emerged from the study constituted.
- Recognition of new patterns of urban life. Need to recognise the multiple usage of land rather than zoning areas exclusively for certain purposes.
- Recognition of Urban Agriculture as a viable economic activity and urged municipal authorities to support urban farming.

The study indicated that the predominant land uses are "un-developed/agricultural (50\%)" (van Nostrand J. Associates Ltd. 1994). The report contended that the informal economy including urban farming constitutes the major challenge to urban planning and administration in Kampala. This contention is portrayed in the conclusion of the study, which stated that; ‘Urban Agriculture has had a dramatic impact on land use in Kampala. One socio-economic order has replaced another; in physical and regulatory settings not originally planned to accommodate it.’ (Maxwell D 1995 Pg. 82)

5.5 Labour, land, Food and Farming: A household Analysis of urban Agriculture in Kampala, Uganda Maxwell D, 1995

This study was carried out partly as a follow up of pertinent issues that come up in the previous study by Maxwell and Zziwa 1992. The study had three broad goals; the first was to understand the incorporation of agriculture into the economic strategies of urban households. The second was to explore the formal and informal means of access to urban land for an activity that was technically considered illegal. The third was to measure the impact of urban farming, particularly in terms of food security and nutritional status of children in farming and non-farming households.

Statistical comparisons of farming and non-farming households indicated that there is scarcely any difference between farming and non-farming households.

The study also found that;
- Urban farming is not associated with any particular income group. Keeping dairy cows in confinement or ‘zero-grazing’ is commonly practised. Farming households are sometimes well established. Farming communities are found mostly in less densely populated areas of the city.

\textsuperscript{15} This is a system of governance where the Country is divided into Socio-political grassroot structures from Local Council 1-village level to Local council V-district level.
• These urban farmers mostly access swamps and other marginal lands, which they do not own. A significant number of households practised urban farming due to lack of any other means of survival that was available to the household.

• Lack of access to land is the most prominent constraint to farming in Kampala. Use of land for agriculture depended on how the land was accessed and the land tenure category into which the land falls. The differences range from rights to the land, security of tenure and agriculture practices.

• The study gathered and analysed anthropometric data to measure ‘stunting’ and ‘wasting’ of children aged 5 years and below in both farming and non-farming households. Results indicate that children in farming households had significantly lower levels of ‘stunting’ (Low height for age) particularly in the two lowest income groups.

Further investigation of the level of malnutrition by comparing actual numbers of malnourished children among farming and non-farming households in all income groups showed a statistically significant difference in rates of stunting between farming and non-farming households Overall, the study found a clear relationship between farming and nutritional status of households.

The study as had been requested by the KUS Team provided empirical data as regards the significance of urban farming. The findings also served as a basis for new thinking and changed attitudes towards urban farming by a number of city officials as was expressed during the IDRC funded seminar where the study findings were presented for discussion (Atukunda 1998). At the workshop, urban planners and city political leaders generally agreed that farming in the city should perhaps be regulated, but that its current legal status was both unfair and unproductive and does not address the real areas of concern about health and environmental hazards.

5.6 Kampala Poverty Eradication Action Plan (June 2000)

Kampala Poverty Eradication Action Plan (KPEAP) presents the major framework for urban planning and development in the city. The plan presents a replica of National blue print code named the National Poverty Eradication Plan (PEAP) which sets out the national framework for poverty alleviation in Uganda (MFEP 1998). However, while the national Poverty Eradication Action Plan (PEAP) mentions the problem of urbanisation and the need to improve the welfare of the poor urban population, it does not make any specific consideration of urban farming (MFEP: Pg. 28-34).

Ironically, the Kampala Poverty Eradication Plan (PEAP2000-2005) describes the importance of urban agriculture and gives detailed contribution of crops cultivated and animals rared to the total food basket in Kampala city. The plan however lacks clear strategies and operation framework for incorporation of urban Agriculture in the wider urban economy. It simply states that;

‘The total land area under agricultural production in Kampala City is 51%, 83% of households involved in Agriculture have backyard kitchen gardens, 70.9% of the farming population is involved in crop production, 10% in cattle keeping. 70% of poultry consumed in Kampala is raised within the city and 40% of the food requirements is produced within the city. It is against this background that Urban Agricultural section in Kampala City Council has laid strategies and activities to assist urban farmers to meet their production needs’ [Kampala Poverty Eradication Action Plan, June 2000 Pg. 17]
However, it suffices to hazard a question; how can the city authorities enact strategies for implementing activities without mandate-cum reference from National Policy framework? Similarly, the recognition of the importance of urban farming as reiterated by the Kampala Poverty Eradication Action Plan (KPEAP 2000) lacks substantive legal backing as no explicit provision exists in the existing laws that stipulate the role of local urban authorities as regarding urban farming (Local Government Act 1997 Section 80).

6.0 Status of Urban Farming in Uganda.

In 1993 a long range planning group within Kampala City Council funded by the World Bank First Urban Project sought to legitimise and incorporate into urban planning small scale and informal sector activities of all types in the city (van Nostrand 1993). The Kampala Urban Study recommendations called for a more accommodating approach to land use regulation. The team reviewed the Uganda Town and Country Planning Act (1969) and noted that it was outdated and inadequate as an instrument for dealing with the challenges of urban land management. The team also noted that there has been little if any enforcement of the Act due to internal strife, general economic and political decline between 1971 and 1986.

Thus, the conceptual approach to preparation of the City's physical plan was based on the recognition that while the formal planning programmes and procedures developed previously remain legally in practice, they bear less and less reference to what has actually taken place on the ground. Kampala currently comprises a complex mix of highly regulated former colonial developments, and a wide range of largely informal, urban neighbourhoods. The planning team noted that; The overriding objective of the planning process is not so much to control the urban process, but rather to guide and enable it to provide for the full range of social and economic activities which together constitute the historic and contemporary urban culture of Uganda. (van Norstrand J. Associates Ltd. 1994).

In relation to Urban Agriculture, the team also recognised the "need to encourage greater investment in community-based enterprises- the majority of which are operated by women. Such enterprises include urban agricultural activities, …" (ibid). The major output of this study group was the Kampala Structure Plan (1994). The plan includes the written Provisions that constitute an "outline scheme" under the existing Town and Country Planning Act. The structural plan came into effect by statutory instrument in 1994. The Written Provisions take precedence over any previous inconsistent statutes or laws, as well as any future laws, unless such laws state otherwise. The Written Provisions indicate that growing crops and keeping animals can be carried out on land designated as Residential Zones, Industrial Zones and Environmental Zones.

Since 1994, a section known as Urban Agriculture exists within KCCs Production and Marketing Department. Formerly, before decentralisation of Kampala District, it was directly under the Ministry of Agriculture Animal Industry and Fisheries (MAAIF). The broad objective of the section is to support promote and guide the communities in urban agriculture and to ensure household nutrition and food security. According to the review of the section's activities (Kampala City Council 2001), a number of achievements have been made though with some financial setbacks. The achievements include:

♦ Training farmers in various crop and animal husbandry skills
Domestic garbage management and use in urban agriculture

Production of training and extension materials

According to the review report, financial support by KCC is still small (covering about 4% of the annual budget). However, some of the costs are met by NGOs the section collaborates with. They include Environmental Alert, YWCA, Uganda Centre for Sustainable Agriculture and Uganda Environment Protection Fund.

7.0 Emerging issues

7.1 Most of the urban farming activities take place on land held under ‘mailo’-cum-freehold tenure system. However, most of the land is borrowed, a condition which has influenced the types of crops grown. The crops mainly include: vegetables and other quick yielding crops. Perennial crops would have generated relatively sustainable incomes for the farming households.

7.2 The fact that urban farmers depend on land they do not own has created a sense of insecurity. The farmers are not ‘bonafide’ tenants and are hence not protected by any law. This issue has tremendous implications on levels of productivity of the urban farming sub-sector.

7.3 When the layout of urban farming is closely analysed, it is found that a significant population of the cultivation is carried out in poorly drained areas, in most wetlands and other urban marginal enclaves. The major reason here is that urban wetlands and other poorly drained areas are not attractive to the affluent urban populace hence can easily be encroached by unsuspected urban farmers. This is in contradiction to the neo-classical economic theory of urban land market. It is critical that urban wetlands are protected. These areas constitute the green belts and lagoons for absorption of vehicular emissions and sewerage treatment respectively. The encroachment of such wetlands and green belts affects the urban Eco-systems culminating in deterioration of the over all urban environment.

7.4 Urban Agriculture has been officially supported by the central government leadership but not yet operationalised through urban development plans. Yet, the farming activities significantly contribute to the household food requirements. This presents a classic contradiction premised on the legal regime and economic rationality of urban farming.

7.5 It is evident that urban agriculture is transforming into a macro-economic activity. Our rapid appraisal of the contribution of urban farming to the urban economy clearly indicate that urban farming as providing diversified source of household income. This could imply a shift from conceptualising urban

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16 Bonafide-tenants are provided for in the land Act (1998) and in the Ugandan constitution Article 237. A tenant under this provision cannot be abruptly evicted without amicable agreement from both parties, the landlord and the tenant.

17 This theory stipulates that the value of land is directly proportional to the distance of a specific land parcel from the centre. This theory however falls short of detailed analysis of a particular land parcel. Hence, a land parcel can be in the heart of the City but with low value due its poor topography.
agriculture as providing a mere survival strategy to a vibrant economic activity worth supporting.

8.0 Building Partnerships

Sustainable urban Agriculture requires developing partnerships with various stakeholders. Primarily, the MAAIF under its Plan for Modernization of Agriculture (PMA) together with National Agricultural Research Organization (NARO) should include Urban Agriculture activities in their programmes. Municipal authorities ought to not only take a regulatory but also adopt the facilitating function to the urban farming sub-sector. There is need for Local Urban Authorities to develop and enact substantive legislation providing for urban farming activities. Similarly, there is need for harnessing efforts of NGOs in enhancement of urban farming. The advantage with NGOs is their highly acclaimed ‘pro-people’ stance coupled with relatively higher levels of efficiency. In Uganda’s case, such NGOs would include ACFODE, UMCSRC, LUAA\(^\text{18}\) and Environmental Alert.

There is need to sensitize the private sector in enhancement of urban agriculture. The rationale here comes from the fact that a relatively large volume of urban agriculture takes place on privately owned land. However, there is need to improve agricultural productivity. This can be done through improvement of capital and technical assistance to urban farmers. The private farmers are best suited as major beneficiaries of such services. The plausible farming activities here include cattle raring, poultry and vegetable growing. These activities are already expanding in Kampala. They only require improvement (Mwesigwa 1987).

9.0 Suggested areas of Research on Urban Agriculture

From the preceding analysis of the emergence and growth of urban agriculture in Uganda coupled with the previous research studies conducted, it becomes pertinent to investigate the following.

- Political Economy of Informal sector Transformation in Africa; The Role of Urban Agriculture in Uganda.
- Integration of urban farming in urban development planning
- The improvement of Urban Agricultural productivity: The role of Technical Assistance and capital development.
- Micro and Macro-economic rationality of urban Agriculture: From safety Net to spring Board.
- Urban Agriculture and urban environment management.
- Impact of urban agriculture on rural food Production marketing and incomes

\(^\text{18}\) ACFODE, UMCSRC and LUAA refer to Action for development, Uganda Urban Management and Community Services Resource Centre and Local Urban Authorities Association respectively.
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Annex 5: The Political Economy of Urban Agriculture in Zambia

Paul Muwowo

Introduction

The concept of Urban Agriculture (UA) is relatively new in Zambian although some people have practised it for many years. Urban agriculture is the practising of any agricultural activity in an Urban setting such as gardening, livestock keeping (chickens, goats, pigs, sheep and even cattle) and fisheries (raising fish from fish ponds) for home consumption or for the market.

It is clear that there is political will to support UA in Zambia but the existence of colonial laws has suppressed the activity. It is difficult to tell why the laws have not changed because both members of parliament and urban councilors are aware of the urban agriculture activities going on in their constituencies and wards respectively. The other likely possibility is that the people supporting it do not have quantitative facts. It is difficult to convince an economist, for example, that urban agriculture provides food security to vulnerable households if one cannot provide sufficient quantitative data. The addition of economic value to UA can facilitate debate and most probably change attitudes of the people who perceive the activity as a problem.

State of Research on Urban Agriculture

Research on gardens in Lusaka dates back to 1954 when Thomson carried out a study on urban nutrition. In his findings he identifies two types of gardens namely the bush and house gardens. The bush gardens are the rainy season plots while the house gardens seem to be the actual gardens, near homesteads (Drescher 1994). Thomson further compared agricultural activity in two areas in Lusaka which he describes as main location and Chilenje township. According to him, the main location was densely populated and that the people living there were poor (Thomson 1954). His findings showed that 78% of the households are cultivating around the houses and the main crops grown were pumpkins, groundnuts and maize.

In the 1970s Rakodi carried out research in four towns namely Lusaka, Luanshya, Kabwe and Kalulushi. Between 1972 and 1980 in Lusaka and Luanshya, Rakodi observed that between 5% and 40% of the low income households had on-plot gardens (depending on the density of development, soil suitability and water availability). In Mufulira and Kabwe the mine administration provided land in the periphery of the town for cultivation (Rakodi 1985, 1988).

Jaeger and Huckabay (1986) identified the geographical location of different agricultural activities and noticed appropriate concentric circles around the urban centre. Household garden, kitchen garden or backyard gardens occupy the central zone. While the semi-commercial and the commercial type of agriculture is situated at the periphery. The
pattern of cultivation in Lusaka is similar to what Mbiba describes for Harare (Mbiba 1999). The rainy season agriculture is only practiced between October and mid May. Only if there is a permanent water source, such as a natural wetlands, rivers, small dams (like the Kabangwe north of Lusaka, in the Shantumbu area south of Lusaka and the Chainama Hills) is gardening a permanent activity (Drescher 1994). In 1990 Sanyal carried out a survey on agricultural activities. His survey covered five compounds of Lusaka namely: Jack Extention, Mtemele, Kalingalinga, Matero and Chilenje south. He was able to show that the average of 13% of the household practiced both rainy season agriculture and gardening in dry the season (Sanyal, 1995).

Ogle and Malambo (1991) carried out a survey to establish the source of vegetables in three urban centres (Table 1). The results showed that in Lusaka out of the sample of 83 Households, 79% bought vegetables from the city market, 62% bought from street vendors, 49% got vegetables from their own gardens while 5% gathered from the bush. The trends were the same in Kabwe and Ndola, although the percentages of households gathering from the bush were higher compared with Lusaka

<table>
<thead>
<tr>
<th>Town</th>
<th>Lusaka</th>
<th>Kabwe</th>
<th>Ndola</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households</td>
<td>82</td>
<td>42</td>
<td>58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Vegetables</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Markets</td>
<td>79</td>
</tr>
<tr>
<td>Street Vendors</td>
<td>62</td>
</tr>
<tr>
<td>Own Garden</td>
<td>49</td>
</tr>
<tr>
<td>Gather from the Bush</td>
<td>5</td>
</tr>
</tbody>
</table>


In 1992/93 research was done on household gardening in some townships of Lusaka. The survey results showed that nearly 31.6% of women practiced gardening while 24.3% of the men did. The research also confirmed the findings of other previous surveys which indicated that women were more involved in UA than men (Rakodi 1985; Sanya 1985, 1987; Bos 1994).

Figure 1: Involvement of Men and Women in gardening in the Urban Environment
Drescher (1994; 1999) was able to establish that of the sample of 648, nearly 50% of the women and about 35% of the men had rain season gardens where they planted maize which is the staple food (Figure 1)

**Existing Policies Regarding UA**

There are many laws and regulations governing the operation of the City of Lusaka and its surrounding areas. The Ministry of Lands is responsible for the overall management of all the land on behalf of the President, the Ministry of Local Government and Housing formulates policies and strategies for local administration, housing and human settlement planning. Ministry of Environment and Natural Resources is responsible for integrating environmental issues into development planning at all level of government while the Ministry of Agriculture Food and Fisheries formulates and implements all agricultural policies.

**Local authorities’ policies concerning UA**

The Town and Country Planning Act (Cap 475) has set out procedures for the declaration of planning areas by the Minister of Local Government and Housing; the preparation of planning schemes to cover all or part of such planning areas; and the control of development through granting or refusal of town planning permits to developers. The directorate of city planning is responsible for administering the planning laws at city level. However, the allocation of plots to potential developers is a responsibility of the commissioner of lands who also imposes a minimum building clause as a minimum value of structure to be erected on a plot.
The Local Administration Act of 1980, included, among the district council functions time, the establishment of farms and allotment gardens. Very little is known about this programme as to whether it was mandatory or optional for the councils (Rakodi, 1985).

In 1997, the Mayor of Lusaka stated that Urban Agriculture is associated with residential squatting and that it was viewed as a socio-economic problem rather than a solution. Authorities are hesitant to be more pro-active because it is largely seen as resulting from failure by government to address rural development. In the city of Lusaka, this activity was creating havoc in urban land use planning and management. There are concerns with health risks (malaria diffusion) and UA is placing pressure on scarce urban water resources.

From time to time the local authority has used the public health act to suppress Urban Agriculture. The Public Health Act prohibits the following:

- cowshed, stable or other building or premises used for keeping of animals or birds which is so constructed situated, used or kept as to be offensive or which is injurious or dangerous to health;
- Any animal so kept as to be a nuisance or injurious to health;
- Any accumulation or droppings of refuse, offal, manure or other matter whatsoever which is offensive or which is injurious or dangerous to health; and
- No person shall permit any manure or garbage on his premises or land so as to be a nuisance or dangerous to health by affording facilities by breeding by flies or other disease, the owner or occupier of any premises or land asked to remove or remedy the nuisance, when duly notified of its existence, shall at the expiration of such periods as may be prescribed in writing by a medical officer, be guilty of an offence.

A survey of 1603 maize plants in different locations of Lusaka was carried out by a community Health specialist and a government entomologist during the 1978 rain season and found no mosquito larvae in any of the plants and concluded that the slashing of maize had no impact on malaria control (Teresa and Bransby-Williams 1978).

All these laws are prohibitive towards the keeping of livestock in the city. Only up to five chickens and three dogs can be kept (Drescher and Muwowo 1999). Despite the local authority’s restrictive laws, livestock keeping is on the increase in the urban setting. Pigs and Goats are mostly found in the unplanned settlements of Lusaka such as Ngombe, Garden, Kalikiliki, Chainda, Mandevu, Chaisa, John Howard, Chawama while the only medium density residential areas where Goats have been seen are Avondale and Madras.

**Ministry of Agriculture Policies regarding Urban Agriculture.**

It is the Policy of the Ministry of Agriculture Food and Fisheries to ensure food security through the production of the basic food stuffs at competitive rates and at the same time ensure that the resource base (land, water and air) is maintained and improved upon.

The Third National Development plan recommended a pilot project to encourage food production in urban areas and an agricultural extension system service to foster Peri-Urban production units (GRZ 1979). Despite such recommendations, the Ministry of Agriculture Food and Fisheries (MAFF) does not have a specific policy tailored to serve or benefit Urban Agriculture farmers. The policy is for the whole country and for the
benefit of all the farmers. Also, the 1991 National Extension Action Plan (NEAP) did not incorporate Urban Agriculture (Department of Agriculture 1991) into urban land use planning strategies.

The Agriculture Sector Investment Programme (ASIP), which was launched by the President of the Republic of Zambia in June 1995, was designed to harmonise agricultural sector activities and optimise both GRZ and donor resource utilisation to maximum feasible levels (Mulenga 1999). ASIP uses Programme approach to Agricultural development as compared to the Project approach which was pursued in the past. Under ASIP I there were a number of sub-programmes including Agriculture Research, Agriculture Extension, Agriculture Information, Agriculture training, Animal production and Health, Fisheries Research and Extension, Farm power and Mechanisation, Irrigation and Land Husbandry, Agriculture Marketing and Co-operatives, Policy and Planning, Seed Multiplication and Standards, Rural Finance and Rural Investment Fund.

The Rural finance and Rural Investment fund sub-programmes were designed to benefit the rural farmers. It is still not clear whether these sub-programmes will be maintained or not in ASIP 2.

The joint GRZ and World Bank study in 1999, overlooked Urban Agriculture. While the report acknowledged the dual nature of the farmers in Zambia, it did not provide any alternative methodologies for Urban and Peri-Urban farmers.

Arising from the field reports to Lusaka, Kafue and Chongwe, the Provincial Administration constituted a team to study urban agriculture and alternative means of Agricultural extension. The selection of a team was based on the academic background and job description of the officers in Lusaka Province (Annex 1). The main task of the committee is to promote and publicise the existence of urban and peri-urban Agriculture. The committee had a number of consultations last year.

**Forces behind Urban and Peri-Urban Agriculture since the Late 1990s**

There are many factors behind the emergency of UA in third world cities. In Zambia, UA is as a result of economic crises and the liberalisation of the economy.

**Poverty and social equity**

Zambia is one of the most highly urbanised countries in sub-Saharan Africa with about 40% of its population living in urban areas. Generally, Zambia enjoys sparse population densities of about 10.4 people per square kilometre in 1993. The highest population densities are in Lusaka and Copperbelt Provinces with 48.4 and 46.3 persons per square kilometre respectively. The annual growth rate of Lusaka is estimated at 6.1%.

The Government’s Structural Adjustment Programme (SAP) of 1992-94 is another cause of increasing poverty. SAP has involved among other things, a cut back of public sector employment, removal of subsidies and the privatisation of public enterprises. All these have combined to raise the cost of living for the vast majority of people. The middle class of Lusaka spends between 60 to 70 percent of the household income on food while
the low income group spend 80 to 90 percent of their household income (Drescher and Muwowo 1999). It is clear that people in Lusaka, especially the middle and low income groups, can no longer live on a single source of income. This is not only true to Zambia but many cities in countries were SAP has been implemented (Smith and Olaloku 1995). In Lusaka UA has, in real terms, increased from the time a comprehensive study was done in 1992/1993. Those who do not have access to land have resorted to keeping chickens in their backyards, garages or kitchens.

**Rapid urbanisation**

Rural to urban migration has become a survival strategy. Migration is prompted by the need to gain a cash income and to diversify the sources of income for the household left behind in the village. With little to loose, many migrants have taken this risk. The liberalisation of the agricultural market, which entails that market forces will be at play, has disadvantaged the rural population because their livelihood depends on agriculture. During the last four years people from Lusaka have gone to the rural areas to buy maize from rural dwellers for reselling in Lusaka. Many people from rural areas have and are still migrating to Lusaka with the hope of getting jobs or going into business. The continued migration of people from rural areas to Lusaka has been the cause of the phenomenal growth of the unplanned and unserviced areas and hence the rise of UA

**Liberalisation of the economy.**

While liberalisation of the economy has brought untold misery in some quotas, in a way it has made people more enterprising. Many companies have come up which specifically produce machines for gardeners. *Sams Engineering* and *International Development Enterprise* (IDE) manufactures hand operated water pumps (Treddle pumps) whose cost is US$54 in Lusaka and up to up to US$80 in remote parts of Zambia. Amanita Zambiana, Meadows Feeds, National Milling and other milling plants produce chicken and other stock feeds which are relatively cheap in towns.

**Major Constraints of Urban and Peri-Urban Agriculture.**

**Water availability.**

Urban water supply in Zambia is not enough to meet the demand for human consumption and industrial needs. In 1995 for example, the actual water delivered to households, industries, commercial entities and government institutions in Lusaka was estimated at 102 768 m$^3$/ day excluding leakages. With the city’s requirement of 108 598 m$^3$/ day there was a shortfall of 5830 m$^3$/ day (Agyemang et al, 1997). Thus using water for purposes of watering gardens is not possible.

**Urban and Peri-Urban Land Tenure and Land availability**

Land in Zambia is held by the Director General of Land on behalf of the President who is responsible for allocating it to individuals. However, the allocation must be based on the city plan. Van den Berg (1984), showed how various land uses were struggling for land in the urban fringe. He attributed this to the delay and inadequate development of a plan for the city of Lusaka. With the removal of subsidies on all agricultural inputs and the
lucrative business of house rentals, many of these holdings are being subdivided to pave way for the construction of houses. Unfortunately most urban people cannot afford the land. Applications for smallholdings in Chongwe, Chibombo and Kafue attract a non refundable application fee ranging between US$ 15 - 25 US$. 

Cases of corruption in the allocation of plots have been reported. A new phenomena has developed: letting part of the legally owned land to landless people at a “small” fee.

Gardening in Lusaka and other town takes place in open spaces within and in the peri-urban areas. Most of these do not have titles to this land. In 1999 a crop damage assessment was conducted on the Bennie Mwiinga Housing site before construction work started. This site was not zoned for Agriculture but the people who had their fields there were compensated by the Presidential housing initiative. This indicates that there is political will or probably the Government realises that some people derive their livelihood from UA. However, it is difficult for people to cultivate these open spaces because of insecurity of tenure. In the Bennie Mwiinga Housing case, the politicians intervened but this may not be the case for other people.

**Inadequate Extension Services**

Many farmers in the urban and peri-urban areas have not benefited from the inadequate extension services. All the extension methodologies used from 1991 to 1999 were group based and were not suitable for the urban farmers. Extension workers found it difficult to form farmer groups in urban areas. The fixed time schedule of the Training and Visiting (T and V) was also not suitable because a large number of urban cultivators in urban areas are in formal employment or have other commitments besides farming/gardening. During weekends the farmers are free while the extension workers, being civil servants, do not work. The heterogeneity of the farmers adds another dimension to extension. Some of these farmers, depending on their socio-economic status and educational levels, want to be treated in a certain way. As a result of the above mentioned methodologies, only farmers in the rural areas were able to benefit from extension services.

The only way appropriate farming methods can be transferred to women and youths is to come up with extension approaches that can take care of the heterogeneity of these farmers. Unless this is done, Urban and Peri-Urban agriculture in Zambia will not attain its full potential.

**Lack of micro credit schemes and cost of inputs.**

The cost of inputs are beyond the reach of the vulnerable households and as such they use non certified seeds whose yields are low. Micro-lending institutions in Lusaka are more willing to give loans to marketers than urban farmers, including those keeping chickens in the backyards, garages and kitchens

**Areas of Future Research.**

Previous surveys on UA have established that the activity exists (Drescher 1994,1995,1997; Bos 1994; Rakodi 1985,1988). The activity has been examined at from different view points. The Sociologists, Geographers and Anthropologists have argued
that UA is a survival strategy and that it is practiced by households in low income brackets. The urban planners, who believe that a city should be ‘built environment’, believe that this activity should not be allowed in urban areas. There are many factors that facilitate or discourage UA. It is for this reason that more research is needed before urging for widespread cultivation. The areas of research include extension service provision, land tenure and urban development, gender implications, economic importance of UA, nutrition, land management and possibilities of using solid waste in Urban Agriculture.

**Extension Service Provision.**

Extension service in agriculture is dominated by the Government through the Ministry of Agriculture. There have been three notable methodologies in Extension in Zambia namely: individual visits, Training and Visiting (T and V) which was later modified and named Zambia Structured and Extension and Training (ZASET), and most recently Participatory Extension Approach (PEA). Each of these methodologies had its own advantages and disadvantages. Individual visits seem to benefit the Lusaka farmers, but the methodology is too costly. The T and V as proposed by Benor and Baxter (1984), and was designed for a typical rural setting where kinship and to some extent communal responsibility were prevalent and as such were implemented with little or no success in the Urban and Peri-Urban areas. The Participatory Extension Approach has 11 phases and steps. These include: training of trainers; selection of the community; information and approval of the community; identifying community needs; prioritizing community needs; searching for solutions; identifying local institutions; action planning; implementation/experimentation; monitoring and evaluation; and reconsideration: process review and re-planning.

The most difficult task in an urban or peri-urban setting is social mobilisation. The success of PEA, is very much dependant on the participation of the “whole” community. If an extension worker/agent cannot mobilise the whole community, then the PEA process cannot proceed. Generally, the PEA methodology is not suitable for the Urban Farmers because of the procedures involved (MAFF 2000). Research has to be done so that an alternative extension methodology can be developed which will take into account the heterogeneity of the urban and peri-urban farmers.

**Land Tenure.**

Land availability is crucial to the decision to cultivate. Lusaka has “no” land to spare for Urban agriculture. According to Rakodi (1985), most rain season gardens then were on vacant land (public or private) while some people bought land for cultivation. This trend had not changed to date. The new integrated development plan for Lusaka, which is yet to be approved, does not mention UA. Land tenure issues have to be studied with reference to UA as this will enable people to establish why UA was left out even when some farmers were compensated for crop loss in the city. The Land Acts of 1975 and 1999 have to be studied with reference to Urban Development and Agriculture (Mulenga 1999).

Some of the small holdings in the peri-urban areas are not fully utilised. The tenancy of these under-utilised small holdings is subject to a lot of questions. Some of the questions
include: Are the owners of these holdings farmers or not? What criteria were used when allocating this land to them? Is it morally right for them to hold land while some people have no land for cultivation? These and many more have to be studied in depth to understand the implications.

**Gender Implications**

The studies of UA in Zambia, Zimbabwe, Mozambique and Tanzania have been able to indicate gender roles. Most of these reports clearly state that women are more involved in UA than men (Drescher, 1994; Sheldon, 1999: Maxwell, 1994: Hasna 1998: Drankelman and Davidson, 1998). In Zambia, most of the works indicate the important roles of the women and children but none of them show the value of their contribution to the household income. The contribution of women to household food security is often taken for granted. There is need to find out the economic contribution of women to household food security and their economic position in the urban economy (Maxwell, 1994: Rakodi, 1991; Rakodi, 1995).

**Economics of Gardening**

The economic importance of gardening is not viewed by all people in the same way. The rich feel that it is uneconomical on time and finance if it is done specifically to meet or supplement household food requirements. On the other hand, UA makes a big difference for the low income groups. In 1992 and 1993 a market prices survey was done in Lusaka. In this survey, Drescher (1993) observed that the prices of tomato, onions, rape, and cabbage were very high in Kalingalinga squatter compound compared with those obtaining in Northmead and Longacres markets. In view of rising costs of inputs and scarcity of land for cultivation, there is need to study the gross margins of UA and come up with sustainable means of carrying out this activity. This will benefit the low income households.

**Urban Agriculture and its contribution to Household Nutrition**

Cases of malnutrition are high in the squatter compound in the cities of Zambia. Most of the researchers have argued that gardens contribute to the nutritional status of the people either directly or otherwise. The studies so far are all qualitative in that they do not explain the difference in weight or body appearance of the children whose families have gardens and those that do not have. There is need to establish nutritional facts quantitatively and I believe that such facts could be the basis for lobbying for policy changes towards UA.

**Solid Waste Management**

Solid waste management in most cities of Zambia, is not up to the required health standards. It is very common to see uncollected waste in the cities. This problem is very pronounced in the squatter compounds. Most countries have done considerable research in using solid waste and compost. In Zambia, many people grow pumpkins and maize on rubbish dumps. It necessary to carry out detailed studies on the quality of waste and any heavy metals with reference to health (Drescher, 1994a: Gasama 2000).

**Potential Partners In Future Research.**
Most of the research work so far has been done by researchers from the Western countries. However, this does not mean that there is no local capacity to carry out research. A number of individuals, including researchers, academicians, nutritionists, horticulturists, extension agents, have already shown vivid interest in UA (Annex 2). Potential partner institutions in future research include:

**Government Ministries.**
- Ministry of Agriculture, food and Fisheries
- Ministry of Local Government and Housing
- Ministry of Environment and Natural Resources
- Ministry of Lands
- Ministry of Water and Energy.
- Ministry of community Development and Social welfare.

**Institutions of Learning**
- Natural Resources Development College
- University of Zambia – School of Natural Sciences, School of Agricultural Sciences, School of Humanities, and Social Sciences and School of Veterinary Medicine.
- Copperbelt University - School of Built Environment.
- In-service Training Trust (ISTT)

**Research Institutions**
- Institute for Economic and Social Research – University of Zambia
- Mt Makulu Central Research Station – Ministry of Agriculture
- Balmoral Central Veterinary Research Institute
- National Irrigation Research Scheme

**Non Governmental Organisations (Local and International).**
- Zambia Association for Women In Agriculture
- Zambia Small Livestock Association
- Swedish Cooperative Center
- Germany Assistance for International Cooperation (GTZ)
- Netherlands Volunteers (SNV)
- CARE International
- Food and Agriculture Organisation.
- United Nations Development Programme (UNDP)
- Catholic Commission for Justice and Peace (CCJP)
- Zambia National Farmers Union
- World Food Programme
- Programme Against Malnutrition (PAM)
- National Food and Nutrition Commission.

**Conclusion**

Research findings and reports indicate that UA in Zambia is as old as cities themselves. In the past, this activity was done with little concern from local authorities, most
probably because land was available. In the 1980s and 1990s we have seen the emergency of land use conflicts between land development (built environment) and agriculture. Social scientists have argued that UA in the cities is a result of high poverty levels, especially in the squatter settlements. In the quest to meet basic household food requirements, some families practice farming. However, some planners, government officials and politicians, think that UA is a problem rather than a solution.

Arising from the status of research in Zambia, there in need to answer the questions raised above. It is important to start with a stakeholders gathering so that researchers, agriculturists, academicians, planners, government leaders, politicians and farmers can discuss urban and peri-urban agriculture.

A consultancy type of research may not provide adequate answers to these issues. Projects such as the Urban Vegetable Promotion Programme in Tanzania or the Urban Waste Management and Composting in Mali (Gasama, 2000; Jacobi et al, 2000), are needed for a better understanding of the implications of UA.

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## Annex 1: Lusaka Provincial Urban Agriculture Task Force

<table>
<thead>
<tr>
<th>Name</th>
<th>Post</th>
<th>Areas of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms A M Sitwala</td>
<td>Provincial Agriculture Coordinator &amp; Chair</td>
<td>Policy and Farming Systems</td>
</tr>
<tr>
<td>Ms D M Phiri</td>
<td>Senior Field services Coordinator</td>
<td>Nutrition and Food security</td>
</tr>
<tr>
<td>Ms C Hachoongo</td>
<td>District Agricultural Coordinator – Lusaka</td>
<td>Livestock and Poultry</td>
</tr>
<tr>
<td>Mr Chelemu</td>
<td>Senior Agriculture Specialist – Lusaka</td>
<td>Post Harvest Technologies</td>
</tr>
<tr>
<td>Mr P Muwowo</td>
<td>Agriculture Officer Extension Methodology</td>
<td>Extension Methodologies and Land-use.</td>
</tr>
<tr>
<td>Mr J Chuunka</td>
<td>Principal Agricultural Supervisor</td>
<td>Management Information Systems.</td>
</tr>
<tr>
<td>Ms Sikanyika</td>
<td>Senior Agricultural Information Officer</td>
<td>Communication and publicity</td>
</tr>
<tr>
<td>Ms Mwenda</td>
<td>Senior marketing and co-operatives officer</td>
<td>Market and co-operatives information</td>
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<tr>
<td>Ms G Chipepo</td>
<td>Technical Officer</td>
<td>Mapping and Remote Sensing</td>
</tr>
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<tr>
<th>Name</th>
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<tr>
<td>Dr Mable Milimo</td>
<td>Lecturer</td>
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</tr>
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<td>Ministry of Agriculture Food and Fisheries&lt;br&gt;Lusaka Province</td>
</tr>
<tr>
<td>Dr F Haazele</td>
<td>Lecturer</td>
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</tr>
<tr>
<td>Dr C L Mulenga</td>
<td>Acting Director</td>
<td>Institute of Economic and Social Research – University of Zambia</td>
</tr>
<tr>
<td>Paul Muwowo</td>
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<td>Ministry of Agriculture, Food and Fisheries. Kafue</td>
</tr>
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</tr>
<tr>
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<td>School of Natural Sciences&lt;br&gt;Geography Department</td>
</tr>
<tr>
<td>A M Sitwala</td>
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<td>Ministry of Agriculture Food and Fisheries – Lusaka</td>
</tr>
<tr>
<td>Dr Chanda</td>
<td>Senior Agriculture Officer Horticulture</td>
<td>Ministry of Agriculture, Food and Fisheries-Lusaka</td>
</tr>
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</table>
1. Introduction

In all urban areas of Zimbabwe, there is growing and widespread cultivation on open municipal land and undeveloped land intended for residential and industrial development. Urban agriculture dates back to the 1950's. Recently it has increased dramatically. According to Mazambani (1982) the area around and within Harare under cultivation increased by 68% between 1950 and 1980. From air photo analysis, Mbiba (1995) reports that the area under cultivation in 1993-94 was about double that under cultivation in 1990. Masoka (1996) also reports that between 1990 and 1994 the area under cultivation in Harare increased by 93%.

Crop production, horticulture and livestock keeping on these open municipal and undeveloped lands have become significant sources of the food security and indirectly sources of household cash income generation or savings. Advent of economic reforms has exacerbated urban agriculture. This is because of the removal of subsidies on food commodities and retrenchments in the formal employment sectors. These have in turn contributed to falling real incomes and reduced food security status of urban households. The vulnerable households resorted to urban agriculture to grow food crops to sustain their livelihood. Drakakis-Smith (1995) and Mudimu et al (1998) observed that urban cultivation had become an important strategy through which families cope with the impact of the economic structure adjustment programme. Mudimu (2001) reports on new emerging dimensions in urban cultivation in terms of the socio-economics profile of participants that have implications for the political economy of urban agriculture.

The political economy of the land for urban and peri-urban agriculture involves the interplay of several factors, namely, the socio-economic motives for urban agriculture, the socio-economic profile of the players, institutions governing access to urban agriculture and the strategies that are used to gain the access.

The paper reviews research on the dynamics of urban land markets and sub-markets for urban and peri-urban agriculture, patterns of formal and informal land access and use, the strategies for access and factors determining access. The paper attempts to show how these issues are, or are not, integrated into urban policy, planning and legislation. Gaps in and emerging issues for research issues are identified. The paper relies on past and current empirical research.

2. An Overview of the Role and Issues of Urban Agriculture
This section gives an overall picture of urban agriculture. Urban agriculture is the production of field crops, gardens crops, fruit trees, ornamental trees and shrubs and rearing of livestock within the city or town boundaries. Peri-urban agricultural activities involve residence from urban and surrounding areas undertaking agricultural activities on lands surrounding urban centres. Some of the lands are smallholdings zoned for agricultural activities. This is widespread and increase in all urban areas of Zimbabwe (Mazambani, 1982).

The use of urban space for agricultural activities is in two forms, namely `on-plot' to `off-plot' (Mbiba, 1992). On-plot cultivation occurs on the small plots on residential stands. On-plot cultivation is primarily concerned with vegetable production for home consumption and occasionally for sale when there is a surplus. Sometimes rabbits and chicken are raised on-plots. These activities are semi-commercial because some of the produce - eggs, chicken and rabbits are sold for cash. This form of urban space use has to meet the requirements of the by the local authorities with respect to size and nature of activities. Some city regulations do not allow raising of livestock because of noise nuances and potential health hazards from animal wastes. Access to on-plot cultivation is by way of possessing a residential property. Residential urban areas in Zimbabwe are divided into high, medium and low density suburban areas ranging from 200-300, 800-1000 above 1000 m², respectively. The on-plot sizes are pre-determined by urban planners with areas for the high, medium and low-density areas. The differences amongst plot sizes are a result of the different structures built by plot owners.

The urban agricultural activities of major interest in Zimbabwe is off-plot cultivation of field crop (Mbiba 1995; ENDA-Zimbabwe, 1996, 1998; Mudimu et al., 1998). The agricultural activities take place on open spaces reserved for future use in residential, commercial and industrial areas, along river banks, dams or catchment areas of dams and other waterways, along roads sides, railway lines and on hills (Mbiba, 1995; Mudimu et al., 1998; ENDA-Zimbabwe 1996a and b). An example of what the situation is like in most urban areas in Zimbabwe is shown in Figure 1 which indicates the extent of urban agriculture in the industrial, residential and open spaces in the city of Harare. Off-plot cultivation can be legal or illegal depending on whether permission was granted by the local authority or not. It is also controversial and illegal when it takes place without permission on someone’s property such as undeveloped residential stands, surrounding farms, properties of schools, churches, and firms.

Off-plot or field plot sizes vary with residential location as shown in Table 1. Smaller towns such as Gweru and others have much bigger plots (ENDA-Zimbabwe, 1996b), as the population has not increased that much compared to bigger towns such as Harare, Bulawayo and Chitungwiza. Although off-plot fields tend to be small in size, people have the tendency of opening up numerous fields in different places such that some may end up with more than a hectare per family. Medium density areas have smaller off-plots because there is not much open space due to their location where in most cases they are sandwiched by high and low density areas.
Table 1. Average size of fields by location

<table>
<thead>
<tr>
<th>Residential location</th>
<th>Range off-plot (m²)</th>
<th>Range on-plot (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low density</td>
<td>50-250</td>
<td>50-200</td>
</tr>
<tr>
<td>Medium density</td>
<td>15-45</td>
<td>15-105</td>
</tr>
<tr>
<td>High density</td>
<td>50-4500</td>
<td>2-25</td>
</tr>
<tr>
<td>Small plots</td>
<td>5000-25000</td>
<td></td>
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</table>

2.1 Pattern of Land Use for Urban and Peri-Urban Agricultural Activities

The major urban agricultural activities according to income levels are shown in Table 2. Close to 90 percent of the urban population grow vegetable for home use.

Table 2 Agricultural activities by household income groups

<table>
<thead>
<tr>
<th>Activity</th>
<th>Income level (ZWS)</th>
<th>Percentage of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td>Below 5000:00</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>5000-15000:00</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>15000-25000:00</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Above 25000:00</td>
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<tr>
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</tr>
<tr>
<td></td>
<td>Above 25000:00</td>
<td>15</td>
</tr>
<tr>
<td>Livestock</td>
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</tr>
<tr>
<td></td>
<td>5000-15000:00</td>
<td>12</td>
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<tr>
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<td>15000-25000:00</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Above 25000:00</td>
<td>30</td>
</tr>
</tbody>
</table>

Off-field crops

Table 3 shows the major field crops grown off-plot throughout in Harare. In general, all cultivators grow maize, (Zea mays L.) which also covers the largest area. This is because maize is the staple food crop, which is used to make ‘sadza’. Maize production in urban areas results in reduction in expenditure on maize-meal. Surpluses, if any are sold generate cash income. Sweet potatoes [Ipomoea batatas (L.) Lam] make up 25 % of the crops grown and are a substitute for bread. Other crops grown are okra (Hibiscus spp.), tsunga (Brassica juncea L.) and bambara nuts (Vigna subterranean (L.) Walp ((ENDA-Zimbabwe, 1996b; Chivinge and Machakaire, 2000). Besides maize, which is grown as a staple food crop, the rest are grown as supplementary crops. In 1998, some commercial cotton and sunflower were observed in some plots in Harare.

Table 3 Range of Crops Grown, Number and Size of Plots in Harare

<table>
<thead>
<tr>
<th>Crop</th>
<th>Number of Plots per Respondent</th>
<th>Respondents Growing %</th>
<th>Average Plot Size (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>1.639</td>
<td>100</td>
<td>0.30</td>
</tr>
<tr>
<td>Sweet potatoes</td>
<td>1.689</td>
<td>47</td>
<td>0.15</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>1.393</td>
<td>28</td>
<td>0.015</td>
</tr>
<tr>
<td>Nyimo (Bambara nuts)</td>
<td>1.65</td>
<td>23</td>
<td>0.015</td>
</tr>
</tbody>
</table>
### On-plot Crops

On-plot gardening constitutes is a major activity in all low, medium or high-density areas (ENDA-Zimbabwe, 1996b). It is the most common activity practiced throughout the year by about 78% of the practitioners. Over 90% of those practicing gardening grow vegetables of which 54% is made up of tomatoes.

While in the high-density areas most of the vegetables are produced for home consumption and incidental surpluses for sale, in low-density areas there is deliberate production for sale. In high density areas there is little land (on average 12.6 m² according to Mbiba, 1995) left for gardening on-plot while in the low and medium density areas space of up to more than 2 ha can be available.

Table 4 in Appendix) shows some of the major vegetables grown in urban areas throughout the country. These are very similar to what is also grown in peri-urban areas (Sibhensana, 1996; Turner and Chivinge, 1999). Vegetables are an important source of macro- and micronutrients such as Vitamin A, Calcium, iron, vitamin C; consumption of which prevents the drastic effects of ‘hidden hunger’ or malnutrition.

### Livestock

Due to the drop in the economic conditions, there has been an increase in livestock production in all residential areas mainly for sale and consumption in the past 3 years. Own rearing for own consumption of livestock and livestock products provides a cheaper protein source. The most common types of livestock reared are chicken, pigeons and rabbits which are reared in raised structures in the high density areas with limited space. Most people keep one type of livestock but some keep more than one. Due to space limitations in the high-density areas, less livestock is reared (ENDA-Zimbabwe, 1996a).

**Figure 1. The main types of livestock kept in urban areas**
Fruit trees

Production of fruit trees is widespread in all residential areas. They are primarily grown for family use but surpluses are sold to cash income. Some smallholdings in low density suburban areas produce fruits for sale. The common fruit trees grown are mangoes (*Mangifera indica* L.), guavas (*Psidium guajava* L.), peaches (*Prunus persica* (L.) Batsch) and oranges (*Citrus sinensis* (L.) Osbeck (Table 5). Most of these fruit trees do not vary much from those grown in peri-urban areas as reported but Turner and Chivinge (1999).

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocado</td>
<td><em>Persea Americana mill</em></td>
<td>Duke</td>
</tr>
<tr>
<td>Guava</td>
<td><em>Psidium guajava L.</em></td>
<td>Hass</td>
</tr>
<tr>
<td>Mango</td>
<td><em>Mangifera indica L.</em></td>
<td>Sabre, Peach, Sensation</td>
</tr>
<tr>
<td>Paw paw</td>
<td><em>Carica papaya L.</em></td>
<td>Hotus gold</td>
</tr>
<tr>
<td>Lemon</td>
<td><em>Citrus limon Burm f.</em></td>
<td>Rough lemon (C. jimbiri)</td>
</tr>
<tr>
<td>Sweet orange</td>
<td><em>Citrus sinensis (L.) Osbeck</em></td>
<td>Valencia, Delta, washington</td>
</tr>
<tr>
<td>Grapefruit</td>
<td><em>Citrus paradisi</em></td>
<td></td>
</tr>
<tr>
<td>Banana</td>
<td><em>Musa nana Lour or cavendishi lam</em></td>
<td>Dwarf cavendish</td>
</tr>
<tr>
<td>Granadilla</td>
<td><em>Passiflora edulis sims</em></td>
<td>Purple granadilla</td>
</tr>
<tr>
<td>Mulberry</td>
<td><em>Morus nigra L.</em></td>
<td></td>
</tr>
<tr>
<td>Peaches</td>
<td><em>Prunus persica (L.) Batsch</em></td>
<td>Kakamus</td>
</tr>
<tr>
<td>Pears</td>
<td><em>Apodytes dimidiata Arn</em></td>
<td>Bon Cretien</td>
</tr>
<tr>
<td>Grapes</td>
<td><em>Vitis vinifera L.</em></td>
<td></td>
</tr>
</tbody>
</table>

Source: Chivinge and Machakaire (2001)

**Ornamental Crops**

Urban agriculture in Zimbabwe includes ornamental plant production both on- and off-plot. These are grown for own use and commercial sales as nursery and flower business.

2. **Access to Land for Urban and Peri-Urban Agriculture: Historical Background**

Urban and peri-urban agriculture has always existed in all urban areas in Zimbabwe since people started residing in the urban areas. It existed in three forms. First, it exited as a household activity whereby householders grew own vegetables and some rainfed crops for home use. Secondly, it started as commercial farming activity on large residential properties zoned for peri-urban farming activities such as growing vegetables, fruits and ornamental crops and keeping dairy cattle and hobby animals such as horses. In Harare, these areas included Tynwald, Christon Bank, Waterfalls, Hatfield, Parktown, Borrowdale, and Ruwa. The commercial agricultural activities were a response to the growth of markets for agricultural produce due to the increase in the urban population.

Prior to 1978-79, access to urban land for residential purposes and peri-urban agriculture was prescribed by laws that were enacted to reinforce racial segregation of black and white people. Thus, prior to 1978-79, due to the segregation laws in existence then, all the residential property owners were white. The removal of racial segregation laws in the 1978-79, led to blacks buying or renting residential properties in urban and peri-urban areas and their entry into peri-urban agriculture on commercial basis.
Off-plot agriculture started as blacks came to reside in urban areas either on the employers’ properties or in the specially designated residential areas for black workers, known as African townships. Over time since 1920’s, as more and more wage income blacks were having secured homes in urban areas off-plot urban agriculture increased. In the early years, non-Zimbabwe black urban dwellers predominated in off-plot agricultural activities. This can be attributed to a number of factors. One factor was the labour migration in Southern Africa that resulted in massive inflow of labourers from neighbouring countries who were preferred domestic and mine workers. The laws regulating access to land in the rural areas in Zimbabwe, made it difficult for foreigners to own land in rural areas hence they had to stay in urban areas. Off-plot agriculture emerged as an activity to supplement availability of fresh agricultural produce. Malawians constituted a significant proportion of the urban work force especially in the mines and as domestic workers. Mbiba (1995) showed that 60% of the cultivators in Harare had no rural land. Of these over 35% foreigners were originally from Malawi although some now have Zimbabwean citizenships. Those from Mozambique constituted about 12% of foreigners in urban areas.

The second factor was the massive rural-urban migration during the height of the liberation war, 1976-1980, when many black people left their homes to come and find shelter in urban areas. Most of these were not employed or it was just the husbands who had some low paying jobs. Consequently they had to supplement their food needs by practicing urban agriculture. The majority of these did not return to their rural homes after independence. In fact there was increased rural-urban migration after 1980 as more and more people looked for jobs and preferably staying in urban areas. The majority of them had to practice agriculture in the form of crop production off-plot and on-plot as a strategy to have affordable produce.

The situation was worsened when the Economic Structural Adjustment Programme (EASP) was implemented in the 1990s. Many people lost their jobs and the cost of living became very high with a lot of negative impact on women and the youth. In addition a lot of the domestic workers get very low salaries hence they practice off-plot agriculture. With the hard economic conditions especially after 1997 many residents in the low-density areas started practicing urban agriculture with poultry production and vegetable growing intensifying between 1998 and 2000. These people have adequate land on-plot and the financial resources to commercially produce these products.

Most people in urban areas are not landowners, they are either lodgers or stay where they are employed (domestic workers). These are the groups that increased and intensified uncontrolled off-plot agriculture because they have no access to land on plot.

Within the city boundaries, in all urban areas of Zimbabwe, residents cultivate in open municipal land and undeveloped land intended for residential and industrial development. The open lands include stream banks, vlei areas, road and rail reserves and open land reserved for recreational and other purposes.

The general attitude of urban city authorities in Zimbabwe has been either to deter or to stop the agricultural activity from continuing. Prior to black majority rule in 1980, the then white control City Council and central government considered urban agriculture by the blacks as unacceptable ruralization of the urban environment (Mazambani, 1982).
Thus urban agriculture was extremely untolerated. The cultivators faced prosecution if caught. The racial segregation that was in place restricted the practice to areas around the high-density suburban areas to which the black people were restricted. Around low-density suburban areas reserved for the white population, domestic workers cultivated open areas to a limited extent and as an illegal activity.

There was no immediate change in attitude after majority rule in 1980. In Harare, the City Council mounted campaigns against urban agriculture that included arresting the cultivators and slashing of maturing crops.

The cultivators, the majority who were women, resisted and opposed the City Council by continuing their agricultural practice year after year. This resistance was taken to be a fight against a colonial and male attitude to city planning with regard to alternative urban land uses (Mudimu, 1996). This opposition was articulated as a political and economic battle. The women mobilised themselves to lobby their local city councillors and their constituent Members of Parliament for a general change in attitude towards urban agriculture. The persistence and the accompanying political pressure led the Harare City Council in 1992 to concede by allocating some designated land for urban agriculture. The land was allocated to women operating as organised farming groups or who formed farming co-operatives. This option gave some residents the right to grow their crops and for the City Council to allocate suitable land and be able to monitor and control the impacts of some urban cultivation. Despite this move, “illegal”, or un-sanctioned, cultivation by both members of co-operatives, who have plots outside the identified co-operative lands, and other individuals, who are not members of co-operatives, has persisted.

**Strategies for Access to Urban Agriculture**

**Table 6 How Off-Plots Were Accessed in Harare**

<table>
<thead>
<tr>
<th>Method of Access to Plot</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>First to claim plot</td>
<td>199</td>
</tr>
<tr>
<td>Allocated by City Council</td>
<td>51</td>
</tr>
<tr>
<td>Through farming group</td>
<td>32</td>
</tr>
<tr>
<td>Allocated by land owner (church, school, factory)</td>
<td>21</td>
</tr>
<tr>
<td>Given by friend or relative</td>
<td>111</td>
</tr>
<tr>
<td>Renting</td>
<td>1</td>
</tr>
<tr>
<td>Bought</td>
<td>1</td>
</tr>
<tr>
<td>Not known (i.e. respondent child or hired worker)</td>
<td>64</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>480</strong></td>
</tr>
</tbody>
</table>


Table 6 shows that access to a plot for cultivation has essentially been by staking a claim to a piece of open land. Some of the respondents accessed land through farming groups that was allowed to operate, or were allocated land by the City Council in 1992. Plots were also obtained through donations from relatives or friends. A very small percentage (0.4%) of the respondents rented or bought plots. Such cases appear to be under reported.
The sale and leasing of plots indicates that there is a market for the urban spaces for crop cultivation. This underscores the value attached to land for cultivation.

Access to land is also governed by whether one is a (a) house owner or lodger, (b) the period one has been resident in a suburban area. House owners tend to dominate cultivated areas that are in proximity to residential areas. Lodgers do not have much access because they do not stay long in a place as they are constantly changing accommodation. Because of this, lodgers have problems accessing land for cultivation.

It was also observed that house owners who first settled in a residential area tend to have more plots than those who acquired properties later. Earlier settled households maintain ownership and access which excludes other households.

Residents from the high density suburban areas, claim cultivation plots on farms and undeveloped lands laying outside the city boundaries.

Land Markets for Urban and Peri-Urban Agriculture

A recent survey carried out in purposively selected suburban areas, in Harare, revealed that, though small, there was an active market for renting or leasing urban agricultural plots. About 5 percent, of the 600 cultivators interviewed, were renting plots from “owners” (forthcoming Mudimu, 2001). Payment was either in cash or in kind. In either case payment varied as determined by the plot size, distance from area of residence and whether the parties were related. The willingness to pay for use of a plot is an indication of the value attached to urban agriculture.

Table 7 Prices for Renting/Leasing Fields for One Season in Harare

<table>
<thead>
<tr>
<th>Sites</th>
<th>Fee Charged or Paid</th>
<th>In-kind Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dzivaresekwa</td>
<td>700 – 900</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Hatcliffe</td>
<td>100 - 1 500</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Sunningdale</td>
<td>250 – 2 000</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Mufakose</td>
<td>Up to 1200</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Tafara</td>
<td>Up to 2 000</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Mabvuku</td>
<td>Up to 2 000</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Warren Park</td>
<td>400 – 1 500</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Ashdown Park</td>
<td>600 – 2 000</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
<tr>
<td>Mabelreign</td>
<td>800 – 1 500</td>
<td>Some green maize, maybe one bag of maize grain</td>
</tr>
</tbody>
</table>

Source: Mudimu (2001)

The trends in the prices for smallholding in peri-urban in and around Harare are indicative of the changes in the value and use of the land. Most of the purchase are for sub-dividing and developing the land into residential areas. Thus, there is conversion from agricultural land use to residential use.

Table 8 Trends in Prices of Smallholding Properties in Peri-Urban Areas of Harare

<table>
<thead>
<tr>
<th>Suburban Area</th>
<th>Smallholding 15 – 25 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Marlborough</td>
<td>175 000</td>
</tr>
<tr>
<td>Tynwald/Snake Park</td>
<td>100 000</td>
</tr>
<tr>
<td>Christon Bank</td>
<td>150 000</td>
</tr>
</tbody>
</table>
Source: Compiled from various reports on property sales.

### 3. Rules, Regulations on Urban Agriculture

In Zimbabwe, the urban land is reserved for urban infrastructural development. Land is for residential, industrial, commercial and development of other amenities. Title deeds are given to those who buy land and the rest is council property. There is no provision for agricultural land within the city boundaries except in suburban areas zoned for agricultural activities or in cases in which a specific permit is granted to use part of the property for agricultural activities. In either case some activities that can be carried out are proscribed by city regulations. In particular, the regulations do not allow for rearing of animals as they are considered a nuisance due to smells and noises.

Agriculture is permitted in zoned peri-urban areas. These peri-urban areas are titled properties.

The legislative and regulatory instruments and their effects or implications on urban agriculture are:

- **The Regional, Town and Country Planning Act of 1976** gives power to local authorities for local development planning (issuing of development permits, and preparing local and master plans). Through this Act, the local authorities are responsible for activities carried in areas under their authority. Section 22 Subsection (b) paragraph (iii) states that the use of urban land for agricultural activities does not constitute land development. In essence use of urban land for agricultural activities is not recognized as urban land development.

- **In the Urban Councils Act (1995), Section 235 (1) (j)** gives the Responsible Minister authority to formulate regulations to prohibit or regulate cultivation in local government areas. While the Act gives power to local authorities to make their own by-laws, these by-laws should not contravene the main Act.

- **The Streambank Protection Regulations (Natural Resources Act, 1975):** This proscribes cultivation within 30 metres of a stream to prevent silting into water systems.

- **The Water Act (1974)** which forbid riverbed cultivation in the dry season to reduce silting and downstream erosion when the river resumed flowing.

There is no clear legislative instrument against, or in support, of plans relating to urban agriculture. The Regional Town and Country Planning Act that governs urban planning and management refer to urban agriculture as one of the development activities that is subject to control through statutory instruments. The Urban Council Act, that governs local authorities, gives the responsible minister discretion to make regulations pertaining to cultivated urban lands. It, however, does not necessarily prohibit urban agriculture. The Act gives power to the responsible minister to clear crops when they are likely to cause fire, or health problems, or if they are unsightly. All these are subjective. Both Acts do not necessarily prohibit urban cultivation on open spaces in the cities. Past control measures such as slashing of crops were justified on the basis of the Natural Resource Act that controls, or prohibits, cultivation inside 30 metres of riverbanks, or other waterways. The implications are that urban local authorities do not have the power neither to forbid nor allow urban land use for agriculture.
3.1 Conflicts in Urban Land Use for Agriculture

This section reports on different views of and conflicts in urban land use for agriculture by urban planners and managers and the cultivators.

View of Urban Authorities

Local authorities viewed urban agriculture as demanding a significant proportion of cities’ land and having negative environmental and health impacts. These were considered as impacting negatively on quality of urban life, contributed to some decline in the aesthetic quality of urban space and increased costs of urban environment management. The negative impacts and costs associated with urban agriculture were identified as:

(a) Soil erosion which eventually results in silting water ways and sources;
(b) Use of open areas which should be used for recreation by residents,
(c) Costs of re-surveying or re-pegging areas because the boundary pegs were removed by cultivators and
(d) Tall maize plants provide hideaway for muggers.

Bowyer-Bower and Tengbeh (1995) measured the environmental effects of urban agriculture on the environment of Harare. They assessed that in cultivated areas the infiltration of rainwater into the soil was reduced on average by 28.5 percent. Soil loss in cultivated lands ranged from 2.5 to 13.7 tonnes per hectare per year, depending on soil type. Cultivation of open spaces and wet lands contributed to loss or change in spatial diversity of species habitat of over 80 percent, reduction of ecological diversity and contributed to a 55 percent loss in tree presence in Harare (Bowyer-Bower and Tengbeh, 1995).

View of Cultivators

Those involved in urban agriculture contend that it provides opportunities for households to improve availability of own produced foods and cash income and reduces the vulnerability of women and children to food insecurity and negative impacts of the economic reforms (Mbiba, 1995). Savings in food purchases frees their budgets for other household needs. In addition, it contributes to better family nutrition that would not have been possible if the family purchased all requirements from the market. Improved nutrition contributes to better family health. In their view the open and undeveloped urban lands were under utilised.

In a study undertaken in Harare (Mudimu, 1998) the majority of the respondents (73 percent) were of the view that it was permissible to cultivate (Table 14). Fifty-five percent admitted that they cultivated without any form of permission, 30.2 percent and 15.0 percent had some form of permission from the City Council and rightful owners of the land, respectively. Those with City Council permission were members of co-operatives allocated land around 1992.

Table 9 Respondents’ Perception of Legality of Cultivation
### Respondents’ Perception

<table>
<thead>
<tr>
<th>Allowed to Cultivate</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>19.0</td>
</tr>
<tr>
<td>Yes</td>
<td>72.5</td>
</tr>
<tr>
<td>Do not know</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who granted permission</th>
<th>% Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>54.8</td>
</tr>
<tr>
<td>City Council</td>
<td>30.2</td>
</tr>
<tr>
<td>Rightful Owner</td>
<td>15.0</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 10 Respondents’ Views on Why Cultivation should be allowed

<table>
<thead>
<tr>
<th>Why Cultivation should be allowed</th>
<th>Respondents %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For food production</td>
<td>56.0</td>
</tr>
<tr>
<td>Income generation</td>
<td>5.8</td>
</tr>
<tr>
<td>Land is idle</td>
<td>15.2</td>
</tr>
<tr>
<td>To clear the land</td>
<td>4.8</td>
</tr>
<tr>
<td>For employment</td>
<td>7.3</td>
</tr>
<tr>
<td>No land in rural areas</td>
<td>1.5</td>
</tr>
<tr>
<td>Recreational activity</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Fifty-six percent of the respondents were of the view that cultivation on available land should be allowed to enable food production (Table 10), because the land was idle (15.2 percent) and for recreational activities (9.4 percent). Cultivation was considered as providing opportunity for income generation and employment. Some respondents (1.5 percent) would want urban cultivation to be allowed as they do not have access to land in rural areas.

### Views on Alternative Land Use

### Table 11 Respondents’ View on Alternative Uses of the Land

<table>
<thead>
<tr>
<th>Alternative Land Use</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Indifferent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Housing</td>
<td>320</td>
<td>66.7</td>
<td>69</td>
<td>14.4</td>
<td>9</td>
</tr>
<tr>
<td>Factories</td>
<td>81</td>
<td>16.9</td>
<td>223</td>
<td>46.5</td>
<td>21</td>
</tr>
<tr>
<td>Recreational</td>
<td>12</td>
<td>2.5</td>
<td>28</td>
<td>5.8</td>
<td>85</td>
</tr>
</tbody>
</table>

The ranking of alternative use of the lands under cultivation (Table 11) suggests that respondents gave more weighting to building residential accommodation followed by factories. This is a reflection of the two problems facing the urban population, namely
shortage of accommodation and high rate of unemployment. The use of some of the lands for recreational facilities such as parks, playing fields, etc. received very low ranking. This suggests that the respondents did not consider this as appropriate use of the urban spaces, given the need for urban agriculture.

4. Perspectives from Past Research on Patterns of Access and Land Use:

Several researchers have studied various aspects of urban agriculture in Zimbabwe (Mazambani, 1982; Mbiba, 1995, Mudimu and Chigume, 1994, Drakakis-Smith, 1995, ENDA, 1996, Mudimu 1996, Siziba, 1998, Mudimu et al 1998). These aspects cover the motives, conflicts, gender dimensions, and linkages of urban to economic reforms. Changes in these have implications on the future of political economy of urban agriculture. This section summarizes some of the findings pertinent to the political economy of urban land use for agriculture.

4.1 Socio-economics of Urban Agriculture

Urban crop production is now part of the food security system in the urban areas of Zimbabwe. It directly provides food and indirectly generate household cash income. Mudimu and Chigume (1993) and Mudimu et al (1998) measured the contribution of cultivation on open spaces to household food security and cash income in the City of Harare, Zimbabwe. Maize from these sources provided grain that lasted up to 4 months for some of the households. These translated into savings on household food expenditure (maize grain purchases) of up to US$15 per month. This is substantial for households whose breadwinners are on minimum wage of US$100-250 per month and facing food basket needs of US$20-40 per month.

Linkages with ESAP

Drakakis-Smith (1995) and Mbiba (1995) attributed the steep increase in urban cultivation in the 1990s to the tough economic climates since 1990. Mbiba (1995) concluded that the growth of numbers entering this sector was correlated with the incidence of the 1991-92 drought and the harsh economic climate related to the IMF/World Bank sponsored Economic Structure Adjustment Programme (ESAP).

Low-income urban households suffered the most from the burden of the removal of subsidies on consumer goods, producer inputs, and public services (health and education). Real incomes decreased due to increase in food prices, rents and transport fares. According to Brand et al. (1993), the urban minimum wage fell from 60% to 35% of the Poverty Datum Line in the year following the introduction of ESAP. These led to decrease in the purchasing power of residents. Production of own food became a strategy through which families sought to cope with the impact of the economic structural adjustment programme thereby releasing pressure on the family food expenditure budget (Drakakis-Smith, and Mbiba, 1995). This is consistent with the findings of Mosha (1991) and Sanyal (1987) that urban cultivation is adopted as one of the strategies for survival by the urban poor as a response to decline in formal urban economies.

From his study in 1995, Drakakis-Smith reported that some 70% of the primary plots had been cultivated for less than five years implying that most cultivators entered open space
cultivation in 1990. This is supported by Mbiba's findings that 62% percent of the cultivators had been cultivating on their plots for 3 years and less implying that 62% of the cultivators entered the sector within the three years 1990, 1991 and 1992. The 1996-1998 study in Harare showed that 56% started cultivating between 1991 and 1995 (Table 12). This finding agrees with those of Mbiba (1995) and Drakakis-Smith (1995).

**Table 12 Period respondent started urban cultivation**

<table>
<thead>
<tr>
<th>Period started</th>
<th>Respondents %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956-1979</td>
<td>15.5</td>
</tr>
<tr>
<td>1980-1990</td>
<td>28.4</td>
</tr>
<tr>
<td>1991-1995</td>
<td>56.1</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Mudimu (1998)

**Table 13 Retrenchment and period started cultivation**

<table>
<thead>
<tr>
<th>Employment Status of household head</th>
<th>Year started cultivation</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before 1991</td>
<td>After 1991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently employed</td>
<td>Number</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Retrenched</td>
<td>195</td>
<td>17</td>
<td>34.7</td>
<td>32</td>
<td>65.3</td>
</tr>
<tr>
<td>Pensioner</td>
<td>53</td>
<td>24</td>
<td>75.0</td>
<td>8</td>
<td>25.0</td>
</tr>
<tr>
<td>Never employed in the past 5 years</td>
<td>17</td>
<td>120</td>
<td>60.9</td>
<td>77</td>
<td>39.1</td>
</tr>
</tbody>
</table>

Source: Mudimu (1998)

A substantial number of workers, in both private and public sectors, were retrenched as a result of ESAP. As a result of the loss of wage income, family affected could have resorted to urban agriculture in an attempt to either source a means of livelihood or to diversify sources of income. As shown in Table 13, of the 53 retrenched respondents, 65.3 percent began urban cultivation in the period 1991 to 1995 compared to 34.7 percent who started in the pre-ESAP period. A cross tabulation of the employment status of household head by the period the family started urban cultivation (before or after introduction of ESAP in 1991) suggests a linkage between retrenchments and urban cultivation.

**Changes in attitudes and the socioeconomic profile of participants**

Up to the mid 1990s, the entrenched perception (probably from the colonial era) was that farming is a rural activity and therefore not desirable for the modern image of urban centres. There is change in people's attitude towards urban cultivation as evidenced by increased in area cultivated, number of persons involved and socio-economic profile of the cultivators.

**Change in Gender Aspects**

Over time, women have been the most active in urban cultivation (Mbiba, 1992 and 1995; Mudimu and Chigume, 1991; Mudimu, 1996). Mbiba (1995) found out that 63% of the cultivators on open spaces were women. Mudimu (1996) argues that the womenfolk
adopted urban agriculture as a livelihood strategy by to improve on family welfare (income, food and employment). The economic reforms of the 1990s, through retrenchments changed slightly this dominance of women in urban cultivation. Recent findings show the composition of women had dropped to 54.5%. As many men were retrenched and rendered idle in the streets, many could have been prompted to join their family in urban cultivation.

There has been change in men’s attitude towards their women’s participation. There is also increased and active participation by men in support of their spouses and in their own right. Urban agriculture has become a source of cash wages for some unemployed males.

Income Levels

Up to the mid-1990s, socio-economic profiles of cultivators showed that participants were mostly the poor. Most were low-income urban residents who grew the crops to supplement disposal incomes through savings in food purchases. Dakakis-Smith (1995) reported that incomes of most (60%) of the households participating in urban were found in the ZS$500-ZS$2000 range.

Recent observations show signs of increased participation by middle income and richer families. A number of cars were seen parked in some cultivation sites with the owners busy cultivating. Some residents in low-density middle income suburbs like Mabelreign, Milton Park and Belvedere, were claiming areas behind their durawalls for their own cultivation. But they had to deal with those who used to cultivate these areas all along. There were some reports of clashes between the richer residents and the cultivators who used to cultivate these areas all along over the right to cultivate. There is thus increased competition for and conflict over cultivation area.

Professional Status of Cultivators/Plot Owners

<table>
<thead>
<tr>
<th>Table 14 Income group and time joined open space cultivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. (%)</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Professional in high density</td>
</tr>
<tr>
<td>Professional in low density</td>
</tr>
<tr>
<td>Other (lower income groups)</td>
</tr>
<tr>
<td>Entire sample</td>
</tr>
</tbody>
</table>

Table 14 shows that professionals in both high and low-density areas entered open space cultivation much more recent as compared to other cultivators. While the percentage of lower-income cultivators who entered the sector after 1991 is 56% that for 'professional' (higher income cultivators) is 81% and 66.7 in high and low-density areas respectively. This supports the notion that richer are now also engaging in open space cultivation. As shown in Table 14 none of the respondents were cultivating in low-density areas before
1980. This could be explained by the fact that low-density suburban areas were reserved for whites prior to Independence (1980).

Table 15: Occupations of employed respondents by residential area

<table>
<thead>
<tr>
<th>Respondent's Occupation</th>
<th>High Density</th>
<th>Low Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Professional</td>
<td>21</td>
<td>12.6</td>
</tr>
<tr>
<td>Skilled</td>
<td>36</td>
<td>21.6</td>
</tr>
<tr>
<td>Unskilled</td>
<td>26</td>
<td>15.6</td>
</tr>
<tr>
<td>Domestic</td>
<td>15</td>
<td>9.0</td>
</tr>
<tr>
<td>Other</td>
<td>69</td>
<td>41.2</td>
</tr>
</tbody>
</table>

Source: Mudimu (1998)

The category 'professional' included teachers, nurses, lecturers, etc. Nonetheless, majority cultivators were poor as most were unemployed or employed in low-income non-professional jobs. Occupations of cultivators were reflective of the residential area they came from. In low-density areas, as is expected a higher proportion was employed as 'professionals' as compared to high-density areas.

Residential Status

Studies prior to 1995 indicated Cultivators in high-density areas tended to own places of residence on which they stayed as compared. Cultivators in low-density areas were dominantly domestic workers housed in the servants' quarters on premises of their employers (Mbiba, 1995).

Table 16 House ownership status of respondents, in Harare

<table>
<thead>
<tr>
<th>House ownership</th>
<th>Residential area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High density</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>House owner</td>
<td>119</td>
</tr>
<tr>
<td>Lodger</td>
<td>36</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Mudimu (1998)

When one looks at the percentage of people who owned houses and cultivated in low density areas, there is evidence to suggest that more middle income people are now engaging in urban cultivation.

Unlike in previous years when most of the cultivators in the low density areas were either hired workers or did not stay there, now a greater percentage, 59.7%, were found to be residents from these low density areas. This is also supported by some respondents in low-density areas who alleged that people who owned houses adjacent these plots was chasing them away from their former plots. Table 14 shows that, now the composition of cultivators in terms of their house ownership status (owner or lodger) in both high and low density areas is similar.

Creation of employment opportunities
There are some occasional employment opportunities being created as urban cultivation expands with increased participation of middle-income families. Hired workers were contracted to clear a piece of plot ready for planting, to weed or both. They were a fee ranging from $50.00 to $200. In some cases domestic workers worked in the plots as part of their job for their employers.

Increase in Demand for Urban Space and Competition for its Use

Between 1950 and 1980, the area under cultivation increased by 68 percent (Mazambani, 1982) and by 93 percent between 1990 and 1994 (Masoka, 1995). This massive increase is attributed to a number of factors, namely, increase in rural-urban migration, poverty and changes in the socio-economic welfare of the urban population. One factor is the rapid urban population growth since 1980. According to the 1992 population census Harare followed by Bulawayo had a rate of in-migration of 56.4% and 53.1% respectively. Out migration in other provinces was generally similar and this ranged from 20-30% with noted difference in Mashonaland East (33.2), Harare (34.5) and Bulawayo (41.1%). The largest net gainer of population was Harare (50.4) followed by Bulawayo (25.5%). Masvingo (15.2) experienced the largest loss followed by Matebeleland South (-12.5%).

In all urban areas of Zimbabwe there is huge demand for housing due to population growth. The increase in urban population has created conflicting demand for urban space for housing and agricultural production. There are massive conversion of undeveloped land spaces by urban authorities and peri-urban lands by private land developers to housing projects.

In most high density suburban areas, there is massive conversion of residential back and front yards from on-plot gardening to housing units for renting. There are two contributing factors. City water has become expensive for gardening to the extent that one does not save much by growing own vegetable. The most important factor is the high demand for houses to rent. As cash income from rental is higher and more regular than expenditure saving from own production of vegetables, on-plot gardening is not attractive any more. The opportunity costs has become too high.

A new situation is emerging as result of the increased demand for urban and peri-urban space for agriculture and for housing. The conversion of residential space from on-plot gardening to residential units for renting in high-density suburban areas is creating increased demand and expansion in urban land use for off-plot cultivation. The conversion of peri-urban agriculture land, which have been significant suppliers of vegetables, to housing schemes has implication for the supply of vegetables in the major urban centres.

Evolving Political Economy of Urban Agriculture

Due to the change in attitudes and increased use of urban agriculture for sustainable food security, there is thus increased competition for and conflict over cultivation area. Some residents in low-density middle income suburbs were claiming areas outside their walls for their own cultivation. In some cases land owners are claiming use of undeveloped
plots around their homesteads. This is resulting in conflicts with the cultivators who used to cultivate these areas all along over the right to cultivate.

The increase in the number of participants and increased participation by middle income and importance of urban agriculture as strategy for sustaining urban food security in the face of difficult economic environment are creating a conducive environment for changes in attitudes of urban authorities.

- Urban authorities now acknowledge the need to accommodate urban agriculture in use of urban space.
- Ministry of Agriculture through extension department have created urban extension programmes in three cities, Mutare, Gweru, and Harare.
- Ministry of Environment has indicated the need to review legislative instruments that control urban agriculture

However there are still some conflicts in some suburban areas. Some residents (very high income) still consider urban agriculture as inappropriate use of urban space which should be proscribed for a number of reasons. Some of these are that Tall crops and influx of non-resident cultivators introduce risk elements in residential areas. Balance between environmental concerns when it comes to silting of water way, water sources, and use of wetlands

**New Institutional Arrangements for Urban Agriculture**

Current trends suggest need to transform and create new institutions for management of urban space for agriculture. This would involve:

- The establishment of stakeholders and advocacy groups to facilitate changes and organize the participants for the common good such as sustainable land use.
- A Urban Agriculture Policy and Technical Advisory Group should be formed to oversee the development of policy to manage urban agriculture. This should be made up of all stakeholders from the central, local governments and advocacy groups and representative of urban farmers.
- Un-used space should be re-claimed and put into a pool of land for urban agriculture
- Designating some of the farms surrounding urban centres and dividing them into small land units for allotment to residents of urban areas for food production. The allotment could be on fee basis.
- Increased investment into horticultural production in Communal Areas surrounding urban centres.

Expansion in urban agriculture in the face of shortage of urban land and increased demand for water calls for:

- More efficient and appropriate technologies for intensive production as opposed to current extensive land use.
- Effective extension programmes:
  - Information dissemination through videos
  - Universities to play role
  - Private sector input supply to play roles

**Areas for Research**
1. Given the importance of urban and peri-urban agriculture in alleviating food insecurity and the demand for urban space for agriculture, there is needed to come up with new institutional arrangements for managing urban space so as to increase accessibility by a large number of residents. This calls for a study to identify sustainable options.

2. There is need to assess the impact of the conversion of peri-urban land into housing schemes on (a) vegetable supply (b) on food security and (c) demand for urban space for off-plot cultivation.

3. The trend towards conversion of on-plot gardens into housing projects requires a comparative study on the environmental impacts or costs of urban agriculture vs environmental impacts of high-density housing and population concentration.

4. The over dominance of maize production grown as sole crop has potential problems. It is depressing production of other crops important for nutrition security (legumes: groundnuts, roundnuts, cowpeas, sweet potatoes). There are also potential for increased built-up of pests and diseases that may affect future production. There is need for a study on this so that appropriate strategies would be put into place.

Due to above factors, local authorities should support cultivation on certain open lands. A clear policy on urban agriculture, as a significant land use, needs to be formulated.

References


**Mbiba, B. (1994)** “Institutional responses to uncontrolled urban cultivation in Harare: Prohibitive or accommodative?” Journal of Environmental and Urbanization 6(1)


## Annex 7: Workshop Programme

<table>
<thead>
<tr>
<th>NO</th>
<th>TIME</th>
<th>ACTIVITY</th>
<th>RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Opening Session and Technical Papers Presentations. The objective of this session is to receive technical papers and get to understand the key research issues from five country case studies and an overview of the region. By the end if the presentations, it will emerge clearly what the key research issues are from a region and country perspective.</td>
<td>Session Chair G. Matovu</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Day I</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Wednesday 28th February</strong></td>
<td></td>
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<tr>
<td></td>
<td>07.45-08.20</td>
<td>Registration</td>
<td>L. Dodzo</td>
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<tr>
<td></td>
<td>08.20-08.40</td>
<td>Introductions and Welcome Remarks</td>
<td>G. Matovu</td>
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<tr>
<td></td>
<td></td>
<td><strong>Inputs by discussant</strong></td>
<td>L. Mougeot</td>
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<tr>
<td></td>
<td>08.40-08.50</td>
<td>Outline of purpose &amp; objectives of the workshop, expected outputs and methodology</td>
<td>S. Mushamba</td>
</tr>
<tr>
<td></td>
<td>08.50-09.25</td>
<td>The Political Economy of UA in Eastern and Southern Africa; An Overview</td>
<td>B. Mbiba</td>
</tr>
<tr>
<td></td>
<td>09.25-09.35</td>
<td><strong>Inputs by lead discussant</strong></td>
<td>Dr. Tanya Bowyer-Bower</td>
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<tr>
<td></td>
<td>09.35-10.10</td>
<td><em>The Political Economy of UA in Kenya</em></td>
<td>A. K. Njambi</td>
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<td></td>
<td>10.10-10.20</td>
<td><strong>Inputs by Discussant</strong></td>
<td>I. Kaori</td>
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<td></td>
<td>10.20-10.45</td>
<td>Tea Break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.45-11.20</td>
<td>The Political Economy of UA in Tanzania</td>
<td>M. Mlozi</td>
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<td>11.20-11.30</td>
<td>Inputs by Discussant</td>
<td>A. Mgugu</td>
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<tr>
<td></td>
<td>11.30-12.05</td>
<td>The Political Economy of UA in Uganda</td>
<td>A. Nuwagaba &amp; G. Atukunda</td>
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<tr>
<td></td>
<td>12.05-12.15</td>
<td><strong>Inputs by Discussant</strong></td>
<td>P. Jacobi</td>
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<td></td>
<td>12.15-13.00</td>
<td><em>Plenary Discussion on the Overview, Kenya, Tanzania and Uganda Presentations</em></td>
<td></td>
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<tr>
<td></td>
<td>13.00-14.00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.00-14.35</td>
<td>The Political Economy of UA in Zambia</td>
<td>P. Muwowo</td>
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<tr>
<td></td>
<td>14.35-14.45</td>
<td>Inputs by Discussant</td>
<td>R. van Veenhuizen</td>
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<tr>
<td></td>
<td>14.45-15.20</td>
<td>The Political Economy of UA in Zimbabwe</td>
<td>G. Mudimu</td>
</tr>
<tr>
<td></td>
<td>15.20-15.30</td>
<td>Inputs by Discussant</td>
<td>Z. Ishani</td>
</tr>
<tr>
<td></td>
<td>15.30-16.00</td>
<td><em>Plenary discussion on Zambia and Zimbabwe presentations</em></td>
<td></td>
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<tr>
<td></td>
<td>16.00-16.15</td>
<td>Tea Break</td>
<td></td>
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<tr>
<td></td>
<td>16.15-17.00</td>
<td>Plenary discussion: key research issues emerging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.00-17.10</td>
<td>Introducing day two of the workshop: confirming groups and house keeping matters</td>
<td>S. Mushamba</td>
</tr>
</tbody>
</table>

19 Presentation of papers will last 35 minutes each, followed by 10 minutes intervention by a discussant.
Day 2
Thursday 1st March

Identification of Research Issues on the PE of UA based on Thematic Issues. The objective of this session is, through group discussions, to identify key research issues based on identified themes. Participants will be split into four groups of five. The expected output from the group discussions is additional research issues emerging on identified themes. [Research issues from a thematic perspective].

<table>
<thead>
<tr>
<th>Notes</th>
<th>08.00-10.30</th>
<th>Field Trip to Urban Agriculture sites in Harare</th>
<th>S. Mushamba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.30-11.00</td>
<td>Tea Break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.00-13.00</td>
<td>Group Discussions on Thematic Issues.</td>
<td>Matovu</td>
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<tr>
<td></td>
<td></td>
<td>[What are the key issues, research topics and methods of work under each of the themes. To be done in matrix form].</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Group Discussion: Thematic Issue 1:</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Systems Dimension: Research issues on formal and informal rules, institutions and processes that determine access to land and other UA resources. Facilitator Z. Ishani</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Group Discussion: Thematic Issue 2:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy Dimension: Research issues on urban legislation and land use planning as determinants of who practices UA. Facilitator B. Mbiba</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3. Group Discussion: Thematic Issue 3:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research issues on processes and institutions for resolving conflicts [potential and existing] over resources for UA. Facilitator G. Matovu</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4. Group Discussion: Thematic Issue 4:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research issues on the policy implications of the Political Economy of Urban Agriculture, Facilitator J. Zowa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.00-14.00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.00-16.00</td>
<td>Group Presentations and Plenary Discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Draw up a composite matrix, research issues at regional/ international level, national level, community level etc. Then how is the research approached at various levels, how can research be conducted ie participatory methodologies, observations, questionnaires etc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.00-16.15</td>
<td>Tea Break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.15-17.00</td>
<td>Final Group Presentations and Plenary Discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.00-17.15</td>
<td>Announcements and housekeeping matters</td>
<td>Dr. L. Mougeot</td>
</tr>
</tbody>
</table>

Session Chair
L. Mougeot
### Developing The Research Proposal: Research Agenda, Structure and Institutional Frameworks

The objective of this session is to agree on/confirm the research issues and to draw up an action plan/way forward. The action plan will have very clear time frames, activities to be undertaken, responsibilities etc at various levels [regional, national, and community].

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
<th>Session Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08.30-08.45</td>
<td>Summary of Key Issues Emerging from Day 2</td>
</tr>
<tr>
<td></td>
<td>08.45-10.00</td>
<td>Developing a framework/outline for the research proposal on the political economy of UA in ESA. Key issues in developing the research proposal.</td>
</tr>
<tr>
<td></td>
<td>10.00</td>
<td>Tea break</td>
</tr>
<tr>
<td></td>
<td>10.30</td>
<td>Plenary discussion on action plan</td>
</tr>
<tr>
<td></td>
<td>12.30</td>
<td>Lunch</td>
</tr>
<tr>
<td></td>
<td>14.00</td>
<td>Final session on the research proposal</td>
</tr>
<tr>
<td></td>
<td>15.00</td>
<td>Workshop Evaluation</td>
</tr>
<tr>
<td></td>
<td>15.30</td>
<td>Final Remarks by all participants, what has been learnt, what they propose to do next</td>
</tr>
<tr>
<td></td>
<td>16.00</td>
<td>Tea Break</td>
</tr>
</tbody>
</table>
Annex 8: List of Participants

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Annex 9: Field Trip Sites