African Indigenous Vegetables and urban & peri-urban agriculture policy dialogue

Rhodes University, Grahamstown, South Africa
23rd – 26th January, 2008

Workshop Documentation
This report documents the International Policy Dialogue Workshop on “The Promotion of Indigenous Vegetables in Africa Urban and Peri-Urban Spaces: Production, Consumption, Poverty Alleviation and Policy”, which took place on the 23rd to 26th January 2008, at Rhodes University, Grahamstown, South Africa. This report is not a final synthesised report, but tries to capture the workshop output in a non-interpreted way.

THIS DOCUMENTATION IS MEANT TO BE A REFERENCE DOCUMENT for all participants and is intended to provide details of what transpired. Almost all results of the working groups and plenary sessions are documented including summary reports of the topic synthesisers.

The contents of this publication are the sole responsibility of the IndigenoVeg consortium and can in no way be taken to reflect the views of the European Union or of the Technical Center for Agricultural and Rural Cooperation.
Foreword by the workshop organizers

Urban agriculture is widely practiced in many cities of the developing world, providing income, nutrition and often a safety-net function to the poorest sectors of society, and as such is an important, but underexploited vehicle for poverty alleviation. It makes productive use of undeveloped land, but is frequently not considered in urban land use planning and zoning processes and outcomes. Simultaneously, many small-scale farmers and market-gardeners in these cities and the surrounds propagate and make use of species largely overlooked by research and development agencies. The species are collectively termed “indigenous vegetables”, and represent a vital store of biodiversity for local, national and international gene pools. Within the last decade national and international agencies have realised that the neglected species offer significant opportunities for development of new varieties and crops, provided swift action is taken to conserve the local knowledge and genetic strains.

With this realisation has come a flurry of research activity over the last several years, including the European Union funded Coordination Action, “IndigenoVeg – Networking to promote the sustainable production of indigenous vegetables through urban and peri-urban agriculture in Africa (http://www.indigenoveg.org)”.

After two years of fruitful exchanges and discussions, the scientists in the IndigenoVeg network realised that the time was ripe to pull together the research effort to date, and consider further research requirements for the next decade.

However, very importantly it was also realised that in order to really start making a difference to the lives of the urban poor, it was essential to make links with the people and processes affecting urban and peri-urban development. Thus, it was decided to organise a “policy dialogue” workshop with the objectives:

- To distil key policy lessons and recommendations from the research to date;
- To explore together with policy makers from the seven IndigenoVeg African partner countries, the implications of the recommendations for each country;
- To facilitate the formulation of a plan of action for each country to start disseminating and translating into concrete steps the lessons learned during the workshop.

The event has been an important breakthrough since researchers and policy makers rarely find themselves in the same arena with the chance to hold a two-way conversation about what knowledge policy makers are missing and what information scientists can provide to fill these gaps and meet important development priorities. As this workshop has shown, where spaces for this interaction are provided, the results can be impressive and we are looking forward to witnessing the unfolding of the exciting new initiatives and developments which were planned to follow this workshop in each African partner country.

We would like to conclude by acknowledging the very generous support of the European Union (Framework 6) and of Technical Center for Agricultural and Rural Cooperation (CTA) for sponsoring this event.

Dr Margaret Pasquini  Prof Charlie Shackleton  Dr Detlef Virchow  Dr Einir Young
Bangor University  Rhodes University  AVRDC  Bangor University
Foreword by the facilitators

Working together with scientists and policy makers to promote African Indigenous Vegetables particularly in the urban and peri-urban areas of sub-Saharan Africa was a great experience. Africa must strategically position itself to deal with the challenges of climate change amidst increasing population and urbanization. As scientists work and predict future trends it is imperative that policy makers and other stakeholders are working side by side with scientists to ensure effective implementation of recommendations.

It was our pleasure that together with the workshop steering committee we guided an in-depth exploration of the underlying issues that resulted in proposals of realistic strategies for the promotion of policies on African Indigenous Vegetables in urban and peri-urban Africa.

We thank the organizing committee for entrusting us with the task of facilitating and extend our heartfelt gratitude to the other facilitators: Einir, Eric, Georgina, Karen and Bianca who made very valuable inputs into the planning and execution of the facilitation of the process.

Dr Maria Nassuna-Musoke
PICOTeam Ltd.

Hlamalani Ngwenya
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIVs</td>
<td>African Indigenous vegetables</td>
</tr>
<tr>
<td>APMR</td>
<td>Justus Liebig Universität Giessen, Germany</td>
</tr>
<tr>
<td>APT</td>
<td>Albert-Ludwigs-Universität-Freiburg, Germany</td>
</tr>
<tr>
<td>ARC</td>
<td>Agriculture Research Council, South Africa</td>
</tr>
<tr>
<td>AVRDC</td>
<td>The World Vegetable Center, Tanzania</td>
</tr>
<tr>
<td>BPS</td>
<td>Maseno University</td>
</tr>
<tr>
<td>CAZS</td>
<td>Bangor University, Wales, UK</td>
</tr>
<tr>
<td>CDH</td>
<td>Institut Senegalais des Recherches Agricoles, Senegal</td>
</tr>
<tr>
<td>CNRA</td>
<td>Centre National de Recherche Agronomique, Cote d’Ivoire</td>
</tr>
<tr>
<td>CCMA</td>
<td>Consejo Superior de Investigaciones Científicas, Spain</td>
</tr>
<tr>
<td>CTA</td>
<td>Technical Center for Agricultural and Rural Cooperation</td>
</tr>
<tr>
<td>DAS</td>
<td>University of Copenhagen, Denmark</td>
</tr>
<tr>
<td>DES</td>
<td>Rhodes University</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FARA</td>
<td>Forum for Agricultural Research in Africa</td>
</tr>
<tr>
<td>INRAB</td>
<td>Institut National des Recherches Agricoles du Benin, Benin</td>
</tr>
<tr>
<td>IVs</td>
<td>Indigenous vegetables</td>
</tr>
<tr>
<td>KARI</td>
<td>National Agricultural Research Organisation, Uganda</td>
</tr>
<tr>
<td>NARES</td>
<td>National Research and Extensions Systems</td>
</tr>
<tr>
<td>NCDs</td>
<td>Non-communicable diseases</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa Development</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>PRSPs</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>PSG</td>
<td>Process Steering Group</td>
</tr>
<tr>
<td>RDA</td>
<td>Recommended Daily Allowance</td>
</tr>
<tr>
<td>RLF</td>
<td>Rainman Landcare Foundation, South Africa</td>
</tr>
<tr>
<td>SSA</td>
<td>sub-Saharan Africa</td>
</tr>
<tr>
<td>TLV</td>
<td>Traditional Leafy Vegetables</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
</tr>
<tr>
<td>UPA</td>
<td>Urban and Peri-urban Agriculture</td>
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1 Official Opening & Setting the Scene

1.1 Welcome to Rhodes University by Dr Saleem Badat

As a word of welcome to the participants to Rhodes University, Dr Saleem Badat, the vice chancellor of the university gave an interesting presentation indicated below.

"The Workshop Chairperson, participants, conference organisers, colleagues from universities, government and other institutions, ladies and gentlemen – Molweni, good morning.

On behalf of the academics, students and support staff of Rhodes University, a very warm welcome to Rhodes University, to iRhini/Grahamstown, to the Makana District, and the Eastern Cape; and to our international colleagues and visitors, an especially warm welcome also to South Africa.

I trust that you will enjoy a stimulating and productive four days and that you will emerge with insights and ideas that will penetrate and push further the barriers to discovery, knowledge and understanding and the formulation and adoption of appropriate policies in the areas of the promotion of African indigenous vegetables and peri-urban agriculture in African cities.

For transport, logistic and costs reasons, compared to universities in Johannesburg, Pretoria, Cape Town and Durban, Rhodes scholars have to work especially hard to attract and host national and especially international conferences, workshops and seminars. That we do so with considerable success is, I believe, testimony to the quality of our scholars, recognition of their scholarship nationally and internationally, and also acknowledgement that Rhodes is one of our premier research and development universities. Certainly, it enjoys the best research output of all South African universities per academic. I am especially confident of our standing in the field of Environmental Science, most ably led by Prof Charlie Shackleton.

I am pleased that a workshop of this nature is being hosted by Rhodes University, and that we are an integral part of scholarly and wider co-operation to advance fundamental scientific research and to also contribute to policy-making to address the social and economic development challenges of South Africa and the African continent.

We host many conferences here, mostly in the conventional sense of the word. But this IndigenoVeg meeting stands out in a number of respects, all of which make is especially pleasing that it is here at Rhodes University:

- First, it is focused on African problems, African scholarly endeavour and African solutions – the vast majority of you here for this meeting are from Africa.
• Second, it is a result of co-operation and partnerships, between institutions in Africa, as well as between Africa and Europe. No single institution or country can go it alone. Partnerships are vital to address the challenges of modern societies under globalisation.

• Third, its emphasis is on issues that underpin several dimensions of sustainable development of Africa, including nutrition, agriculture, income generation and rational and effective urban planning.

• Fourth, I wish to congratulate the organisers for their creativity and thinking that has gone into devising a format that will see the translation of the standard scientific findings usually reported at conferences into relevant policy lessons and propositions. So many scientists and scientific meetings fail in this regard, with the result that science from Africa does not realise its true potential in addressing the development challenges of our continent. It is also heartfelt to see this meeting trying to communicate the science to wider audiences. In this regard this workshop could serve as an inspirational model for other conferences on African issues and in Africa.

• Finally, this workshop clearly is not just a talk shop, but is focused on facilitating positive change and development through communication and direct contact with policy makers. I am thrilled as Rhodes has probably never hosted so many officials from the African continent at a single meeting.

In as much as it is important for scholars to meet among themselves, it is also vital that there be spaces that bring together academics, researchers from other civil society institutions and government and state officials.

For the past 17 years I have been involved in higher education policy research and policy development and for 7 years served as the head of the higher education advisory body to two Ministers of Education. It is my experience that the specific constituencies of academics, state and government, and civil society are not always easy to bring together, and especially to hold together.

This is not because there is not recognition among all such constituencies of the need to work together and to build mutually respectful, beneficial, reciprocal relations to address our common concerns and challenges. The reality, however, is that there are sometimes (but perhaps here I am being too diplomatic and I should say that there are often) different and divergent interests, and varying immediate concerns; and therefore, understandably, differences emerge around how issues are theorised and conceptualised, which issues are prioritised, the discourses and language through which they are discussed, and how approaches, strategies and the like are formulated.

In my view this is an unavoidable element of the coming together of such different social actors and a not unhealthy aspect of these different actors finding each other and learning to think, debate and labour together. Whatever difficulties and tensions may arise, the important thing is to appreciate the value of such coming together, to be sensitive and respectful of different views and to recognise that we need each other if we are to address the concerns, problems and challenges that are our common lot.
To the extent that you successfully bring and hold together all these important social actors, my congratulations to you on this endeavour and what will be a significant achievement.

Universities and scientific disciplines and fields must, beyond communicating with a peer scientific community, also engage around science and knowledge with other social actors who have an interest in the results of intellectual labour.

Communicating beyond purely scholars and a scientific community ensures that our universities, as part of their knowledge production and dissemination roles, engage actively with the public and act as catalyst of public debate and education. We are, after all, as universities, meant to advance the public and social good and contribute to the advancement of social equity, social practice, development and democracy.

I am also pleased that there are students at this conference. The reproduction of a new generation of scholars and scientists, who also more extensively reflect the demographics of our country, is an urgent and pressing challenge. Conferences such as this are important mechanisms for the induction of new and emerging scholars into scientific networks and for attracting them to an academic career and public service.

I would love to participate further in your meeting, even if it is just to learn exactly what is an African Indigenous Vegetable. Indeed, perhaps it is something the university administration should put on the daily menu for our approximately 3 000 residence students. Perhaps the organisers should write a motivation in that respect!

I would have loved to also attend the session tomorrow on the policy process. For many years I had taught a postgraduate course on critical policy sociology. I wish to suggest that we should not assume that there is a shared understanding of the concept and term ‘policy’. The concept policy is embedded in different problematiques and can have very many different meanings.

I like the fact that in many languages no distinction is made between the terms ‘policy’ and politics, alerting us to avoid too over rationalistic conceptions of policy and policy-making and to also appreciate that ultimately policies and policy making are contestations and struggles over social relations and the kind of society we wish to create.

I am certain that you also appreciate that policy processes can span a continuum that ranges from being essentially technocratic to democratic in essence. The structure of this workshop and the range of actors that have been gathered here make clear that you are keen to foster democratic policy-making processes.

In closing, I wish you a very stimulating and productive conference, an enjoyable stay at Rhodes and in iRhini/Grahamstown, and I am confident that you will find us informative, helpful, friendly and hospitable hosts. Please do call upon your Rhodes colleagues and conference staff for any information or assistance during your stay.

1.2 Opening of the conference by Dr Detlef Virchow
“Dear Dr Saleem Badat, vice chancellor of Rhodes University. Thanks for the warm welcome. Dear participants of our policy dialogue workshop to “promote African Indigenous vegetable and urban and peri-urban agriculture in African cities”.

Ladies and gentlemen! It is my privilege as chairperson of this workshop to welcome you on behalf of the steering committee to this workshop, which is held in a very nice setting of Rhodes University.

Why did we invite all of you in this workshop? Why did you undergo the travel from very different places in Africa and from abroad to participate in this workshop? And why are we all together interested in promoting urban and peri-urban agriculture in African cities? Are there not many others and many interesting important issues to be discussed?

In 870 days the football world championship will kick-off here in South Africa, and since Sunday the African cup of nations is on-going in Ghana.

And we want to discuss African Indigenous vegetables and urban/peri urban agriculture in African cities.

In Kenya we have to watch how a democratic system is weakened or destroyed by the power interest of some and historic reasons never discussed and solved.

And we want to discuss AIVs and urban/ peri-urban agriculture in African cities?

The world climate and the energy crisis are already affecting world agricultural production and world markets. The frequency of crop failure due to drought is increasing. The world cereal storage is on the lowest level since over 20 years. The world market price for maize has increased by 50% and wheat by 100% in the last 12 months.

And we want to promote AIVs and urban/ peri-urban agriculture in the cities?

Not only the food prices are increasing, we still have 800 million people who are undernourished with not enough protein calories. While we still fight hunger, the total number of people who are malnourished –especially those lacking micronutrients- has overtaken the number of undernourished people.

And we want to promote AIVs and urban/ peri-urban agriculture in the cities?

Yes we do: Not because we think that AIVs and urban/ peri-urban agriculture can solve all the problems in Africa. But because we know that AIVs have the potential:

- To improve health status of –especially- the poor
- To raise income of producers
- To increase the employment rate,
- And because in some years 50% of Africa’s population will live in urban areas, and because the food supply has to be met.

To promote AIVs and urban/ peri-urban agriculture in African cities we have organised this workshop. It is high time:
For scientists to summarize the state of the art of research on AIVs, in urban/peri-urban areas

To formulate policy implications and recommendations on why and how to promote AIVs production and consumption in African cities

To communicate these policy implications and recommendations to policy makers in a language, which they understand

And this is exactly reflected in this workshop objectives and structure. We want to:

Collect and summarize the key results and challenges of research on AIVs in urban/peri-urban areas

Formulate key implications and recommendations for policies in a language, which the policy makers understand

Discuss policy implications of these recommendations at national level

Support policy makers to develop strategies and specific steps to support AIV production and consumption in urban/peri-urban areas

And to succeed in this, we have invited all of you and even more. We have invited:

Participants mainly researchers of the IndigenoVeg Network, European union funded coordination action and other researchers working AIV and urban/peri-urban agriculture

Policy resource persons from several countries in Africa to support us to find the right language for policy makers

Policy makers from the same countries

And facilitators who will help us to steer the process of the 3 days

As you see from the objectives and the participants, we want to achieve a lot. We have the right people together to be able to achieve it.

I think we all here want to be successful and have a successful workshop, because AIVs can contribute to the fight against poverty and malnutrition in the cities in Africa.

Let me come to the end by acknowledging the support for this workshop. The main sponsors are the European Union (EU) and the Technical Center for agricultural and Rural cooperation (CTA). Rhodes University for hosting us.

Financial resources are important, but human resources are essential. A special thanks to Prof Charlie Shackleton, Tory Werbeg and the team from Rhodes University and Dr Margaret Pasquini who was behind every e-mail that all of us received. A special thanks to all of you for coming to Grahamstown and participate in this workshop to promote AIVs and urban/peri-urban agriculture in African cities. Thank you very much.

### 1.3 Overview of sessions and announcements by Prof Charlie Shackleton

Prof Charlie Shackleton of Rhodes University (Dept of Environmental Science) gave an overview of the sessions and some general announcements. He started by expressing his heartfelt welcome to the almost Southern tip of the continent. He acknowledged the presence of one of the sponsors from CTA,
and the presence of all the participants. Before giving some housekeeping announcements, he apologized for some logistics that did go as smoothly as should have been (e.g. transport hiccups, etc). He wished all very good deliberations.

1.4 Introduction to the workshop process

For setting the scene for the workshop, the process was handed over to Dr Maria Nassuna-Musoke (a facilitator from PICOTEAM). After greeting the participants, she expressed her sincere gratitude to be part of the facilitation team. She firstly introduced her colleague Hlami Ngwenya, also from PICO Team. Apart from the facilitators from PICO, there were other facilitators who were to play a role in the workshop process (more especially during the group discussion). These facilitators included:

- Karen Brock
- Einir Young
- Eric Buiten
- Georgina Cundill
- Bianca Ambrose-Oji

1.4.1 Workshop Co-management

Maria also introduced the process steering group (PSG), which was a group taking responsibility for the co-management of the workshop (Box 1). A number of PSG members had already met before the workshop started to discuss the precise workshop outputs and agree on the final process. The PSG committed to meet at the end of each day’s activities to review the process and progress and plan for the next day’s activities.

<table>
<thead>
<tr>
<th>Box1: Process steering group</th>
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<tbody>
<tr>
<td>• A mechanism for co-management of the workshop by participants</td>
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<tr>
<td>• Plan the major outputs of the meeting</td>
</tr>
<tr>
<td>• Its task is to get feedback on the process and content of the workshop; and</td>
</tr>
<tr>
<td>• To plan day-by-day with the facilitator in the evening after the day’s session.</td>
</tr>
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</table>

Names:

- Detlef Virchow
- Margaret Pasquini
- Francois Assogba-Komlen
- Einir Young
- Georgina Cundill
- Maria Nassuna-Musoke
- Charlie Shackleton
- Rachel Slater
- Karen Brock
- Eric Buiten
- Hlami Ngwenya
- Bianca Ambrose-Oji
1.4.2  Facilitation principles

In order to create an atmosphere of free interaction and discussion, Maria shared with the participants some key principles that would guide the facilitation process and interaction during the meeting. The facilitation principles comprise of core values and some rules for table interaction.

**Core values**

- **Informality** – This is key to creating a relaxed atmosphere for free interaction and active participation by all, therefore participants were encouraged to be as informal as possible.
- **Open dialogue Multilog** – Not a one-way communication but rather an open dialogue to be fostered by using break out rooms where the participants would spend most of their time in discussion with each other, and sitting arrangements to encourage active participation of all.
- **Appreciation of any contribution** – Participants were reassured that they might all have different levels of understanding of the program and that therefore there could be no stupid question. Participants were encouraged to ask any question, so that at the end of the meeting no-one would go home with unanswered questions.
- **Ownership by participants** – Although the meeting was organised centrally, the process should be co-created together with the participants in order to have their active input into it.
- **Inclusiveness** – The participation of everybody would be fostered, giving priority to the quiet ones to intervene.
- **Integrity** – The independent facilitators had no stake in the meeting agenda per se, but rather were there to guide the process. Thus they would not be taking sides but would make an effort to balance contributions so that at the end of the meeting every participant would happy of the outcome.
- **Transparency** – Facilitators were not given any briefing of any specific agenda before the workshop thus participants were urged to open up and bring everything on the table.
- **Flexibility** – Although there was a program –with fixed times- given to the participants, the process will be flexible in order to cater for any emerging burning issues.
- **Creativity** – Participants were encouraged to think beyond the box and challenged to continuously re-assess their perceptions in order to see if there could be new thinking or new way of seeing things, which would be very useful in bringing new ideas. Participants were encouraged to challenge each other.
- **Honesty and Political incorrectness** – People tend to be polite especially when real sensitive issues are discussed. This often makes people to put the real issues under the carpet. The participants were encouraged to be ‘political incorrect’ and bring out things on the table, without hiding the real issues.

**Rules for interaction during group discussions**

- Sit on a new table every half day with new people so that new ideas are tapped from as many people as possible.
- Think first individually, make a few notes and then discuss.
- Listen much more than you talk.
- Control self, avoid speeches check your talk and give others a chance to contribute.
- Nobody should present more than once; encourage the quiet ones; observe the group, look at who is not contributing and encourage them to speak.
1.4.3 Participant differentiation

This session was meant to provide a general feel of who was represented in the meeting. The categories were as follows.

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimate Representations</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>± 40 %</td>
</tr>
<tr>
<td>Men</td>
<td>± 60 %</td>
</tr>
<tr>
<td>Region</td>
<td></td>
</tr>
<tr>
<td>West &amp; Central Africa</td>
<td>± 20</td>
</tr>
<tr>
<td>East Africa</td>
<td>± 12</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>± 11</td>
</tr>
<tr>
<td>Europe</td>
<td>± 10</td>
</tr>
<tr>
<td>Asia</td>
<td>± 01</td>
</tr>
<tr>
<td>IndigeneoVeg network members</td>
<td>± 25</td>
</tr>
<tr>
<td>Policy resource people</td>
<td>07</td>
</tr>
<tr>
<td>Others</td>
<td>± 18</td>
</tr>
<tr>
<td>Approximate number of participants on first day (before the policy-makers arrived)</td>
<td>55</td>
</tr>
</tbody>
</table>

1.4.4 Anticipated workshop outputs

After getting the feel of who was represented, Maria presented to the participants the anticipated outputs as discussed and agreed upon the previous day by the PSG (Box 2). The workshops aimed at pulling together the research results on indigenous vegetables & translate them into policy recommendations.

**Box 2: Anticipated Outputs**

The workshop aims to pull together the research results on indigenous vegetables in urban and peri-urban areas & translate them into policy recommendations.

**The ‘products’ should be:**

1. A current state of the research on IV in urban and peri-urban areas with the key results & challenges
2. A set of key implications & recommendation for policies
3. Implications of these recommendations at national level (emerging from the dialogue with policy makers)
1.4.5 Anticipated structure of the workshop (process map of how to get there)

Maria took the participants through the analytic process which the workshop would follow. The process was based on 5 major steps which were:

Step 1: Opening and setting the scene
Step 2: Where we come from: what are the lessons and insights from the research projects?
Step 3: What are the implications of these research results for policy development and what policy recommendations are emerging?
Step 4: What do these policy recommendations mean for the situation in the countries?
Step 5: What are the next steps i.e. actions required to enhance the policy environment for IVs and core thrusts for collective action?

1.4.6 Program overview

The program overview was presented (Figure 1) and emphasis was put to the fact that it was just a road map, and not fixed. It would allow for flexibility where necessary.

Figure 1: Overview of the workshop programme

<table>
<thead>
<tr>
<th>Overview Programme</th>
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<tbody>
<tr>
<td><strong>Tues 22/01</strong></td>
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<td><strong>Session 1</strong></td>
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<td><strong>Session 2</strong></td>
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<td><strong>Session 3</strong></td>
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<td><strong>Session 4</strong></td>
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<td><strong>Evening Programme</strong></td>
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2 Where Do We Come From? Lessons & Insights from the Research Projects

To level the ground for the group work, there were a series of presentations made. In this session – chaired by Dr Margaret Pasquini- the presentations were meant to give an overview of where the researchers come from in terms of the lessons and the insights from their research projects.

The presentations were in the following sequence.

1. An overview on African indigenous vegetables, urban and peri-urban agriculture and the IndigenoVeg project: presented by Dr Einir Young.
2. Consumption patterns and nutrition of AIVs from urban and peri-urban agriculture: presented by Mrs Ineke Vorster.
3. Income generation and gender from AIVs in urban and peri-urban settings: presented by Dr Germain Pichop (co-author Dr Katinka Weinberger).
4. Production systems for AIVs: presented by Dr Gideon Mwai (co-author Dr Francoise Assogba-Komlan).
5. Markets by Dr Mumbi Kimathi.
6. Success stories on indigenous vegetables by Mr Meissa Diouf.

After every presentation was made, the participants were requested to distil some critical issues that were emerging from each presentation in terms of key lessons and results that are significant for policy. Participants were given two minutes after each presentation, and were requested to reflect and write the issues on their notebooks for use in the group discussions at the later stage. This individual reflection was guided by the question in the Box 3.

The elaborate presentations as converted from the power point presentations are captured in the following section.

Box 3: Question for individual reflection

Looking at these presentations and your own experiences:

“What are the most critical research results and lessons that have significant implications for policy on IVs, urban and peri-urban Agriculture?”

2.1 An overview on African Indigenous Vegetable project by Einir Young

Indigenous Vegetables
Taking advantage of ‘being different’ in a globalised market place – let us invite Cinderella to the ball

Content
- What will I get out of this conference?
- Who’s who – and a bit of history
- What are indigenous vegetables/peri urban agriculture
• How do they fit into the bigger picture?
• Where do we go from here?

Understanding each other’s language

• Academic languages
  – Social scientists
  – Economists
  – agronomists
• Rural development specialists’ language
• Farmers’ language
• Political language
  – Politicians
  – Civil Servants
  – Policy makers
• Business people and entrepreneurs

Is there a problem with language?

• Question: What are the two major industries in Africa?
  Answer: Building fences and shipbuilding?
• The place is full of stakeholders
• Initiatives are being constantly launched all over the place

A diverse audience – which am I, which one are you?

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The False Democrat</td>
<td>Collects opinions &amp; ignores them</td>
</tr>
<tr>
<td>The ‘Frank Sinatra’ type</td>
<td>‘I did it my way’</td>
</tr>
<tr>
<td>The Expert</td>
<td>Expert on everything</td>
</tr>
<tr>
<td>The Bully</td>
<td>Dominates everything</td>
</tr>
<tr>
<td>The Negative One</td>
<td>Negative about everything</td>
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<tr>
<td>The Bore</td>
<td>Self Explanatory</td>
</tr>
</tbody>
</table>

Essential ingredients

• Patience
A willingness to listen
• An ability to think outside our own silos or boxes
• Confidence to contribute
• Respect for other opinions
• A desire to learn & make a difference

Outcome
• A greater interdisciplinary and inter-sectoral understanding and a clear message for policy makers in a language they can understand

Who’s who – and a bit of history

Consortium of 14 partners:
• The overall aim of promoting indigenous vegetables principally in urban and peri-urban areas of sub-Saharan Africa
  - NB highest urban growth rates in the world (4.58%) here
  - Projected to have over 50% of its population living in urban areas by 2030 (UN-Habitat, 2007).
  - Urban consumers will be an important group to target during the promotion of indigenous vegetables.

Sub-Saharan Africa:
• Institut Senegalais des Recherches Agricoles (CDH) – Senegal
• Institut Nationale des Recherches Agricoles du Benin (INRAB) – Benin
• Centre Nationale de Recherche Agronomique (CNRA) – Cote d’Ivoire
• National Agricultural Research Organisation (KARI) – Uganda
• Maseno University (BPS) – Kenya
• The World Vegetable Center (AVRDC) – Tanzania (and Taiwan)
• Agriculture Research Council (ARC)
• Rainman Landcare Foundation (RLF)
• Rhodes University (DES)

European partners:
• Albert-Ludwigs-Universität-Freiburg (APT)
• Justus Liebig Universität Giessen (APMR)
• University of Copenhagen, Denmark (DAS)
• Consejo Superior de Investigaciones Científicas (CCMA)

Co-ordinated by:
• Bangor University, Wales (CAZS)

- Margaret & Katinka have an idea with a view to seeking EU funding
- December 2003 relevant EU FP6 call for proposals
- Jan - June 2004: ‘Concept’ & identifying partners
- June - September: Proposal writing
- September 15th 2004: Submission
- February 2005: ‘Good news announcement’
- Feb - December 2005: Contract Negotiation
- January 2006: Start date

The road to Rhodes Part II

2006

- Bamako, Mali
- Cotonou, Benin
- Dakar, Senegal
- Kampala, Uganda
- Kisumu, Kenya

2007

- Pretoria, South Africa
- Arusha, Tanzania (x2)

N.B. For the whole story visit http://www.indigenoveg.org

The road to Rhodes (2006-2008)

The integration meeting (Arusha November 2007) identified key scientific issues:

- Consumption patterns and nutritional value of AIVs
- Income generation from AIVs in urban and peri-urban areas
- AIV production systems
- The importance of awareness raising to simulate markets for AIVs
- Sharing success stories

The road after Rhodes (2008 -)

- Acting on the outcomes of this meeting
- Indigeno Veg book
- Other collaborations
What are indigenous vegetables/peri urban agriculture

What is peri-urban and why the interest?

"Urban agriculture is an industry located within (intra-urban) or on the fringe (peri-urban) of a town, a city or a metropolis, which grows and raises, processes and distributes a diversity of food and non-food products, using and reusing largely human and material resources, products and services found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area” Mougeot (2000),

- This is considered by some to be an important but often overlooked sector, by others an inconvenient mess - what is your opinion?
- Indigenous Vegetables = Traditional vegetables
  = indigenous and naturalised species that have not been the subject of scientific breeding work
- Over the last two decades, people have
  - become aware of the many interactions between agriculture and environment,
  - the limitations of the Green Revolution,
  - become very concerned about rapid climate change,
  - realised the need for a highly diversified diet, rich in vegetables and fruit, for good health
  - shifted from top-down to community-driven rural development.
- as a result previously neglected and underutilised and underexploited species are becoming interesting for
  - nutritional and food security
  - income generation
  - medicinal value
  - suitability for low-input systems, and marginal environments

The challenges

1. **Image.** - Trendy city people (especially young people) think they are “old-fashioned”, "poor man's food".

2. **Convenience.** - People in towns and cities are too busy, “fast” foods are becoming popular, they eat less fresh produce especially if it takes a lot of effort to prepare (as is the case with many indigenous vegetables). Old recipes are not handed down. Grandma’s cookbook has fallen off the best seller’s list

3. **Wider economic forces/ globalisation**, increased economic opportunities for a restricted number of commodity groups, leading to the marginalisation of local agro-biodiversity – at the moment. This could change with consumer pressure in the global market for fewer ‘food miles’

Opportunity

- improved food and nutritional security for urban dwellers
- employment and income generation opportunities
- potential environmental benefits:
- Large quantities of waste produced in cities could be turned into compost for urban and peri-urban agriculture, recycling valuable soil nutrients, enhancing soil properties, and alleviating the waste disposal problem which is very serious in many developing countries.

- Alternatives to commercial vegetables as African farmers feel the effects of European concern for carbon footprint and food miles.

How do they fit into the bigger picture? - The bigger picture of global warming

Commonly accepted definition of sustainable development - *The time for talking is over*

**Bruntland:** ‘Development which meets the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs’

“Living well within the limits of nature (Martin Wackernagel, sharing nature’s interests)

Balancing people, planet and profit

Global Headlines

- “Un-natural” disasters: natural disturbances made worse by human activities
- Wars and civil unrest – Iraq, Afghanistan, Darfur, Israel, Kenya
- Water shortages, failed crops, starving people, electricity outages
- Rural & urban land use
  - loss of biodiversity, habitat fragmentation, landscape management, logging natural hard-wood forest
- Rubbish
- Displaced people: economic and ecological migrations
- How to deal with post peak oil scenarios
Where do we go from here?- Food for thought

- This concern for the wider issues of SD is an opportunity for Africa and for IV producers
- European markets for high potential vegetables e.g. green beans from Kenya could disappear, but this could be an opportunity to develop new local markets for IV crops.
- In Europe some towns are moving towards thinking in terms of ‘food feet’ rather than foot miles with the ‘transition towns’ initiatives. Are there marketing/branding opportunities for IVs? Can urban peri-urban Africa lead the way?

How can the interest in sustainable development benefit Indigenous Vegetable researchers, producers and consumers?

2.2 Consumption and nutritional value of indigenous vegetables in urban and peri-urban areas in Africa by Ineke Vorster

Agenda 21 suggests

Promote patterns of consumption and production that reduce environmental stress and meet basic needs of humanity

Make consumers aware of the health and environmental impact of products, through such means as consumer legislation and environmental labelling

IV : Low input, better adapted, nutritious, taste locally acceptable

It is difficult to distinguish

- Wild /domesticated
- (uncultivated / cultivated)
- Dietary / non-dietary
- (food /medicinal)

Plays a role in neglecting of IVs in agricultural and food procurement systems

Conclusion about wild fruits

Several international institutions have drawn 2 conclusions into wild foods:

1. Wild foods are part of the local and regional agricultural and food procurement systems
2. Wild species are important genetic resources in maintaining biodiversity

Most popular IVs consumed in Africa

West Africa: amaranth, African eggplant, corchorus, okra, sweet potato leaves
East Africa: amaranth, veg cowpea, pumpkin, corchorus, nightshade
Southern Africa: amaranth, okra, cleome, pumpkin, veg cowpea
Consumption of TLVs per capita/ day in peak season

- Burkina Faso: 80g (rural)
- Senegal: 24g (national)
- Mauritania: 65g (urban)
- Uganda: 160g (rural)
- Nigeria: 91-130g (urban)

Why do people eat/ not eat IVs?

- Wealth: varying answers
- In some countries becoming status food again (Kenya)
- Ethnicity influences choices
- Time to prepare: opportunity costs of working urban women
- Knowledge on how to prepare

Seasonality and its influence on consumptions

- Some only eat a specific crop fresh:
  - Food shortages
- Some crops are preserved:
  - Food shortages not so acute
  - Many say yields too low -lack of land
- In some countries becoming status food again (Kenya)
- Ethnicity influences choices
- Time to prepare: opportunity costs of working urban women
- Knowledge on how to prepare

Figures on malnutrition children under 5

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentages</th>
</tr>
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<tbody>
<tr>
<td>Senegal</td>
<td>42%</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>21%</td>
</tr>
<tr>
<td>Benin</td>
<td>34%</td>
</tr>
<tr>
<td>Uganda</td>
<td>38%</td>
</tr>
<tr>
<td>Kenya</td>
<td>30%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>38%</td>
</tr>
<tr>
<td>South Africa</td>
<td>30%</td>
</tr>
</tbody>
</table>
The vulnerable groups
Several studies have shown the role of traditional food in meeting macro-and micronutrients needs of vulnerable groups

- Infants and children
- Pregnant/breastfeeding women
- Women
- Elderly

Potential:
Households affected by death/illness (i.e. HIV/AIDS)

- Traditional food habits have progressively been replaced by the globalised food system
- Over the past decades SSA has experienced a rapid increase of non-communicable diseases (NCD) such as obesity, diabetes, heart diseases and cancers.
- The NCDs are an additional health problem.

Prediction of deaths in developing countries

- Predicted that by 2020 NCDs will be responsible for 70% of deaths in developing countries
- Must work against almost exclusive promotion of globalised foods
- The move to cash cropping has reduced the availability of nutrient-rich traditional foods.
- Led to loss in biodiversity – led to dietary simplification – in many cases led to malnutrition.

Nutrient value

- Traditional foods contain non-nutrient phytochemicals linked to protection against NCDs.
- Generally all leafy vegetables show a higher level of minerals than exotics (>1% of dry weight).
- Several TLV have high % protein: cleome, many amaranth, Momordica balsamina, chenopodium, Bidens pilosa.
- In general TLVs can provide 10% of the RDA

Anti-nutrients

- Alkaloids: Crotelaria brevidens, nightshades
- Phenolic compounds: cleome
- Nitrates: certain amaranth
- Most removed during preparation.
- Must consume huge amounts.
- Some have medicinal properties
- Most removed during preparation, which means that consumer have to consume huge amounts
What must we do?
- incorporate agriculture into urban planning
- Incorporate agriculture into urban planning
- Promote IVs within the agricultural system
- Empower farmers by improving availability and use of IVs
- Create awareness of nutritional value – boost demand, increase status of food

Comments and questions
Q. McDonalds – to what extent can we benefit from McDonalds for marketing purposes?
Q. Is there an opportunity for instant food?
A. There are opportunities
Q. If the varieties are low yielding, that is might be interesting for the people.
A. The yields are low because of the limitation of space, not because the plant itself is low yielding
Q. What is the price of the amaranth bread compared to the normal bread?
Q. How can urban agriculture be integrated into planning?
A. In Asia it was done. They have formal designated areas in the cities for the purpose of urban agriculture. It is associated with the farmer organization; everything is organized with specific rules and regulations.
In the Philippines there as a success story that we can learn from
Tanzania and Uganda also have some experiences in urban agriculture- lesson can be drawn from these countries

2.3 The Role of Women in AIV supply chains- Issues and policy implications by Germain Pichop

African Indigenous Vegetables (AIV)
- Are an integral part of the diet of the urban and peri-urban population
- Provide a large market with high value
- Support numerous small businesses with potential to grow

Some facts about AIV
- AIV contribute significant share of essential nutrients for the urban poor
  - 25% of ß-carotene consumption among the poorest (Weinberger and Swai, 2006)
  - For poor households a more important food source than exotic vegetables (Gockowsky et al, 2003)
- Large market
  - 30% of all marketed vegetables in Nairobi (Ngugi et al., 2006)
- Important means of livelihoods
More than 32,000 households engaged in producing and marketing AIVs in Yaoundé (Gockowsky et al., 2003)

- Average revenue for 3 most important AIVs among Abidjan Wholesalers > US $541 (240,000CFA) (above poverty line!)
- Average revenue for 3 most important AIV among Kampala farmers > US $200 (340,989UGX)

Source: IndigenoVeg Survey data

AIV supply chains are changing

- Size of the AIV market grows fast
- Entire sector characterized by very rapid change
  - Supermarket growth
  - More sophisticated, more integrated supply chains
- Changing procurement system
  - Shorter supply chains
  - Increasing importance of contract farming

Development effects of these changes

- Effects usually different for men and women
- AIV supply chain no exception
- Likely spheres of conflict
  - Input side: access to resources
  - Output side: access to incomes and profits
  - Gender relations
    - Changes in AIV supply chains
      - Production
      - Wage employment
      - Trading
    - Gender outcomes
      - Access to resources
      - Bargaining power
      - Norms and beliefs

Role of women in AIV supply chains

- Women are traditionally responsible for family food provision
- In urban areas, women participate in all segments of the supply chain
  - Production
  - Marketing and handling
- Women effectively contribute to the economies of the cities in which they operate
- Very high involvement of women
Low capital requirements for entry
- Utilizes indigenous practices and low-cost inputs
- Allows even the poorest households to participate
- Even unskilled and uneducated women can gain access to business environment

Production of AIV
- In UPA, women’s involvement in production of AIV is lower than that of men
  - 16% in Côte d’Ivoire,
  - 40% in Benin,
  - 14% in Senegal,
  - 34% in Tanzania
  - 37% in Uganda
  Source: IndigenoVeg survey data
- Declining role in UPA production?
- Because of increasing importance for cash income?
- Vegetables, especially AIV, traditionally a “female domain”!

Marketing of AIV
- Marketing dominated by women
  - 100% of retailers and middle-actors in Côte d’Ivoire
  - ~68% in Uganda
  - ~90% in Kenya
  - ~65% in Tanzania
  - ~80% in South Africa
  Source: IndigenoVeg Survey data

Other roles of women along the chain
- Processing is undertaken by women
- Transportation by foot is carried out by women
- Women provide cheap labor where AIV production and marketing is done by men

Production issues
- Precarious land ownership status and lack of access to land prevents access to capital and micro-credit
- Caused by
  - Cultural traditions precluding women from land ownership
  - Hostile and repressive policy by authorities towards urban farming
- Traditional role of women, making it difficult to enter formal workforce and accumulate necessary capital

- Emerging importance of contract farming
- Were production entails resources held by both sexes
  - Have contracts signed by both partners
  - Ensure contracting does not undermine women’s traditional resource claims

Marketing issues
- Lack of skills on product processing and handling
- Inadequate infrastructures - difficult for women to optimize market activities
- Women will be more affected by growing market share of formal supply chain
  - Access to information (standards, traceability)
  - Credit (investments to ensure food safety, certification)
  - Legal rights (contracts)

Employment issues
- Large, cheap female labor surplus contributes to competitive edge in developing countries
- Sometime bad working conditions for women
- Global market forces have not reduced gender-based wage differentials
- Need for information/ lobbying at policy level to raise labor standards

Intervention areas for policy makers
- Liaise with ministries of education etc for promotion of better nutrition involving AIV
- National policies to promote small scale agriculture should include AIV
- Support to small-scale business development
- Support to infrastructure development for markets
- Training on production and processing techniques should be established

Conclusion
- AIVs increasingly plays an important role in the diet of the urban population
- Because of their perishability, more will be produced within the UPA limits
- Women play a central role in production, handling and marketing activities
- They however face numerous constraints in their activities
- They need the support of policy and decision makers to make ends meet
Comments and questions

Q. The role of women- It appears that women are less involved in some aspect of IVs- what is driving the change in the gender
A. More men are engaged in the production activities, but to the large extent the marketing component is done by women. In most cases is the women who are going around selling IVs. However, the profit is still controlled by the men

Q. The increasing of supermarkets markets- is it good?
A. The super markets are too small. The assumption of people is that the vegetable that are sold in the supermarkets are safer to eat than those that are sold in the other areas. Supermarkets can bring more assurance for people to consume IVs

Q. The proportions IV consumed versus the one sold – Is it meant for home consumption and getting the surplus for selling- (home consumption)
A. We did not really get into the proportions. Most people producing in urban areas, do that solely for marketing. But in peri-urban the purpose is more for home consumption, and the surplus is sold

2.4 IV production systems in UPA in Africa: an overview by Gideon Mwai

Introduction
- Potential for nutritional and economic benefits to vulnerable/marginal populations
- Increased interest in the last two decades
  - Consumption & production trends
- Relevance in UPA context

The case for IVs in UPA

<table>
<thead>
<tr>
<th>Space-limited production</th>
<th>Livelihood strategy</th>
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<tbody>
<tr>
<td>Short production cycle</td>
<td>Urban unemployment</td>
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<tr>
<td>Labor-intensive</td>
<td>Malnutrition</td>
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<tr>
<td>Low capital outlay</td>
<td>Food security</td>
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<tr>
<td>Farming system diversification</td>
<td>Sustainable agriculture</td>
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<td></td>
<td>Intercropping</td>
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<td></td>
<td>Crop rotation</td>
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<tr>
<td></td>
<td>Organic production</td>
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</table>

IV production systems quite similar on the continent-:
- Mixed cropping for semi-cultivated / subsistence farmers
- Monocropping for commercial producers (Irrigation, Off-season production)
Determining factors

- Reason for growing
  - Contribution to livelihood
  - Cultivation vs collection
  - Input availability and use
  - Men vs women
- Market demand
- Agro-ecological context - Soil type, Irrigation?
- Knowledge and skills

Rural-urban context

Subsistence
- Traditional skills and knowledge
- Low external inputs
- Largely organic?
- Low yields

Kitchen/backyard garden

Mixed cropping
- Intercropping (Spiderplant/swiss chard intercrop)
Monoculture

Aspects
• Intensive cultivation
• Relay cropping
• Crop rotation
• Staggered planting
• Organic production

Production Constraints
• Land
• Infrastructure
• Low yields - Seed systems; Inputs; Pests and diseases
• Equipment - Irrigation system
• Production technologies

Concerns
• Heavy input use
  - Pesticides
  - Fertilizers
  - Irrigation water
  - Organic systems?
• Environmental health and food safety
• Soil fertility - sustainability

Conclusion: Way forward

Research interventions
• Improve production
  - seed systems
  - IPM
  - Organic systems
• Quality issues
  - Food safety
• Environmental impact

Policy interventions
• Facilitate
  - Space allocation
  - Integration of IVs in UA
  - Credit (inputs)
    • Groups?
  - Extension services

Comments and questions
Q. What is the future of this system – urban areas were not built for crop production
A. The integration of AIVs can provide a framework for quality controls measures. The food safety issues
C. In urban areas there is lot of traffic, emissions from the moving vehicles- what is effect on the vegetables for human consumptions
Q. The sustainability of the system-
Q. The objectives of people is to make money- how can we integrate the traditional vegetables into the mainstream economic systems?

2.5 Commercialization & market access of AIVs value chain concepts by Mumbi Kimathi

Farm concern international

Mission
• To build Pro-poor market development initiatives and commercialization of poor households in Sub-Saharan Africa for enhanced community empowerment

Vision
• Commercialized African households with increased incomes and better livelihoods

Project; Market Access for African Indigenous Veg
• Farm Concern International in partnership with; AVRDC World Vegetable Centre, International Centre for Potatoes, Urban Harvest, and Biodiversity Intl’

Value chain analysis & consumer research findings

Summary;2003
• Lack of access to info on AIV nutritive benefits across various consumer segments
• Poor product image- ‘The poor-man food perspective’
• Lack of commercialization thus wild harvesting, seasonal, poor quality
• Minimal value chain presentation of AIVs
• Value chain players lacked info on AIVs
• Potential market share…minimal existing market share
• Non-existing formal or informal seed systems
• Market share; 31 tonnes / month (3-4 months / yr)

Two Roads in farming Life
Value chain partnerships for AIVs
- Partnerships with top supermarkets;
  - Strategic image building i.e. from supermarkets to traditional markets is effective in image building
- Business partnerships between supermarkets & Commercial Villages®
- Synchronized production & supply schedules developed

Image building campaign
- In-store promotional events at various supermarkets conducted
- Recipes developed & tested across different consumers segments
- Radio & TV campaigns geared towards Nutritional Marketing
- Promotional & image building strategies for urban & rural consumers

Impact
- 2003 baseline sales estimates at 31 tonnes / month [3-4 months annually]
- 2006 sales estimated at 600 tonnes / month for formal & traditional markets
- Currently meeting 40-60% of the demand size
- Market Shares for 5 AIVs dominate markets
- Higher sales for conventional vegetable recorded with increased image for vegetables
- Institutional markets increasing orders i.e. hospitals, schools…

African Traditional Vegetables cont… Case study
• Consumption for ATV in Nairobi has increased from 31 Tons in 2003 with an estimated farm gate value of US$ 6,000 to

• A current 600 Tonnes in 2006 with an estimated farm gate value of US$ 142,860

• Farm gate prices increased by 30% and the current supply of 500 tons is estimated to account for 60% of the demand level.

• The ATV distribution network includes supermarkets, kiosks, informal markets and street markets.

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• The ATV distribution network includes supermarkets, kiosks, informal markets and street markets.

Emerging threats in Sub-Saharan Africa

• Weak production systems that will eventually fail to support food chains in both rural and urban areas

• Increased urbanization in Sub-Saharan

• Africa demands stable rural production systems to support emerging food demands for priority products e.g. roots & tubers, cereals, legumes, horticultural products etc.

• Food prices would increase as result of weak food chains thus increased cost of living and more slums in SSA

Comments and questions

Q. The public sector procurement- how did you managed to get schools and hospitals to get interested in the IV

A. We are partnering with a lot of small organisations to educate them about the value added of IV

Q. An increase farm income- how does that have implications on the consumer price?

A. Instead of having many brokers, we might have to have one broker- the price for the consumer has always been consistent

Q. For the international markets- how do you access the international markets?

A. We have not access the international markets- when we do that we will take care of the shelf life of these vegetables

Q. The impact assessment – What is the role of the traditional traders

A. Brokers are partly farmers and service providers- we are involving them in the marketing process
2.6 Success stories on indigenous vegetables: Case of roselle (Hibiscus sabdariffa L.) at Keur Pathe Kane in peri-urban area of Mboro city, 70 Km from Dakar, Senegal by Mr Meissa Diouf

History of the activity
- Established since 1946, this old village became peri-urban area of Mboro city in 2002. Water scarcity is one of the main constraints in this peri-urban area. Since 1974, the women's organisation started to grow and sell leaves of roselle. All these women have one & unique economic activity, growing & selling roselle leaves.

Methodology
- Participatory Rural Appraisal (PRA) with multidisciplinary research team & during 8 days in this peri-urban area

Roselle on-farm production - Findings
- Roselle leaves can contribute until 100 % of household income.
- The amount of money gained vary from 1000 $US to 2000 $US per year.
- The inputs used by farmers are water from traditional well, no pesticides and few are using urea, but at low rate.
- According to these farmers,
  - they pay school for their children,
  - buy domestic utilities,
  - pay hospital when they are sick,
  - contribute to the budget of the infrastructures in this locality, etc.
- The level of consumption vary from 43 g / person / day during dry season & increase up to 53 g / person / in rainy season to control malaria.
- In 2003, they have public congratulations from the header of the “Tidjiana confrery” during the yearly biggest annual meeting held at Tivaouone in Senegal.

Main recipes

Constraints
- Access to input (quality seeds, water, fertiliser, etc.),
- Improved cultural practices,
- Space in the market for selling roselle leaves.

Participatory breeding for seed supply

New cultivars of Roselle selected
Vegetable production

- Farmers at Mboro start to increase their income when selling the best cultivar of Roselle (L24).

Comments and questions

Q. Why did you choose to start with the seeds?
A. We started with the seed because it is the first input

C. After all the presentations were made, there was still a bit of time left before lunch. The time was open to the participants who did not have a chance to raise questions and comments during the formal presentations. Some additional questions and comments were invited, and this is what came out.

Q. Whether this project is about urban agriculture as in urban livelihood, or is it about indigenous vegetable. IVs is one kind of one cropping system, there are many other crops. What are we talking about here?
- This is exactly why we having this conference. Most of the scientist here
- We need some guidance in the discussion groups how to take
- We are first of all looking at promotion indigenous vegetables because they are facing extinction. However we do not what to do it in general, but more focusing on urban and peri-urban.
- With this, we want convince the policy makers that indigenous vegetables are competitive crops to be grown in urban and peri-urban areas.
- When we think of an estimate of the huge of farmers- agriculture in and around cities urban agriculture is very important and it has to be addressed by politics

Q. To the people who have been involved in this project from the beginning, what have actually change on the ground- has the attitude change, has the levels of production change?
- We did not have major changes in these two years that in this two years there will be major impact down at the ground. It is a network, and we are hoping that this meeting, will be able to help translate what has been done so far into action on the ground- That is the reason why we have invited the policy makers.
- What this network has done, it have brought different players, researchers, and other players to come an talk about the common issue.

C. In the academic circles and the development circles, there is recognition about the importance of urban agriculture. We need to find ways of integrate this into practice

2.7 Formal viewing of posters

After the morning with various power point presentations (rich in content and experiences), the participants were taken through the poster presentations. As well as posters from the IndigenoVeg market supply chain surveys, there were ten posters from external researchers. These are listed below:

• E. AGBO, C. KOUAME, A. MAHYAO, J. C. NZI, L. FONDIO and D. GNAKRI. Consumption of indigenous leafy vegetables in urban and periurban areas: case of Abidjan in Côte d’Ivoire.


• P. NGUEGANG, L. PARROT, N. GUEDJE, V. JOIRIS, J. LEJOLY. African traditional leafy vegetable production among urban agriculture under different pesticides use.

• E. ZOSSOU VODOUHE. Vernonia amygdalina (an indigenous vegetable) in exotic vegetables systems production in urban and suburban areas in Cotonou, Benin.

• J.C. N’ZI, L. FONDIO, E. AGBO, A. MAHYAO & C.KOUAME. Inventory, characterization and selection of leafy vegetables in the urban and peri-urban production system of Côte d’Ivoire.

• T. TSOU FEMATOUO. The contribution of indigenous vegetables of urban and peri-urban farming systems to food security and poverty alleviation in the major towns of Cameroon: opportunities, constraints and perspectives.

• F. VODOUHE. Rural – urban linkages in the supply of an indigenous vegetable (Vitex doniana) in Benin.
3 Critical Issues & Implications of the Research Results to Policy on AIVs in UPA

As indicated in section 2, the participants were given a task to reflect and write down in their notebooks the issues that were emerging from each presentation (see task in Box 4). This exercise formed the basis of the group work.

The participants were sub-divided into five major groups. The emphasis was on representation of different experiences, regions, gender etc in these groups. The five group discussions were facilitated by the facilitators mentioned at the beginning of the workshop (Eric, Einir, Hlami, Karin and Georgina). The process for the group discussion followed more or less the following.

- Each group meets
- Individuals share their reflections with the rest of the group members
- Together they agree on the 5-8 most critical issues
- These issues were written on cards, and then presented back to the larger group in plenary
- The overall presentations were then clustered based on what was emerging.

Table 1 reflect the clustered issues.

<table>
<thead>
<tr>
<th>There are success stories- how do we communicate them</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How to effectively sell (promote) IVs through coherent stories and knowledge dissemination</strong></td>
</tr>
<tr>
<td>• Need to frame benefits in context of development millennium objectives/ goals (MDGs)</td>
</tr>
<tr>
<td>• Employment to vulnerable groups especially women</td>
</tr>
<tr>
<td>• Selling point of IVs (Household income, employment, nutritional value, health etc)</td>
</tr>
<tr>
<td>• Document micro nutrients, bioavailability (including processing and medicinal properties)</td>
</tr>
<tr>
<td>• High nutritive value and medicinal- how to harness this</td>
</tr>
<tr>
<td>• IVs have nutrition and health</td>
</tr>
<tr>
<td>• Focus on diet value- this will capture consumers, producers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the gaps that need to be filled to enhance the selling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How to continually identify &amp; fill the knowledge gaps that inform policy</strong></td>
</tr>
<tr>
<td>• Economic opportunities for IVs as compared to exotics</td>
</tr>
<tr>
<td>• Role of IVs in income generation – poverty alleviation</td>
</tr>
<tr>
<td>• Knowledge gaps- comparative evidence/ other livelihood, crops and land use</td>
</tr>
<tr>
<td>• Understanding of supply chain from producers to consumers</td>
</tr>
<tr>
<td>• Environmental impact and food safety issues</td>
</tr>
</tbody>
</table>
• Are IVs produced in urban areas safe?
• Urban planning health ad safety - urban agriculture versus urban waste
• Safe water handling systems as a resource

<table>
<thead>
<tr>
<th>What support systems are necessary to enhance IVs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How to promote availability land, water and ensure integrated urban planning</strong></td>
</tr>
<tr>
<td>• The land issue- production space limits in urban areas and land production areas in peri-urban areas threatened by expansion of urban areas</td>
</tr>
<tr>
<td>• Access to land/ availability maximizing profitability</td>
</tr>
<tr>
<td>• Access to resources like land and labour</td>
</tr>
<tr>
<td>• Integrating IVs into urban planning process- land availability/ protection for urban crop production (multiple land use)</td>
</tr>
<tr>
<td>• Urban planning, space and tenure</td>
</tr>
<tr>
<td>• Water accessibility, quality/ safety and policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How to brand IVs to ensure public acceptable</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The image issues- contribution to changing the perceptions among politicians, donors, the general public- from poor man’s food to economic opportunities</td>
</tr>
<tr>
<td>• Awareness campaign on nutritional and health value</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How to improve the input support systems for sustainable IVs production</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish/ strengthen the seed systems</td>
</tr>
<tr>
<td>• Improve seed system will increase production and consumption of good varieties</td>
</tr>
<tr>
<td>• Insufficient support services (e.g. seeds and extension)</td>
</tr>
<tr>
<td>• Insufficient support services e.g. seed, extension</td>
</tr>
<tr>
<td>• Inclusion of IVs in research programmes of national research and extension systems (NARES)</td>
</tr>
<tr>
<td>• IVs and UPA need to be integrated into national food and nutrition policies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>How to promote efficient market systems for IVs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need for private investment and marketing- niche markets</td>
</tr>
<tr>
<td>• Need to improve market infrastructure</td>
</tr>
<tr>
<td>• Information on market conditions (market saturation)</td>
</tr>
<tr>
<td>• Physical infrastructure for sellers</td>
</tr>
<tr>
<td>• Market organization</td>
</tr>
<tr>
<td>• Markets (local, regional, international)</td>
</tr>
<tr>
<td>• Need more information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Some cross cutting issues</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Capacity building with regards to different stakeholders (e.g. farmers, middleman etc)</td>
</tr>
<tr>
<td>• Capacities development at various levels- coordination and strengthening institutions</td>
</tr>
<tr>
<td>• Learning from successes</td>
</tr>
<tr>
<td>• Inter-sectoral co-operation</td>
</tr>
</tbody>
</table>
Summary of the critical issues emerging from the presentations

After the issues were clustered, the facilitator further worked (in the evening after the daily meeting to suggest headings for each cluster. The refined clusters and their headings were then presented back to the participants. This recap presentation was made by Erik, and he suggested the following sequence.

The success stories: We have done research, and we have success stories to tell, but how do we effectively tell this in a coherent manner?

Knowledge Gap: Despite the successes that we have, there are other areas where we lack knowledge. What kind of gaps? Is it a research gap or is it because the research findings are not properly communicated?

We need intervention: There are areas that need intervention. If we have success in this area, we have a likelihood of getting impact and results on the ground. These are the areas where we need to have a break through in terms of policies

These issues include:
- How to promote availability of land, water, and ensure integrated urban planning?
- How to promote efficient market systems for IVs?
- How to improve the input support systems for sustainable IVs production?
- How to brand IVs to ensure public acceptance?

Cross cutting issues - There are some cross cutting issues such as:
- Learning from successes
- Capacity development
- Inter-sectoral co-operation
4 The Policy Making Process and Promoting our Research Concerns to Decision Makers

4.1 Presentation by Dr. Bianca Ambrose-Oji

Who are we trying to target, with what message, using what method?

Since the main purpose of this meeting (as spelt out in the workshop objectives) is to analyse the researchers’ results and lessons, identify areas that have implication for policy on IVs and then make recommendations to the policy makers, it is necessary to understand the policy making process. This presentation is meant to bring the participants to a better understanding of who these policy makers are, which levels of policy actors are operating (the context), and the process that goes into policy making. This will place the researchers in a better position to strategically package their recommendations.

Objectives

- Summarise some key features of policy processes and communication
- Outline our key policy problems and questions we need to be asking ourselves
- Provide discussion points for today’s sessions

A Note on Material Sources

- Key references on which these sessions are based:
  - ODI RAPID website: wwwodi.org.uk/RAPID
  - “Toolkits for Policy Impact” Start & Hovland
  - “Unpacking Policy” Brock, McGee & Gaventa

What is the Policy Making Process? Linear sequence?

<table>
<thead>
<tr>
<th>FORMULATION</th>
<th>IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A problem is identified by expert policy makers</td>
<td>• By ‘implementers’ who are usually seen as bureaucrats and technocrats</td>
</tr>
<tr>
<td>• Information is gathered about the problem by expert researchers</td>
<td></td>
</tr>
<tr>
<td>• A decision is taken about the solution</td>
<td></td>
</tr>
</tbody>
</table>

Source: Brock, McGee & Gaventa (2004)
Global and Regional Policies

- Global processes and policies
  - Agenda 21, PRSPs,

- Regional
  - SADC-MAPP, Common Agricultural Policy-ECOWAP, NEPAD’s Comprehensive Africa Agriculture Development Programme

- National
  - Land use policies, industrialisation policies, economic development plans, selection of growth points, agricultural development policies

- Local
  - Metropolitan development strategies, community development plans

What do researchers need to know?

- How is the policy making process constituted in this arena?
- What are the opportunities and timing for input into formal processes?
- Who are the policymakers?
- What are policy maker priorities?
• Is there policymaker demand for new ideas or researcher’s evidence?
• What are the resources/ strengths of resistance to these ideas?

Who are policy makers?
Different actors
• Politicians
• NGOs
• Urban planners
• The public
• Farmers’ group
• Ministry officials
• International institutions

Policy “Narratives”
• A narrative is a story
• It is a simplified story of complex processes which offers convenient and straightforward policy options
• Our story needs to be convincing enough to replace/ modify another ‘narrative’

Example of policy narrative
Urban agriculture is a problem for human health. Urban farmers used solid waste and waste water which leaves poisonous residues on vegetables and provide breeding for mosquitoes. Urban agriculture should be stopped
Indigenous Africa vegetables are not important to urban consumers. Supermarkets supply the vegetables that people want to eat from secure areas. There us no need to protect peri-urban production areas.

Mis-match between Policy and Research Values and Beliefs

<table>
<thead>
<tr>
<th>Policy makers</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colloquial/ anecdotal (contextual)</td>
<td>Scientific (context-free)</td>
</tr>
<tr>
<td>Anything that seems reasonable</td>
<td>Proven empirically</td>
</tr>
<tr>
<td>Policy-relevant</td>
<td>Theoretical driven</td>
</tr>
<tr>
<td>Timely</td>
<td>As long as it takes</td>
</tr>
<tr>
<td>Clear message</td>
<td>Caveats and qualifications</td>
</tr>
</tbody>
</table>

What Researchers Need to Do

Construct a message which is:
- clear
- Concise
- Present a strong story or new narrative
- Provides clear policy

Need to overcome
- Evidence not being conclusive
- Long delivery times
- Complexity rather than simplicity

What is communication?
- Psychologists define communication as the exchange of information and the transmission of meaning
- The art of promoting a point of view, an idea or information, or a product

The communication cycle
Barriers to effective communication

- Different Priorities
- Different Beliefs
- Wrong Message
- Wrong language
- Wrong media
- Wrong channels

Credibility and Language Problems

- For policy makers, research evidence is often too long, verbose, detailed, dense, impenetrable, jargonistic, methodological, untimely,

Marketing mix

- We need to learn from the business people- They are very is good in selling their products
- They have four key elements Price, Place, Promotion, Product
- It is the combination of these four mix that makes it work

Marketing mix in the research context

- Product: our product is not the result of the research, by the message that comes from the data
- Price: we have to think about the price- the cost of acting on the Message (political, social, economic etc)
- Place: we have to be at right place to deliver that message
- Promotion: informing, persuading people
- The proof of product is our research- our research is our proof, but this evidence is translated into the message
- People- who is the policy audience
- Process: the methods of delivery and social networks and interaction

Different types of business promotion

- Personal selling (Face to Face contact )
- Sales promotion - including money-off coupons, competitions, free accessories, buy-one-get-one-free
- Public relations (Networking, liaising with Press Offices) - the deliberate, planned and sustained effort to establish and maintain mutual understanding between an organisation and its publics
- Direct mail - the direct sending of emails, Policy Briefs
- Trade exhibitions- Attending the same subject specific meetings
Advertising - Using the press and other media to promote the message
   - Sponsorship - making strategic partnerships with other institutions

The Key Issues
- Identify the NEEDS and MOTIVATIONS of potential users in the policy community
- Ensure the message is well packaged and well presented
- Advertise and promote the message
- Facilitate an ongoing dialogue.

Summary of Key questions
- What are policy-makers’ needs and expectations with regard to research?
- What can researchers do to meet policy makers’ needs and improve communication with them?
- What can policy-makers do to foster the use of research in policy making and improve communication with researchers?

4.2 Lessons learnt from the presentations

After the presentation was made, the participants were given a chance to ask questions of clarity. Like with the other presentations, the participants were again grouped into small discussion to reflect on this presentation and its implication for policy. Some of the outcomes of the group discussion were captured below.

- We need to know who the policy makers are
- We need to have proper message, clear priorities
- Interactive session to get a feed back from the policy makers
- We need to understand and identify their priorities
- The composition of the message and how these actions are translated into realistic actions
- Positive messages
- Are we prepared to sell urban and peri-urban agriculture without AIVs?
5 Analysis of the Implications & Recommendations for Policy

Section 3 saw different thematic areas emerging, based on the clustering of some critical issues that were distilled from the presentations. Section 4 summarised the additional presentation made on the policy process as well as some issue emerging from this presentation (as discussed by the participants in their small group discussions). As indicated before, these two sections form the basis for the major group work which builds up towards policy implications and recommendations.

The session described in this section was based on the analysis of the issues that emerged from the previous two sessions. The session aimed at getting deeper into analyzing the underlying issues of each thematic area.

This process was very crucial to create a platform for people to jointly think through and create a common understanding of the issues. It was also important in helping the participants to better package the recommendations.

The participants were again sub-divided into five small groups based on their interest in the thematic areas. The grouping also took into account the richness of the diversity of the group. It was also important at this time to accommodate the participants who were not able to express themselves fully due to language constraints. Hence, a separate group for the French speaking participants was formed. They chose one theme that was more likely to address the issues that they were experiencing in their home countries, and they went on a parallel discussion group. The questions that guided the group discussions are captured in the Box 5 below.

**Box 5: Group Task**

Looking at the presentations on policy making processes, the interaction between researchers and policy makers

1) What are the underlying issues/problems here?
2) What opportunities exist that can be used to address the problems?
3) Looking at the problems and the opportunities, what could then be done? (i.e. possible options to utilise opportunities I addressing the problems?)
4) How could this be packaged to make it receptive to policy makers?
5) What cross-cutting issues such as capacity requirements and knowledge gaps need to be addressed?
6) What are the opportunities for information sharing, learning from success stories etc?
7) How then would the policies have to look like (recommendations)?

Please nominate a rapporteur who will capture all the discussions electronically.
5.1 Group 1 output: How to effectively sell (promote) IVs through coherent stories and knowledge dissemination

What makes IVs special?

- They are an important part of African dietary and cultural habits
- They contribute to the biodiversity of food crops
  - Benin inventory identified 200 plant species used as vegetables
  - Promoting IV maintains the genetic resource base and secure future food resources
- They are found in a wide range climate conditions
  - IVs found throughout sub-Saharan Africa – from wetlands to arid zones
  - Transferring IVs across climatic regions is one strategy for coping with climate change (and thereby protect threatened food systems)

How can IVs and UPA contribute to breaking this cycle?

IVs have high nutritional value

- Poor health & low productivity
- Low incomes
- Poor diet and malnutrition
- High Urban Unemployment

IVs provide employment throughout their production and marketing chain in urban and peri-urban areas

IVs are high value crops that can be produced in urban areas
5.2 Group 2a and 2b: How to promote availability of land, water and tenure integrated urban planning

(a) Group 2a: English

Underlying issues/problems
1. Land:
   - Land for urban agriculture purposes has not been legalised, institutionalised and is insecure
   - Valuable agricultural land being lost due to rapid urbanisation

Opportunities to address the problems
Institutionalised and secure agric land
   - Realisation amongst urban managers of opportunities for urban agric and seeking guidance
   - The positive role of agric in reducing crime, providing employment and improving nutrition and health
   - Land available in form of buffer strips and servitudes offer opportunities
   - Prevent unplanned and unsuitable land being used.
   - Positive use of open space
   - Protecting valuable agricultural land
   - Realisation of national importance to protect valuable land for food security and production

Possible options for utilising the opportunities to address the identified problems
a. Need to ensure that urban agric land use is institutionalised
   - Agric land is not just a residual zoning in town planning schemes (i.e. negative land)
   - Secure provision of land with a set of rules
   - Organisation structures for farmers e.g. cooperative structures etc
   - Distinguish between (1) designated areas and (2) integrated land use practices ("edible parks")
   - Distinguish between land allocation for (1) own production and (2) market production
b. Regulate the relation between agriculture and waste management
   - Use the organic waste for compost
   - Manage waste disposal to protect agricultural resources

Highlight comparative advantages:
   - Land not suitable for development can be used for agric
   - The need for greening and beautification of urban areas
   - Social economic advantages (employment nutrition etc.)
• AIVs as environmentally friendly crop production system in urban areas – supports urban biodiversity

Opportunities for information sharing
• Yes – between South America/South-East Asia and Africa, and within Africa

Policies look like
• Packages as part of integrated urban planning and management framework/systems
• Develop best practice guidelines and manuals

2. Water:

Water allocation and pricing regime do not support urban agriculture
• Not a problem in RSA and Uganda
• A problem in Kenya and Tanzania: not permitted for irrigation

Opportunities to address the problem
Alternative ways of supplying water exist
• Harvesting rain water
• Recycle wastewater
• Use storm water

Packaging the message
Note: Targeted policy actors: City Managers
• There is a problem of illegal use of municipal piped water supply for irrigation
• Alternative ways of supplying water for irrigation exist and can be integrated in the urban planning and management framework
• Need for more sustainable water supply systems for urban agriculture

Comments and inputs
• The issue of gender need to be addressed

How to promote availability of land, water and tenure integrated urban planning?

(b) Group 2b: French

Land- availability / access to land is low and precarious
Urban agriculture not part of urban planning
Water: Low availability
    Bad quality where available
    Water management programmes difficult

Opportunities

- Existence of space suited to urban agriculture
- Existence of water sources
- Producers/farmers can lobby or act for urban agriculture
- Planners (some) are aware of urban agriculture benefits
- Local government decision making that are decentralised

Actions

- Need to lobby for urban agriculture
- Improve/develop secure user rights for producers
- Invest in management of production sites

Packaging the message

Key words

- Diversification of agriculture
- Contribution to poverty alleviation
- Youth employment
- Livelihood improvement
- Green revolution
- Help meet MDG
- Ways to beautify cities

Cross cutting issues

- Coordination of different actors
- Building capacity
- Building awareness with actors

Opportunity for sharing and learning

- City alliance
- PNVD/UNDP
- UN habitat
Associations – Francophone mayors in Africa
FARA
UNICEF

Recommendations
- UPA has important contribution to poverty alleviation, food security. We need to take necessary action to make it sustainable

Comments and inputs
- It is good for the policy makers for
- The issue of policy recommendation was raised- that is not clear
- In relation to the other presentations- where there anything that was different?- The response was that there no differences, the two presentations can enrich each other by using the richness of the different examples that are more context specific.

5.3 How to promote efficient market systems for IVs

What are the underlying issues?

Product
- no customers
- bad price
- perishable
- producers not organized
- Infrastructure: physical, getting there and when they get there
- Two types of markets: ➔ local, ➔ regional, ➔ international?? (needs in depth analysis)
- Lack of information :
- Lack of access to market and production information: whole sellers do not know where? (When?, how much?) to buy the product, where to sell/buy, availability, price, quality product, etc.
- Technical information related to processing

What are the opportunities?
- Nutritional-base market available (emerging market for highly nutritive product)
- Physical place for market (service provision, security, local authority in Nairobi and local business: join forces; case study from Nairobi)
- Income generation
- Regional trade (to organize farmers to benefit from regional trade)
- Urbanization is creating diversity and different IVs are available for production and consumption
Problems—Opportunities: possible options are

- Hook: Introduction of IVs into supermarkets (Nairobi success story) and traditional markets
- Organizing farmers/Development of capacity
- Prosperity attracts investment
- Income generation—higher than conventional vegetables
- New and old businesses producing IVs and the old diversifying into IVs captured new business opportunities
- Creating a strong cash economy; this gives everyone an opportunity
- Opportunities for service provision
- Possible question: ? If I want to adapt this to my situation what should I do (Adapt according to towns link business to market).

Cross cutting issues…

- Capacity development
- Marketing information system (MIS): build one!
- Ministry of agric./Ministry of technology to include MIS in their agenda ➔ Information services including extensions services
- Millennium Development Goals (several ministries are dealing with the achievement of the MDG)
- Networking, newsletters, briefing note, video, mobile phones, radio, events, farmer groups…

Making Markets work…

- Promoting the formal and expedient registration of IVs business in peri urban and urban areas will strengthen the cash economy and the environment of sub-Saharan cities while at the same time enhancing livelihoods of individuals and communities.
- Case study from Kenya

Policy implications

- Tax incentives (en route)
- Simplifying, incentivising the registration process

Benefits to the policy makers

- Meet some MDGs + satisfying donors
- Poverty alleviation, nutrition security and Improve health, etc.
  - Population satisfied
  - Employment opportunities
  - Income generation
  - Increased services
Comments and inputs

- We need to disaggregate and think about the type of people who use these vegetables
- We need identify a broad spectrum of people

The market for whom?

- The issue is meant for the urban poor, because the rural poor do not go to the cities to buy these vegetables, but they produce in their rural area.
- This is for the urban poor who do not know where to get these
- Establish a market channel were the consumer can easily locate the producer and the producer to locate the consumer.
- In some areas these are the potential market or existing dormant markets that need to be streamlined
5.4 How to improve the input support systems for sustainable IV production

- Input support systems:
- Establish and strengthen the seed system
- Improve seed system will increase production and consumption
- Insufficient support services
- Inclusion of IVs in research and extension services

What are the underlying issues/problems here?
Input
Seed system:
- Seed production distribution not institution – no access to quality seed

Fertiliser/Nutrient requirements:
- Lack of information on optimum fertiliser requirements for individual species
- Lack of access to fertilizer
- Issue in various countries – subsidies etc.

Pesticides
- Lack of information on optimum pesticide use requirements for individual species
- Lack of access
- Improper use

Equipment
- Farmers are often poor and small scale and not always economically viable
- No or little access
- Not suitable plots – small plots and topography

Support systems

Credit:
- Ability of farmers to organize themselves
- Lack availability – not creditworthy no collateral and lack of ownership
- Lack of entrepreneurial skills (business skills, financial management, etc...)

Legal:
- Lack of voice
- Little access

Extension/Research
- Extension more for rural farmers
- IV not on agenda only cash crops and staples
- Lack of technical knowledge on IVs of extension
- Resource constraints on extension
- Not on national research agenda – Lack of funding etc.

What opportunities exists that can be used to address the problems
- Linkages with existing seed companies for production and marketing (New varieties)
  - On farmer seed production – own seed (Quality) and produce for company
  - Training and empowering of the farmer
- Link and mainstream IV and UPU with excising support programs
  - Basic inputs
  - Extension
  - Research
  - Etc....
• IVs adapted to local conditions
• IVs require low levels of production skills and can be cultivated by unskilled and people

Looking at these problems and opportunities what could then could be done? (i.e. possible options for utilising the opportunities to address the identified problems)

• Linkages with existing seed companies for production and marketing (New varieties)
  - Train farmers for on farmer seed production –
    • own seed (Quality)
    • produce for company
  - Training and empowering of the farmer
  - Promote utilization of IVs (group 3) – create a market
• Link and mainstream IV and UPU with excising support programs
  - Basic inputs
  - Extension
  - Research
  - Etc....
• Taking deliberate policy actions. Learning lessons from other and include IVs in national programs like the school feeding schemes, HIV/AIDS and hospital dietary recommendations
  - Schools
  - Hospitals
  - Feeding schemes
  - HIV/AIDS
• Include IVs in national programmes
  - Agriculture
  - Food security programme (most important to create the demand)
  - Training curricula in schools, agric training and research institutions
• IVs adapted to local conditions
• IVs require low levels of production skills and can be cultivated by unskilled and people IVs could be
• Awareness raising that they could grow the crop and capacity building

How could this be packaged to make it receptive to policy makers?

Depends on audience

Seed system: Target farmers and seed companies

• Company - Meeting with flyer (more complex) etc to leave behind
• Farmers – simple leaflets, personal interaction, popular media

Promote use:

• Group 3 and point above

Production by unskilled people
• Target NGO’s/social workers working with youth, the poor etc. and extension services
  - Seminars and training sessions with leaflets to left behind
  - Demonstration plots
• Producers Basic training material

Deliberate policy actions – national programs
Audience: Policymakers (national level in health sectors as well as education (Research) and Agriculture) and also workers in health and education sectors.
• Ministers - Policy brief
• Sensitisation meeting - Workers - Input in the newsletter etc; Leaflets and posters

What cross cutting issues such as capacity requirements need to be addressed?
• Promoting seed production when we do not have enough knowledge about potential or market chain
• Research and capacity building can not take place without adequate funding
• Lack of basic research supporting recommendations to for insistence seed companies to take IVs on board
• Is there enough human resource available to do research and capacity building and achieve our goals

What are the opportunities for information sharing, learning from success stories etc?
• Look for other cases success stories and failures
  - Networking with people/ org and exchange visits
  - Learn from other peoples successes and failure
  - Sharing resources and expertise between institutes and countries
  - Internships

How then would the policies have to look like (recommendations)?

Farmers do not have access to quality seed of quality seed. Partnerships between seed companies and farmers will increase the access and availability of IV seed. Create incentives for seed companies to engage with farmers.

There are large numbers of unemployed and unskilled people in urban areas. IVs are easy to grow and require less skill and input and there fore have the potential to generate higher income and food security (and livelihoods.) therefore IV in urban agriculture should be supported through awareness raising and capacity building.

Despite the proven nutritional potential of IVs, they are still not part of mainstream support programmes. By integrating IVs in national feeding and nutritional programs as well as national curricula and training programmes the full potential of IVs can be unlocked. Take deliberate policy actions to mainstream IVs.
Comments & inputs

- What is the role of government in this? In the full discussion that was clarified as to – The government should create a better framework in which the private companies can engage with farmers.
- There are technologies, there is no need for further research, we need to tap on the successes
- There are seeds companies that know how to produce these vegetables

5.5 Preparation for presentation to the policy makers

After the participants had collected some ingredients for the policy recommendations (as shown in the previous sessions), they were then engaged in a plenary discussion on how to package their presentations to the policy makers. They agreed that there should be one presentation, presented by the chairman of the network (Dr Detlef Virchow). Three more participants volunteered to assist in the preparation of the presentation which is presented in section 6.4 of this report.
6 Dialogue with the Policy Makers

6.1 Welcome note by Detlef Virchow

Africa is growing and more people still live in the rural areas of Africa. In a couple of years over 50 % of the African people will live in the urban areas. African cities and the outskirts (what we call peri-urban) are already facing new challenges. And you policy makers know and are somehow involved in the development of Africa.

In future with more people living in the cities, they will face more challenges. Some of the major challenges include:

- How can African cities feed this growing population?
- Will there be enough food for all?
- How is the infrastructure to get the food to the people?
- Will there be enough employment for everyone?

Running a city is sometimes more difficult than running a country, especially if you do not want those cities to suffer from poverty and other development related challenges.

This dialogue which we intend to have today, we want to contribute to the burning issue. We, the participants would like to enter into the dialogue with you policy makers. We don’t have the silver and magic bullet that can solve everything. But with research we offer some alternatives that can help address some of these challenges. We believe that AIVs can contribute to the well being of people in the African cities.

We are mainly researchers (in agriculture and urban planning), and sometimes there are some difficulties. You need our research and evidence so that your decisions are based on evidence. We also need your feedback so that our future research can address the reality.

We have started this meeting two days ago. We collected and summarized all research results on IVs. We also got to understand the policy process so that we are able to communicate with you much better. We used these two days to prepare our message. Today is the final day and the highlight of our three day meeting.

We have the policy resource people who were very useful during the group discussions. We also have a team of facilitators; headed by Maria Nassuna-Musoke. With these few words, I would like to welcome you all in this important meeting.

6.2 Introduction of the policy makers

After the word of welcome, Detlef handed over to Maria, to facilitate the getting to know each other session. Maria requested all the policy makers to introduce themselves (one after another). Each policy maker was expected to say who s/he is, where s/he comes from and what s/he expects to learn or contribute in this meeting.
The introduction exercise revealed that there were 17 policy makers from seven countries in Africa. These were: Benin 3, Cote d’ Ivoire 3, Kenya 1, Senegal 3, South Africa 2, Tanzania 4, and Uganda 2. The policy makers had a wide range of background and represented a variety of ministries such as Agriculture and Agricultural extension, Rural Development, Environment, Municipality, Urban Planning, NEPAD, CNNR etc.

Apart from the policy makers, there was presence of the local Mayor who also came to be part of the opening and welcoming of the policy makers.

**Some of the expectations** as stated by the policy makers are captured below.

- To find ways to incorporate your research findings into policy matters
- To use the findings to inform policy decisions
- To explore the in-depth of the research here
- Establishing a platform for communication between researchers and policy makers
- The value added of this dialoguing will be around how we move from research to policy to programme
- My role is to see research challenges that you have come up with and take them on board when we go back at home
- To support the research about the urban space- I am here to also protect the environment- I am supporting the research and we can together find way on how we can accommodate each
- Incorporation agriculture into urban planning- my contribution- to reflect the outcome of this research and to give feedback as to what further
- Our legislation does not necessarily support urban agriculture - I want to see how we can be able to get results that will enable us to get an entry point for promotion of urban agriculture
- Our contribution is to make urban agriculture more visible and make it more secure- there is a competition due to population increase- the soil is used for other reasons- we want to conserve the green areas.
- In my country there is huge population increase – On one hand there is land allocation by government, on the other hand there is a population that come in without any structure- UA is in decline due to these social pressures- we want to find way of preventing the people who illegally occupy land- this lead to environmental pressure.

After the policy makers had introduced themselves, Maria requested the participants from the respective countries to stand up so that the policy makers could have a general feel of who was there. The following section is the record of the presentations that were made to the policy makers as a result of the discussions of the two previous days by the researchers and the policy resource personnel.

### 6.3 An overview on African Indigenous Vegetable project by Dr Einir Young

To give the policy makers an orientation about the Indigenous Vegetable Network, Einir Young made a short background presentation.
Who’s who – and history

The *IndigеноVeg* network is a Consortium of 14 partners whose overall aim is to promote indigenous vegetables principally in urban and peri-urban areas of sub-Saharan Africa. The justification for this is:

- Africa has the highest urban growth rates in the world (4.58%)
- It is projected to have over 50% of its population living in urban areas by 2030 (UN-Habitat, 2007).
- Urban consumers will be an important group to target during the promotion of indigenous vegetables.

European partners include

- Albert-Ludwigs-Universität-Freiburg (APT)
- Justus Liebig Universität Giessen (APMR)
- University of Copenhagen, Denmark (DAS)
- Consejo Superior de Investigaciones Científicas (CSIC)
- Bangor University, Wales (CAZS) – The Coordinator

Sub-Saharan partners are:

- National Agricultural Research Organisation (KARI) – Uganda
- Maseno University (BPS) – Kenya
- The World Vegetable Center (AVRDC) Tanzania (and Taiwan)
- Agriculture Research Council (ARC)
- Rainman Landcare Foundation (RLF)
- Rhodes University (DES)
- Institut Senegalais des Recherches Agricoles (CDH)
- Institut Nationale des Recherches Agricoles du Benin (INRAB) – Benin
- Centre Nationale de Recherche Agronomique (CNRA) – Cote d’Ivoire

What are indigenous vegetables/peri urban agriculture: What is peri-urban and why the interest?

“Urban agriculture is an industry located within (intra-urban) or on the fringe (peri-urban) of a town, a city or a metropolis, which grows and raises, processes and distributes a diversity of food and non-food products, using and reusing largely human and material resources, products and services found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area” Mougeot (2000).

- This is considered by some to be an important but often overlooked sector, by others an inconvenient mess – what is your opinion?
- Indigenous Vegetables = Traditional vegetables = indigenous and naturalised species that have not been the subject of scientific breeding work
- Over the last two decades, people have
  - become aware of the many interactions between agriculture and environment,
- the limitations of the Green Revolution,
- become very concerned about rapid climate change,
- realised the need for a highly diversified diet, rich in vegetables and fruit, for good health
- shifted from top-down to community-driven rural development.

• as a result previously neglected and underutilised and underexploited species are becoming interesting for nutritional and food security, income generation, medicinal value and suitability for low-input systems, and marginal environments

The challenges

• **Image.** - Trendy city people (especially young people) think they are "old-fashioned", "poor man's food".

• **Convenience.** - People in towns and cities are too busy, “fast” foods are becoming popular, they eat less fresh produce especially if it takes a lot of effort to prepare (as is the case with many indigenous vegetables). Old recipes are not handed down. Grandma’s cookbook has fallen off the best seller’s list.

• **Wider economic forces/ globalisation**, increased economic opportunities for a restricted number of commodity groups, leading to the marginalisation of local agro-biodiversity – at the moment. This could change with consumer pressure in the global market for fewer ‘food miles’

Opportunity

• improved food and nutritional security for urban dwellers

• employment and income generation opportunities

• potential environmental benefits: large quantities of waste produced in cities could be turned into compost for urban and peri-urban agriculture, recycling valuable soil nutrients, enhancing soil properties, and alleviating the waste disposal problem which is very serious in many developing countries

• Alternatives to commercial vegetables as African farmers feel the effects of European concern for carbon footprint and food miles.

After an overview of the IndigenoVeg network, Detlef presented to the policy makers what the participants have come up as implications of their research on policies and the policy recommendations thereof.

### 6.4 Policy implications and recommendations by Detlef Virchow

**African Cities rediscover their roots: African Indigenous Vegetables make a comeback**

What makes AIVs special?

• They are an important part of African dietary and cultural habits
They contribute to the biodiversity of food crops
- e.g.: Benin inventory identified 200 plant species used as vegetables

They are found in a wide range of climatic conditions
- e.g.: throughout sub-Saharan Africa – from wetlands to arid zones

Transferring AIVs across climatic regions is one strategy for coping with climate change (and thereby protecting threatened food systems)

The vicious circle in African cities

Employment and urban livelihoods
- AIVs production and marketing employs a large number of people e.g.: In Yaounde, more than 32,000 households are involved
- Average monthly incomes for producers and traders are high, i.e. in Senegal:
  - Producers: US$ 334
  - Wholesalers: US$ 667
  - Retailers: US$ 445
- For many traders, this is the only source of income
- In most countries, trading of AIVs is nearly exclusively done by women

AIVs are high value crops
- A study in Nairobi finds that
  - 30% of all vegetables marketed are AIVs
  - The commercial farming of AIVs generates 2 million US$ in income annually (increasing)
Nutritional value of AIVs

- AIVs are high in micronutrient content
  - The iron content in amaranth is 15fold higher than in spinach
- Low iron consumption is a major cause of anaemia
  - AIVs contribute 25% of Vitamin A consumption among poor households in Tanzania
  - Vitamin A consumption prevents blindness
- AIVs are an affordable source of micronutrients
- AIVs are important in combating non-communicable diseases (obesity, diabetes, heart diseases)

Breaking the vicious circle

AIVs & UPA can contribute to breaking this vicious circle - *IF policy makers intervene*

Areas of intervention

1. Integrated urban planning including access to land and water
2. Market infrastructure including awareness raising
3. Input support systems
In all these, inter-sectoral co-operation is needed!

1. **Integrated urban planning**

   **Key Issues:**
   - (urban/peri-urban) Agriculture is not part of the urban planning and management system
   - Limited availability and precarious access to land for urban/peri-urban agriculture
   - Water quality, allocation and pricing regime does not support urban/peri-urban agriculture

   **Policy suggestions**
   Recognize and formalize the role of agriculture in urban/peri-urban areas:
   - **Land:**
     - Designate areas (zoning) for agriculture production
     - Introduce integrated land use practices (e.g. edible park)
     - Investment in management of production sites
     - Temporary land use arrangements
   - **Water:**
     - Develop sustainable water supply programmes for urban agriculture (harvesting rain water, recycled waste water etc.)
   - **Others:**
     - Set rules for agricultural land uses and producers
     - Secure user rights for producers
     - Organization structures for producers, processors and traders
     - Regulate interface between agriculture and waste management (use organic waste of compost, manage waste disposal to protect agricultural resources)

   **Benefits**
   - Expected benefits, if urban agriculture is packaged as part of integrated urban planning and management system:
     - Greening and beautification of urban areas
     - Local employment and livelihood improvement
     - Productive use of buffers strips, servitudes and open spaces
     - Planned provision for agriculture can reduce illegal use of land and water

2. **Making markets work**

   **Key Issues:**
• Fragmented and disorganised markets
• Inadequate market information
• Inadequate infrastructure & services for traders
• Multiple tax regimes
• undermine profitability and viability
• leading to market inefficiencies

Policy suggestions
• Recognise AIVs businesses in a formal, user-friendly way in peri-urban and urban areas of SSA
  - Support and promote farmer organisations
  - Reduce/simplify the tax en route to markets
  - Simplifying, incentivising the registration process
  - Awareness campaign on nutritional and health value of AIVs (for the general public, politicians, donors)

This worked in Nairobi…
• AIVs were introduced to supermarkets and traditional markets in Nairobi in 2003:
  - Sales:
    o 2003: 31 tonnes/month for 3-4 months of the year, generating farm gate value of US $6,000/month
    o 2007: 600 tonnes/month all year round, generating an estimated farm gate value of US $142,860/month
  - A network of 3,000 farmers supply the supermarkets, markets, informal markets and kiosks every morning – and by 11am the demand is such that AIVs have sold out
  - Sales of conventional vegetables are now higher sales reflecting the improved brand image of vegetables
  - The market for AIVs is further expanded as with an increase in public sector procurement for institutional markets such as hospitals and schools

Benefits
• Improved viability and profitability of business
• Increased income of individuals and municipality (by strengthening the economy and tax revenue base)
• Enhanced the livelihood opportunities of individuals (incl. increased access to education and medical services) and communities
• Improved infrastructure service delivery and public health and food safety
3. Improved input support systems

**Key Issues:**

- Difficulty accessing quality and quantity of AIVs seed inhibits profitability, sustainability and growth
- Inadequate extension support – bias to exotics and rural areas
- Low funding priority of AIVs and urban agriculture research

**Policy suggestions**

- Improve seed supply for AIVs:
  - Incentives to promote partnerships between seed companies and farmers to increase access and availability of commercially viable AIVs seeds
  - Support of community based seed supply systems to increase access and availability of non-commercial AIVs seeds
- Prioritize extension support for AIVs and urban agriculture:
  - Incorporating AIVs and urban agriculture requirements in extension capacity building and training programmes
  - Broaden extension coverage for urban/peri-urban areas
- Prioritize AIVs and urban agriculture in research programmes:
  - Increased funding for AIVs and urban agriculture research

**Benefits**

- Improved seed systems leading to increased production and income
- Improved agricultural production practices in urban/peri-urban areas

*AIVs and UPA can contribute to fight hunger and poverty in African cities!*

- scientific evidence
- case studies / success stories
  - “poor people’s food” can be sold in the “rich people’s shops” and become economic market opportunities
- Researchers fill the knowledge gaps and produce policies briefs, best practice guidelines and toolkit for municipalities etc
- Policy makers have to intervene and take up the inter-sectoral co-operation

After Detlef had presented, at least each policy maker was given an opportunity to ask a question of clarification, make an input and/or comments. Some of the issues raised by the policy makers were captured below.
C: For us to make viable contributions we need to have copies of the presentations.

C: There is a need to add the post harvest technologies- I did not see that in the presentation.

C: I would like see more on building strong grass roots organisation- that is the area that many governments would like to see- we like to see the people more organised to help have voice.

C: The problem is not about the access to land, but the main problem is the preservation of the agriculture land- we see building coming closer to closer to these lands- the decisions cannot be taken by the politicians alone, we need help from the public to the researchers.

C: In major African capitals there is huge pressure on land- people do not know how to house people- where to house people and where to find land for agriculture- the municipality sells land for money- We need research done to raise the awareness of this problem.

C: Can we have a French copy as well so that we can go home and share with our colleagues- In Cote d'Ivoire the problem of lands is not much of an issue as far as the cities are concerned- The cost of pesticide are very expensive - young people want to start, but the purchasing of land becomes difficult because of the cost

C: In our country the question of marketing is not much of the problem, there are group of women who have cooperatives, however, over production makes the price to drop which is discouraging for young people to take this kind of activities. Also we need more research into minimising the cost of pesticides.

C: We appeal to researchers to pay respect to the health of the consumers because the chemicals damage the value of food. While this heritage should be preserved, there should be more variety. Producers should be helped against bad climatic conditions

C: Regarding land use- there is need to look at the aspects of waste management while in the area of markets- there is need for creating awareness about the safety of using human waste- there is scepticism in the use of disposable waste and regarding input supply system, we need to capture the diversity- include resource conservation

C: There is missing linking between researchers, policy, producers, and the development planner which needs to be taken on board

C: In Kampala the marketing and space confinements has not yet been streamlined. It is also not clear about the yields of the many varieties, which ones are high yielding and which ones are not.

Concerning health, although IVs are very nutritious, we lack the concrete figures with which to convince fellow politicians. We need those figures. The other challenge that researchers need to help us overcome is how well can we prepare IVs in order to preserve the nutrients? We need more research in this area.

C: Municipal cities do not have means to financing of agriculture. What should we do? In some areas, the land has been demarcated and everything is ready, but financing to kick start the processes is lacking

C: Could each country consider having a budget aside for funding these emerging vegetables? NEPAD has created a structure to support such systems.
C: There is need for research on Irrigation material and other equipment as well as credit access is also another area

C: Communication - we must see to it that the farmers can sell their produce. Policy makers need to sit at least once in two years to plan for the future.

C: This is long overdue and we urge the countries to take this into the country level. It is not impossible to get the different sectors to work together. We have CAADP whereby countries have committed themselves in to increasing the budget allocation to 10%, to agriculture. When we go home lets find ways of including urban agriculture in that budget. There are other home grown school feeding program which can be a starting point for some. There is also need to harmonise policies; for instance in many countries there are many food and nutrition policies that exist across many departments, but there is no single harmonized policy on them.

C: It is a good thing that we are meeting together because in most cases we work in isolation. The researchers have told us there are solutions; we need to move on to the next stage, decision must be made. Mayors and other people must be involved in the planning for the future. It is true that sometimes means are lacking, but different ministries should start budgeting for this within their existing budgets? There must be constant dialogue - if this initial decision is not taken, there cannot be any progress in the future and at the end of this conference, the contacts must be maintained.
6.5 Implications of Policy Recommendations to the Countries

After the presentation of the policy recommendations and after the policy makers were given a chance to make comments and questions, the participants were divided into country groups to discuss country specific implications. The group work was guided by the questions in Box 6 below:

Box 6: Group Task

1. How do the policy recommendations presented relate to the policies in our country (s) - What are the differences / gaps?
2. What changes (if any) should be made to make these recommendations more applicable to our country?
3. What could be the challenges in implementing the recommendations?
4. What are the possible strategies for dealing with the challenges? Who should do what and what support would they require from researchers?

Please nominate a rapporteur who summarises the discussion in two to three pages electronically

6.5.1 Tanzania

1. How do the policy recommendations relate to the policies in Tanzania?
   - Policies are in place and map easily onto the recommendations
   - For example:
     - The Agriculture Policy
     - Urban Development and Environmental Management Policy
     - Urban Land Use Policy
     - Government has set aside funds to support resource-poor farmer, especially in urban areas

Gaps: Input support system

2. What changes are necessary (if any?)
   - Training and financing agro-dealers
• Extension services to target urban areas as well as rural areas
• By making them demand-driven
• Promoting private sector technical service providers
• Strengthening crops/pesticides inspection services in urban and rural areas

3. What could be the challenges in implementing the recommendations?
• Need for shift in mind set/awareness raising
• Most of the programmes rely on donor funding, sometimes up to 90%
• Political commitment is a problem, e.g. politicians interfering with otherwise good planning
• Encouraging action-orientated political commitment
• Support system does not target urban agriculture, e.g. extension services, micro finance, irrigation etc

4. Taking advantage of windows of opportunity
• Current review of agricultural policy (urban agriculture already incorporated)
• Current drive to promote previously ignored species
• Currently developing an urban Development and Environmental Management policy. (Who: PMO)
• Current development of Urban Land Use policy (Who: Ministry of Land)
• National Strategy for Growth and Poverty Reduction (MKUKUTA) (Who: Ministry of Planning and Empowerment)
• Subsidising small scale farmers

5. What support do we require from researchers?
• Need information about the quality of IV’s produced in urban areas (issue of chemical residues, microbial etc)
• Identification of most productive varieties
• Developing reliable varieties of seed
Existing policies in Kenya that deal with the issue of land in urban areas

- Local Government Act - UPA is absent
- Physical Planning Act - UPA is absent
- Environmental Management and Coordination Act - UPA is absent
- Physical Planning Act - Local Physical Development Plans are an important output. Nairobi has two for different neighbourhoods - of different density. In both there are some opportunities to develop agriculture in the plan; but they need to be acted on. In high density areas there is very little space, and open spaces are communal and little potential for UPA.
- National Land Policy - out for consideration - but does recognise urban and peri-urban agriculture - but is not specific about them
- Local authorities have bye-laws which designate zones: these are often not kind to urban agriculture. But city bye-laws should be examined to find opportunities for UPA in areas that cannot be built upon or developed. KARI has identified some of those gaps in by-laws as related to urban agriculture - and is in a process of policy dialogue about this.
- BUT all the opportunities for peri-urban agriculture will have other people competing for them...and in some cases it is the landowner who will choose what happens to the spaces.
- In Kisusmu there is a City Development Strategy which supports urban agriculture, and this can be learned from.
- Nairobi and Kisumu has a Slum Development Strategy which supports urban agriculture.

Existing policies in Kenya that deal with the issue of water in urban areas

- Water Act 2002 - but does not develop sustainable water supplies for urban agriculture - and the reality is that people use water illegally, or use waste water.

Existing policies in Kenya that deal with the issue of setting rules for agricultural land use in urban areas

- One proposed solution to set rules has been for the City Council to issue temporary licences for land use - but this has been abused - and needs to be reviewed.

Existing policies in Kenya that deal with the issue of waste management in urban areas

- There is an existing programme for making and using compost for income generation

Existing policies in Kenya that deal with the issue of producers, processors and traders

- National Youth Policy allows formation of groups before funds are given for development - these groups can do agriculture in urban and peri-urban areas
- Organisational structures in place do not favour small scale processors.
Existing policies in Kenya that deal with the issue of agriculture and waste management

- Nairobi City Council has a waste management policy but it is not enforced - it is very new

Existing policies in Kenya that deal with AIV businesses in a user-friendly way

- Pending bill in small and medium enterprises - but not sure what it contains. City planners are trying to promote new kiosks - and hope this will dove-tail with the new bill. A possible entry point to AIVs

6.5.3 Uganda

Summary

- The group broadly supports the policy recommendations
- The policies should be localised for Uganda
- Need to include urban agric into national agric zoning
- Must take note of Kampala’s expansion of urban peri-urban agriculture ordinances

Relation of policy recommendations to existing policies

- Land use: Need to recognize what has happened in Kampala at the point of zoning
- Marketing: Presidents’ manifesto wanted to waive taxes but not yet formalised. Policy makers would be very motivated to promote something that they know has value & has the backup of scientific evidence
- Inputs: Lacking appropriate policies & laws to protect varieties, farmer & community rights

Challenges

- influencing policy
- No channels for moving policy options from (A) research or policy makers to (B) action

Strategy for dealing with this

- Researchers produce results
- These should be presented to ‘translators’ in policy units in the institutions and or ministries
- Policy briefs should then be produced and further refined in collaboration with policy makers
- Policy drafts should emerge to be fed to loca, regional, national government as appropriate
- At national level the policy draft should go to cabinet and if necessary incorporated in law
6.5.4 South Africa

- Agree with policy priority themes presented
- Following policy issues highlighted in the SA context:

Integrated urban planning
- Tenure insecurity needs special attention
- Measures to secure crops and infrastructure against theft need special attention
- Particular focus on supporting homestead gardens
  - Larger residential stands
  - Harvesting rain water
  - Look at vertical gardens + high yield crops
- Community building aspect of food gardening

Making markets work
- Great need for market information and marketing opportunities
- Awareness campaigns important:
  - Crop production opportunities
  - Nutritional values
  - Recipes
  - Income generating opportunities
- Attention needs to be given to value-addition to make farming more attractive
- No culture of traditional markets – country specific solutions must be sought
- Tax problem not applicable
- Waste management at markets need attention

Improved input support systems
- Need to break the dependency syndrome (“project beneficiaries”) 
- Special attention to management training for entrepreneurs
- Policy changes to ease seed trade
- Integration of support services between provincial and local government and with research institutions and other non-government stakeholders

What do we need from research?
“What will it costs” must come from policy briefs – E.g. “what are the important variables for crops to be financially viable”
- Skills requirements for AIV production
- Post harvest technology
- Best practice guidelines and lessons learnt important (also in NEPAD context)

6.5.5 **Benin**

1. **What is available?**
   - Policy recommendations relate with country policy
   - Land management:
     - A recent legal framework is developed in Benin for vacant lands management (e.g. for agriculture)
     - Urban and peri-urban agriculture is integrated in some City plans
   - Water management issues: equipment, financial support from government to support agriculture (mechanization, irrigation, etc.) and urban and peri-urban agriculture can benefit from that.
   - Policy for house wastes management available in Cotonou

**Gaps**
- Pollution: contamination of vegetables in Cotonou
- Eco-Sanitarian issues: complementary research on health issues (pesticide uses can threaten producers and consumers health)
- Financial support for producers to sustain production
- There is still a concern on access to quality water (e.g. particularly in Cotonou water is polluted)
- Farmer organizations exist however, are very weak

**What changes if any …?**
- Awareness raising on existing legal framework
- Long term planning of city management needed (inclusive of UPU land management)
- Develop a framework whereby city lands should not be sold by decision makers

**Challenges**
- E.g. Producers in Cotonou were allocated new lands for production in Sèmè (Peri urban area of Cotonou)
- However, they did not occupy the new allocated land due to lack of financial support
- Post harvest activities related to IVS (conservation, processing, …)
Strategies

- The ministry of agric/environment will recommend the mayorship to integrate sustainable UPU agriculture in all city plans in Benin
- Promoting Traditional vegetables in public services, governmental institutions, etc. → Ministry of Agric.
- Promoting consumption of traditional vegetable in schools → Ministry of Education
- Complementary supports to urban and periurban farmers to exploit the new allocated areas in Seme → Ministry of afric + Mayorship + Credit service
- Efficient Farmers organization → farmers + Ministry of agric.
- Raising awareness on existing legal framework (laws, etc.)
- Implementation of laws on land use
- Create markets (physical places) for local vegetable → Mayorship of Cotonou
- DAGRI for quality IV seed multiplication
- Promoting endogenous crop protection for IVS (e.g. repellent species, etc.)
- The governments of West and Central Africa to initiate within the framework of ECOWAS the promotion of IVs
- Periodical meeting (national and regional network) to assess recommendations

6.5.6 Code d’Ivoire

What

- In Ivory Coast Agriculture is informal
- We accept the recommendations We have to adapt so that politically they can
- We are talking about general planning
- We recommend that there be temporary permit for land use in urban areas
- As we move away from the town, there must be spaces allocated for agriculture
- We have a green around the city of – we will take this further

Water

- Water still needs purification so that it can be used for household
- Organization do exist for farmers, the structure are not solid. We will help them
- We initiatives around solid and water waste

Markets

- How can we guarantee that the markets will be available?
- There is small tax levied from small traders
- We do not have a list of these traders, but we will draw
• Aware campaigns—There’s have been some efforts made, but we will intensify our efforts there
• There is no system of provision of seed, we will give that our attention
• This is a national priority, we will continue to consider to
• We have amount of data regarding cultivation in urban areas, but it is incomplete
• We also know about the nutrition value of food, but it is not enough

Research

• Research has been carried on the lack of vitamins
• We have committed ourselves to make the government aware about the
• When we get home we will able to put conditions that are suitable for this
• There will be a platform to discussion about this
• When we get home, the platform will be set up
• Research will give us the ammunition to convince government
• We commit ourselves to better implementation of these recommendations

6.5.7 Senegal

Recognize and formalize the role of agriculture in urban and peri-urban areas:

Land

In Senegal the State recognises the “Bailmaraîcher”. Also, the Code de l’urbanisme recognises the land allocation to vegetable production use. In the non aedificandi areas agricultural activity is not prohibited. But it is necessary to make a difference between the legal and the legitimate situation.

Its non-visibility causes the activity to be relegated to second place.

Urban agriculture should not only be done in Dakar. It is necessary to inform the State about the problem to move towards a coherent legislation, which recognises and formalises the role of urban agriculture in the country.

The 1996 law on the transfert de compétence means that the State does not exclusively manage agricultural tenure. It is also the responsibility of local authorities who do not have other means except land, so there is speculation.

Agriculture is not a transferred activity, to the contrary of urbanisation. This is what involves Municipalities to allocate land to farmers. But these do not have the responsibility to financially support farmers. There is no budget line.
In the LOASP, urban agriculture is not integrated. It is necessary to develop strong legislative measures to secure the achievements of farmers. Agriculture does not appear in the urbanisation plans, nor in the plan d'ensemble, nor in the plans de detail. Legislative texts authorise agriculture in the urban environment. Nevertheless the legislative framework for the on-the-ground application remains undefined. There are laws but no decrees. The plans which define the use of space do not reserve any space for urban agriculture. It is fundamental to move towards the formulation of the plaidoyer in favour of urban agriculture.

**Water**

- Traditional wells (céanes) are normally used for vegetable production
- Encourage recycling of wastewater for agriculture
- Place the network of vieux forages at the service of urban agriculture
- Water of SDE for which quotas are allocated to producers: the tarification étagée poses problems of cost as well as availability.

**Others**

There is good organisation of producers in urban and periurban zones. The farmers benefit from State subventions (grants), but the major constraints remain access to credit. Micro-finance institutions require guarantees.

**Recognize IVs business in a formal, user-friendly way in peri-urban and urban area of SSA**

Many support structures are involved in the sector: NGOs, public structures, projects, research...

Financial charges on commercialisation are very heavy. On the contrary on land, they secure the properties and investments of producers.

The management of physical spaces for commercialisation is a problem. The occupation of public roads by vegetable sellers takes up a lot of space in a very disorganised way. The retailing of vegetables should be organised.

Many nutritional programmes targeted at children are currently on-going. Also, leafy vegetables are considered to be very important in traditional and modern medicine. Many awareness-raising campaigns are carried out to give value to these products. Nevertheless, the effective promotion is still required.
For the most part, farmers auto-produced seeds. For some species, research has selected some varieties (gumbo, diaxatu, bissap, patate, manioc…). On the other hand, spreading of information and up-take by rural producers remains insufficient.

The Conseil Agricole et Rural should play a role in spreading results of research and their application on the ground.

Decision-makers should equally be very near research and regularly evaluate the actions on the ground.

**Prioritize IVs and urban agriculture in research programmes**

The State has commenced some special programmes which concern various crops: manioc, bissap, … Various donors, amongst which FNRAA which is a partnership between the State of Senegal and World Bank are starting to finance research in these particularly priority crops. This highlights a beginning of recognition for these crops.

**AIVs and UPA can contribute to fight hunger and poverty in Africa’s cities.**

The surveys in two large cities in Senegal show that the production of traditional leafy vegetables provide relatively consistent revenues to producers (334 $ US per month). In addition, women in Mboro involved in production cover their needs. The products are present in modern commercial circuits such as large spaces. The large restaurants in Dakar serve these products.
6.6 Way forward and areas for action by the different countries

After the country presentations were made in plenary, participants were sent back into their country groups to discuss the way forward and their immediate areas of action when they go back to their countries (see Box 7).

The country groups presented their way forward as follows.

### Box 7: Way forward and areas of action- Task

In order to put into action what we have agreed upon in this meeting, what will be our immediate next steps within the resources (human capacity, financial etc) available?

#### 6.6.1 South Africa

<table>
<thead>
<tr>
<th>What</th>
<th>Who takes the lead</th>
<th>With whom</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporate of UA space in urban planning</td>
<td>Amulet Thobane</td>
<td>Tshwane city planning and environment management department</td>
<td>2008</td>
</tr>
<tr>
<td>Organisation cooperatives for community</td>
<td>Raymond</td>
<td>PELLUM SA</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Awareness campaign on biodiversity, nutrition value and recipes</td>
<td>ARC</td>
<td>DOA, Tshwane city, Univ Limpopo, TUT</td>
<td>2008</td>
</tr>
<tr>
<td>Waste management</td>
<td>University Copenhagen</td>
<td>DANIDA UEM</td>
<td>May 2008</td>
</tr>
<tr>
<td></td>
<td>Rainman, Tshwane city</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease seed trades service</td>
<td>Willem, ARC, Univ Limpopo, Tshwane, ARC, DOA</td>
<td>SANSOR, SASAE</td>
<td>2008</td>
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### 6.6.2 Senegal

<table>
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<th>What</th>
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<th>When</th>
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</thead>
<tbody>
<tr>
<td>Reporting the work recommendations to decision makers</td>
<td>Ministry of Agric (MAE) Ministry of finance Municipality Pikine</td>
<td>Min of agric (director Horticulture) Min of urban planning</td>
<td>In January 2008</td>
</tr>
<tr>
<td>Integration of agric in urban planning in Dakar</td>
<td>Municipality Pikine</td>
<td>Ministry of finance Min of Agric Min of urban planning</td>
<td>October 2008</td>
</tr>
<tr>
<td>Implementing national network of stakeholders</td>
<td>Min of agric (director Horticulture)</td>
<td></td>
<td>June 2008</td>
</tr>
<tr>
<td>Facilities provided to the farmers (mineral)</td>
<td>Min of agric (director Horticulture) Farmer organizations</td>
<td></td>
<td>February</td>
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</table>

### 6.6.3 Tanzania

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<th>When</th>
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</thead>
<tbody>
<tr>
<td>Ensure that IVs &amp; UPA are included in the urban developmental policy</td>
<td>Dr Musingi) Dir of sector co-ordination (PMO-RALG)</td>
<td>(Anna Mkusa) coordinator &amp; DPP: Director of policy and planning</td>
<td>Feb-Dec 2008</td>
</tr>
<tr>
<td>Ensure that IVs &amp; UPA are included in the revised agriculture policy</td>
<td>Dir crop development (MAFC) Dir for research &amp; training and Dir policy and planning (MAFC)</td>
<td></td>
<td>Feb 2008 to June 2009</td>
</tr>
<tr>
<td>Strategic implementation framework</td>
<td>Prof Descher Prof Msuya (SUA) Mr Magigi (Moshi)</td>
<td>Dir of sector co-ordination Dir for crop development AVRDC</td>
<td>July 2008</td>
</tr>
<tr>
<td>Joint project and planning meeting</td>
<td>Dr Musingi) Dir of sector co-ordination (PMO-RALG)</td>
<td>University of Freiburg SUA Moshi and AVRDC</td>
<td>August 2008</td>
</tr>
</tbody>
</table>
### Kenya

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<th>When</th>
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<tbody>
<tr>
<td>Update policy dialogue meeting with ministry of agriculture</td>
<td>Maureen/ KARI</td>
<td>Mary and David</td>
<td>1st wk Feb 2008</td>
</tr>
<tr>
<td>Formal meeting to discuss review already carried out by KARI</td>
<td>Mary</td>
<td>Maureen</td>
<td>1st wk Feb 2008</td>
</tr>
<tr>
<td>Min of agric, chief economist Local government to meet permanent secretary min of local government- Meeting that include all stakeholders</td>
<td>David (chief economist) Maureen (min agric) a) Bring MoLG on board b) Learn about NS/ UPA latest study c) Disseminate research d) Learn about information needs of all stakeholders</td>
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<td>3rd / 4th Wk Feb</td>
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### Uganda

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<th>With whom</th>
<th>When</th>
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<tbody>
<tr>
<td>Resolve/ move forward with the information flow challenge presented - issues as related to AIVs PUA in Uganda</td>
<td>Step 1: Researchers Step 2: SR in NARS</td>
<td>Ministry + other units indirectly related institutes ZARDI City planning manager Urban planning authority Funders</td>
<td>Ugandan participation in February Finalize the timetable</td>
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</table>
### Benin

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<th>When</th>
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<tbody>
<tr>
<td>Country report to ministries council</td>
<td>MAEP</td>
<td>Ministry of Environment, Ministry of education</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmer local organization</td>
<td></td>
</tr>
<tr>
<td>Steering committee</td>
<td>MAEP</td>
<td>Ministry of environment</td>
<td>17 Feb 2008</td>
</tr>
<tr>
<td>Translation of policy recommendations into action plan</td>
<td>Steering committee (MAEP, MEPN, Farmers, Mayorship Cotonou)</td>
<td>Other participants of the conference, Stakeholder, Comminunic action</td>
<td>13 March 2008</td>
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<tr>
<td>Fund raising</td>
<td>Steering committee</td>
<td>Active stakeholders</td>
<td>15 July 2008</td>
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<tr>
<td>1st periodical meeting of stakeholders</td>
<td>Steering committee (MAEP, MEPN etc)</td>
<td>Stakeholders</td>
<td>2nd May 2008</td>
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<tr>
<td>Awareness raising</td>
<td>Steering committee</td>
<td>First lady of Benin</td>
<td>Easter period</td>
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<tr>
<td>Participation to national fair/ cuisine show</td>
<td>Steering committee</td>
<td>Ministry of culture</td>
<td>30 June 2008</td>
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### Cote d’Ivoire

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<th>When</th>
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</thead>
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<tr>
<td>Mission report</td>
<td>CNRA</td>
<td>MINAGRI, BNEDT, MAIRIE de Yamoussoukro</td>
<td>05 February 2008</td>
</tr>
<tr>
<td>Dissemination of the mission report and development of a workshop follow-on committee</td>
<td>MINAGRI</td>
<td>Ministères du Plan &amp; Développement, Ministère de la Construction et Urbanisme, Ministère de l’Intérieur (Décentralisation), Ministère de l’Economie et des Finances, Ministère de la Santé et Hygiène Publique, Ministère des Eaux et forêts et Environnement, BNEDT, CNRA, ANADER, UVICOCI, ADD-CI, OCPV, PNN</td>
<td>03 April 2008</td>
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<tr>
<td>Advocacy strategy</td>
<td>Follow-up committee</td>
<td>Follow-up committee</td>
<td>April 2008</td>
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<tr>
<td>National workshop</td>
<td>MINAGRI, Ministère du Plan &amp; Développement</td>
<td>All stakeholders</td>
<td>30 July 2008</td>
</tr>
</tbody>
</table>
6.7 Closure

After the countries presented their way forward and their areas of actions, the meeting then came to an end. On behalf of the facilitators Maria expressed her sincere gratitude to the participants, her colleague Hlami and the other facilitators, Dr Detlef Virchow, Prof Charlie Shackleton, the steering committee, the organizers including Tory and her team. She then handed over to Detlef.

On behalf of the organizers, Detlef also thanked everybody and officially closed the meeting.
## List of Participants

<table>
<thead>
<tr>
<th>Family Name</th>
<th>1st name</th>
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<th>Country</th>
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<td>Richard</td>
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<td>Mairie de Cotonou : Direction de la Prospective et du Développement Municipal</td>
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<tr>
<td>Ale Seck</td>
<td>Eihadji</td>
<td>Mr</td>
<td>Ville de Pikine</td>
<td>Senegal</td>
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<tr>
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<td>Raymond</td>
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<td>Drescher</td>
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<td>Albert-Ludwigs-Universität-Freiburg</td>
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<td>National Root Crops Research Institute</td>
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<td>Fondio</td>
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<td>Kasambula</td>
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<td>Mumbi</td>
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<td>Mayor - City of Yamoussoukro</td>
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<td>Christophe</td>
<td>Dr</td>
<td>The World Vegetable Center</td>
<td>Cameroon</td>
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<td>Koudande</td>
<td>O. Delphin</td>
<td>Dr</td>
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