

Urban Horticulture in Africa

Urban Harvest experiences in East and Central Africa, 2002 – 2006

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- Demographic and historical background
- Emerging institutional support
- Key research experiences
 - Contribution of horticulture to urban livelihoods
 - Horticulture and the urban environment
 - Urban horticulture within city governance
- Future needs

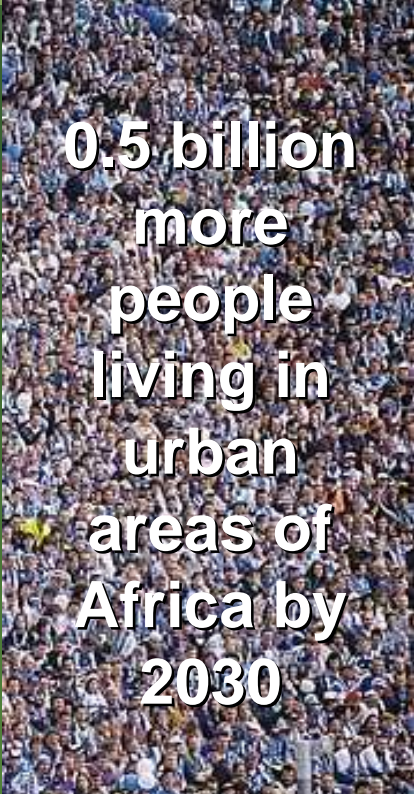
Urban Harvest: the CGIAR System-wide Initiative on urban and peri-urban agriculture

■ Partnerships

■ Goals

- Urban Harvest Regional office, Nairobi
- Improve the contribution of urban agriculture to nutritional status and income of vulnerable urban households
- CGIAR Centers (CIAI, CIP, IITA, ILRI, IWMI, World Agro-forestry Center)
- Other international centers (AVRDC)
- Enhance the positive environmental and health impacts of UPA and mitigate the negative effects
- NARIS (KARI, NARO, IRAD)
- Universities (Makerere, Nairobi, JK Ag University, Egerton, Raubias)
- Support the institutional and policy recognition of UPA as a productive and essential component of sustainable cities
- International, regional networks (GHI, RDAF, MVI)
- www.cipotato.org/urbanharvest/ (Actionaid etc)
- ARI (CIRAD, NRI)

The Millennium Challenge: urban population growth and urban poverty



**0.5 billion
more
people
living in
urban
areas of
Africa by
2030**



Millennium Development Goal 7, Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers



- Lack of employment opportunities in cities
- High cost of food and other services
- Diverse strategies – split households, casual works
- Increasing importance of agriculture for food security and income
- Hostile policy and regulatory environment

How much urban agriculture is there?

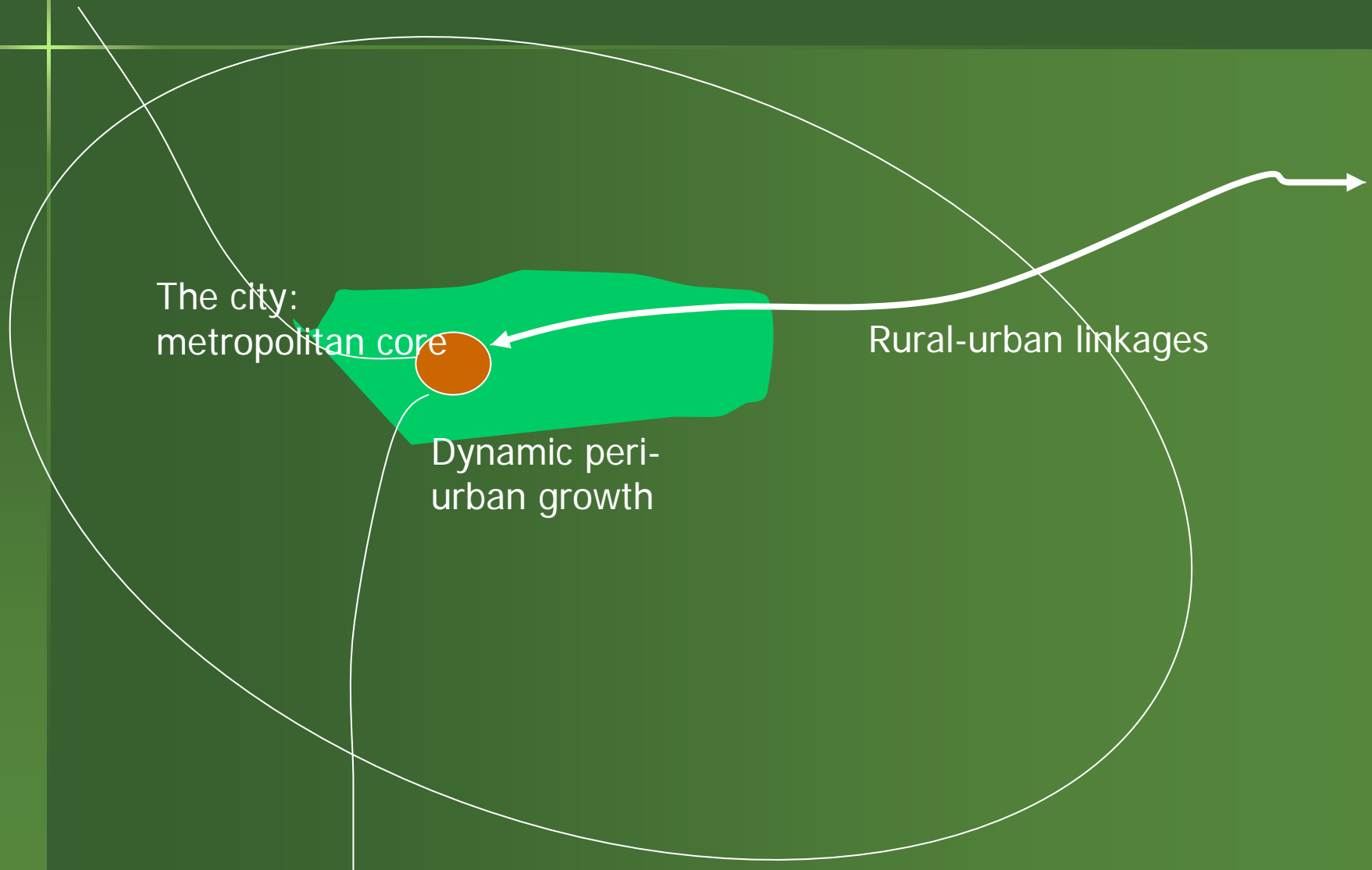
City	% households in agriculture	% women	Sources
Accra	15	10	Obuobie et al 2004
Addis	50	45	Yilma 2003; Tegegne 2004
Dar es salaam	20	90	Sawio 1998
Kampala	35	40	Nabulo et al (2004; 2006)
Maputo	37	70	Smith et al 1996; IFPRI 2002
Nairobi	30	75 - 85	Mwangi & Foeken 1996; Lee-Smith 2001
Nakuru	35	80	Foeken and Owuor 2006; Karanja, forth.
Yaoundé	35	87	Smit et al 1996; Nolte et al 2004

Emerging institutional support

- Urban food security in the Horn of Africa: Addis declaration, 2002
- Urban policy implications of enhancing food security in African cities: Nairobi declaration, 2002
- Urban and peri-urban agriculture in eastern and southern Africa: the Harare Declaration, 2003
- World Urban Forums, 2004, 2006

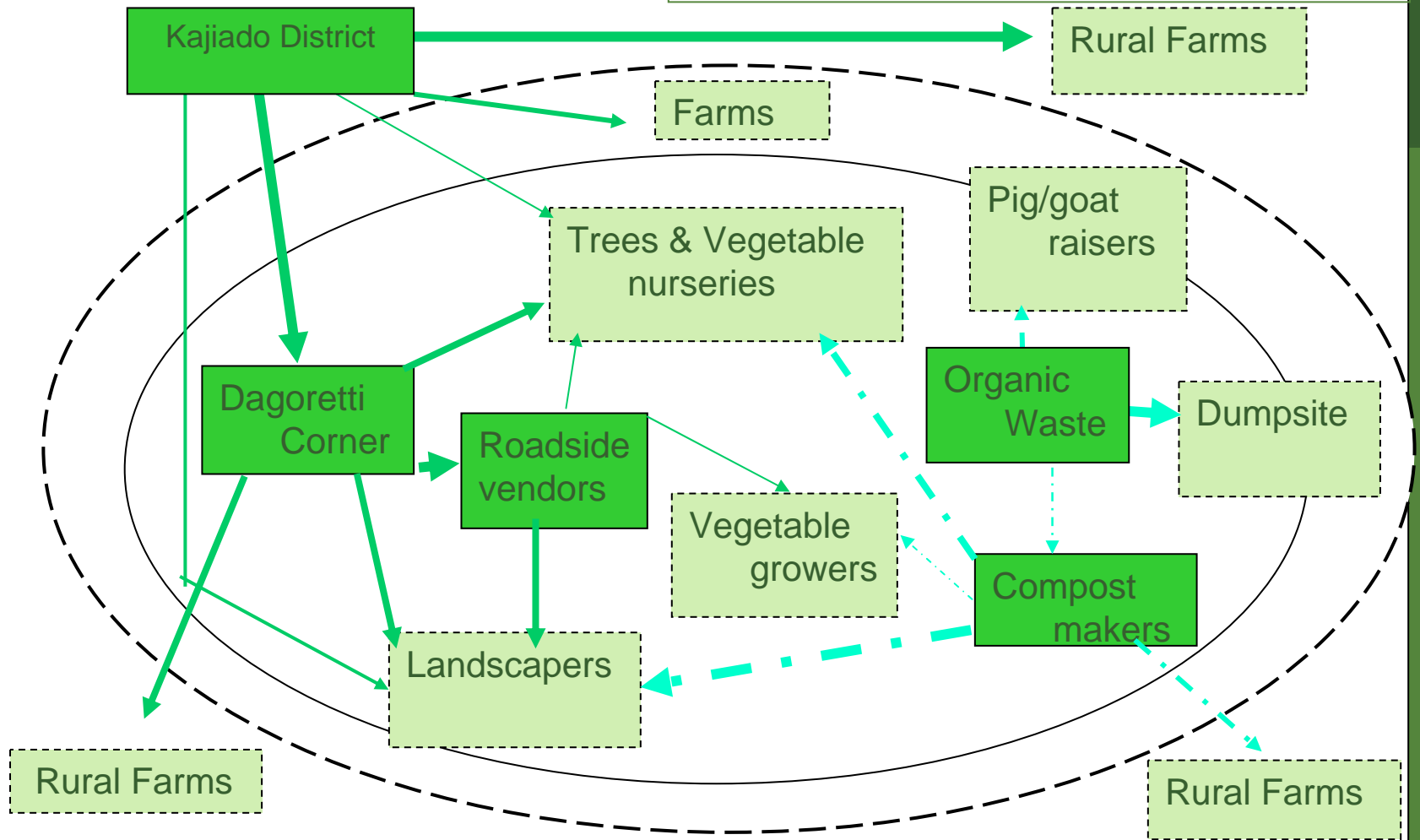
URBAN RATHER THAN AGRICULTURAL SUPPORT, BUT STILL QUALIFIED

The Metropolitan Region: Urban horticulture and livelihoods



(iii) Manure & Compost Sources for Vegetable and Seedling Production in Nairobi

Urban Harvest-ICRAF-ILRI-KARI, 2004



→ Livestock manure
 - - - - - → Compost/organic waste
 ○ Urban
 ○ Peri-urban
 Source of organic(household, market, food hotels) or livestock manure
 Users

Contribution of horticulture to urban livelihoods

- The importance of food security, reported in many locations, documented more rarely
 - Peri-urban cultivation in Kampala, 82%
 - Peri-urban upland farmers in Yaounde, 80%
- In Kamala, positive correlations between farming and food and nutrition security

Urban horticulture and income

- Part of diversified strategy in both urban and peri-urban areas

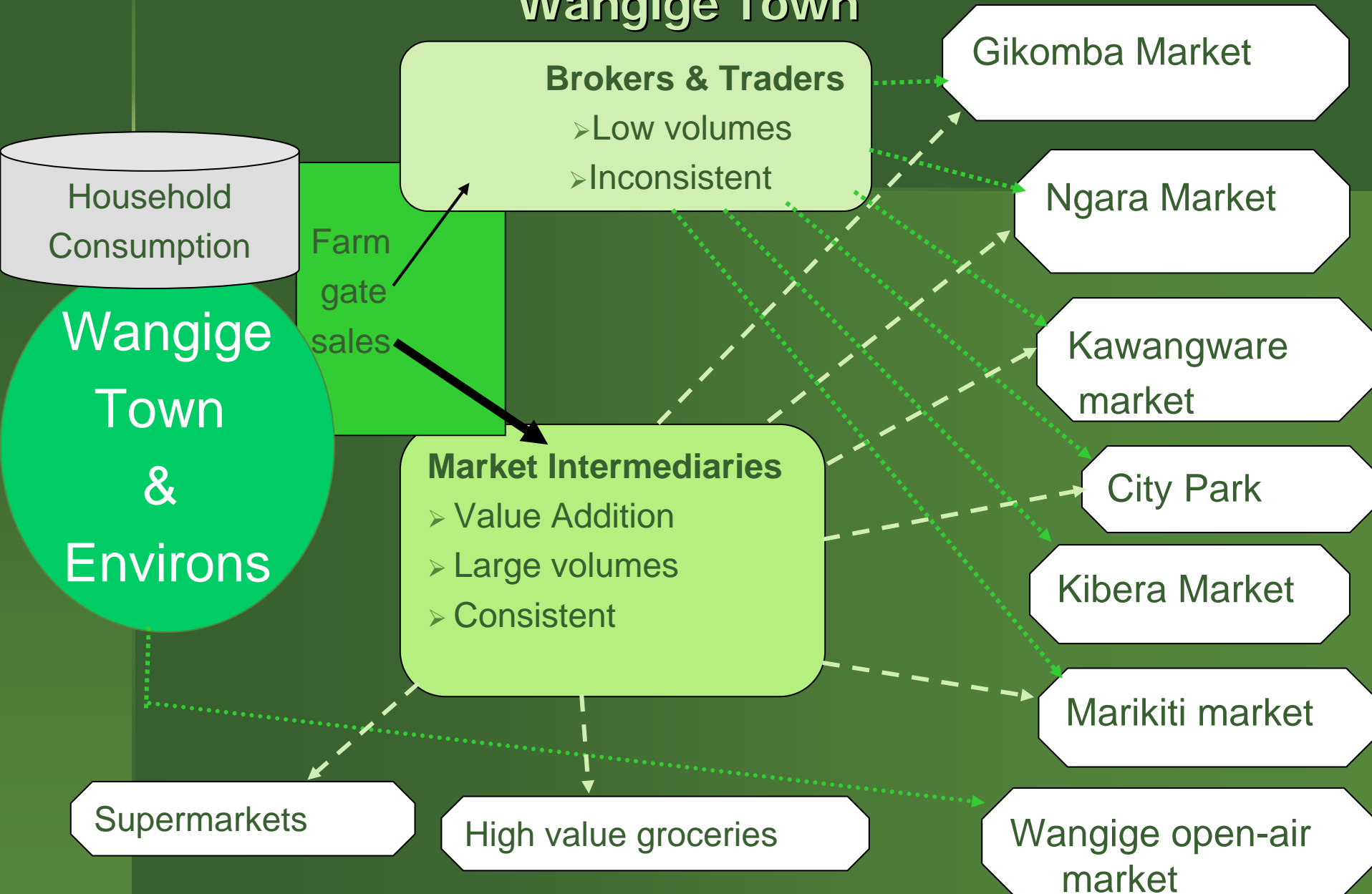
		Main income from farm	Main income from non-farm
Kampala	Peri-urban	46	54
	Urban	24	76

- In Yaounde, main source of income for 87% of producers in intensive urban inland valleys

Women Selling African Leafy Vegetables in Nairobi markets



Leafy Vegetable Marketing: Market Chain Analysis of Wangige Town



Yields and Profitability of the Main ALV's in Nairobi

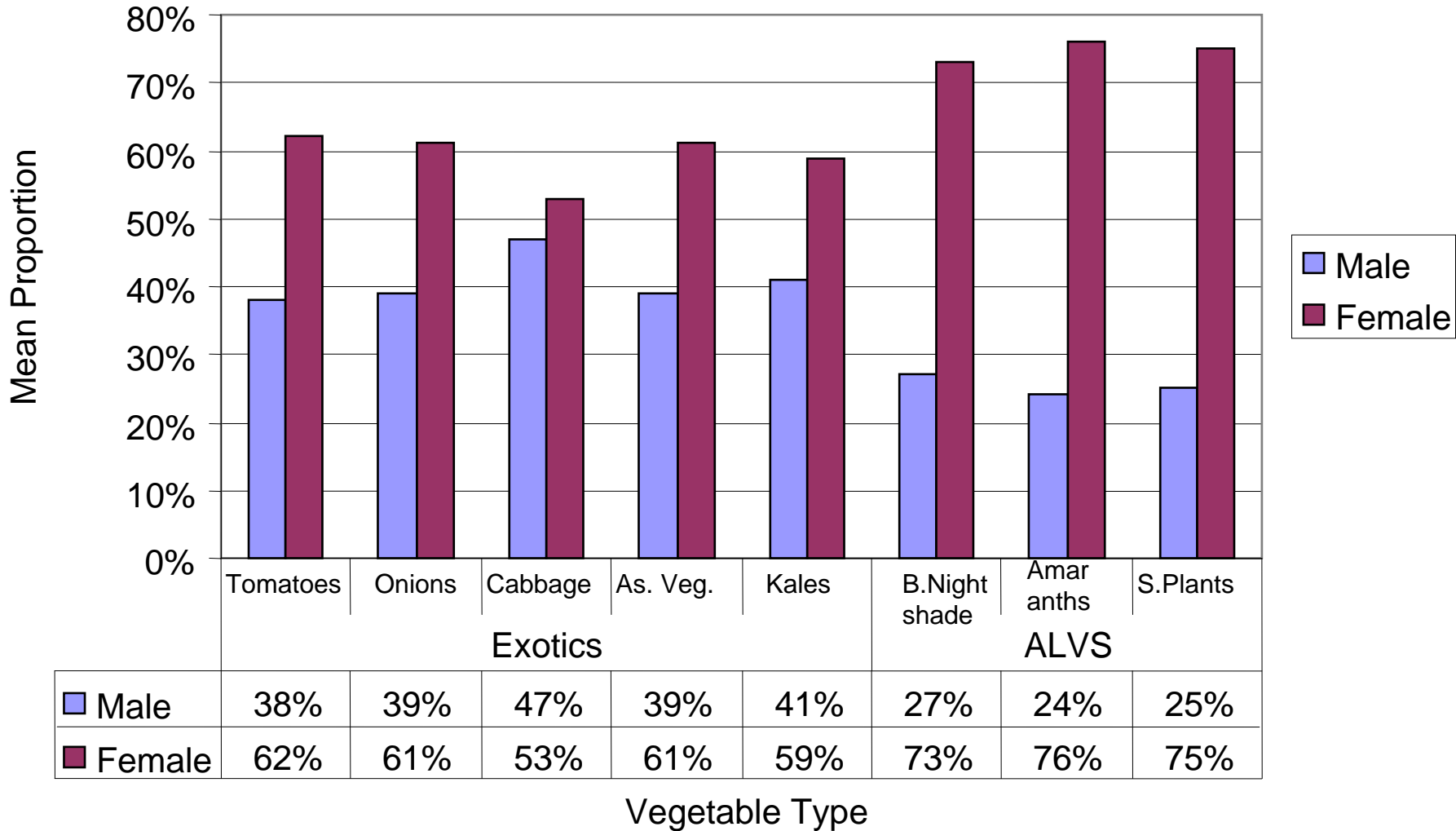
Nairobi	Cost of Production (US\$)	Yields in kgs per 1/4 acre	Profitability in US\$	Period (wks)
■ Spider plant	197	3409	267.3	5
■ <i>Amaranth spp.</i>	268	7500	746.1	4
■ <i>Vigna unguiculata</i> (Cow peas)	197	2841	191.6	4
■ <i>Solanum nigrum</i> (African night shade)	197	2841	191.6	5

Source: Family Concern International and Urban Harvest ,2006.

- US\$ 107,000 is estimated to be transacted in Nairobi and its environs per month through formal and informal market value chains
- 72% of farmers produce predominantly for commercial while 28% produce predominantly for sustenance

Gender Involvement in Vegetable Trading in Selected Market in Nairobi

Trade in Vegetables by Gender



Horticulture and the urban environment

- Contributing to a more sustainable environment
 - Waste management through composting
 - Conservation of water through recycling
 - Green spaces
 - Liveable cities



- Creating health risks
 - Biological contamination, from irrigation water: Parasites, Bacteria, Viruses
 - Heavy metal contamination (Pb, Cd, Zc) Leafy vegetable are susceptible to Pb but ALV are safer than Brassicae e.g. kales (Nabulo, 2005)

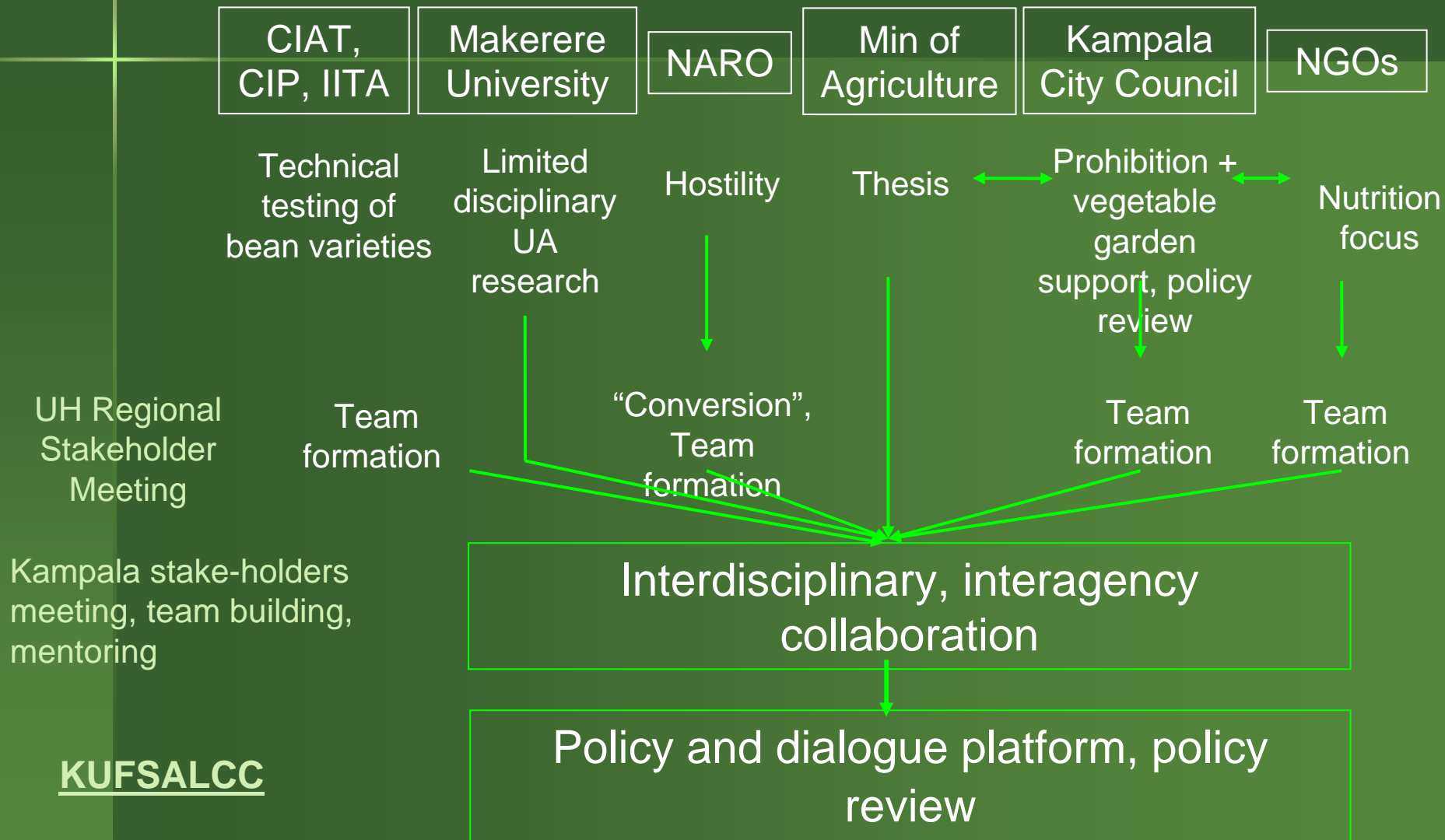


Urban horticulture within city governance: Kampala

- Support to KCC for monitoring of technical and policy processes
- Policy analysis
- Dialogue on city policies on urban agriculture:
 - ➔ Participatory consultation with users
 - ➔ Recommendations for change
 - ➔ New ordinances, guidelines on horticulture, livestock, meat, fish, milk



Research-related stakeholder dialogue process: Kampala



Scaling out the Kampala experience

- Adaptation of Kampala model in Kenya
 - Producer-led multi-stakeholder committee for Nairobi
 - NARI-led national urban agriculture policy review and proposals
 - UPA inserted into national lands policy
- Application of Kampala model in Nakuru, Kenya, with draft UA by-laws developed

Future needs

- Sensitizing process
 - Horticulture in metropolitan regions, in rural-urban linkages: more than linking farmers to markets
 - Urban and peri-urban horticulture in international, regional fora
 - Special events – an international urban horticulture symposium

Future needs (cont.)

- Capacity building
 - Build on Francophone training 2000, Anglophone training 2004: urban/peri-urban team formation, addressing policy, environment and health as well as agronomic issues
 - Gender: mainstreaming gender-sensitive research approaches in horticulture

Future needs (cont.)

- New research opportunities
 - Technical aspects of intensifying space-constrained horticulture around cities
 - Opportunities for diversifying cereal or rootcrop-based systems with horticultural crops
 - Health and policy research
 - Challenge program development – broad-based partnership linking these different sectors, nationally and internationally