

Overview of urban agriculture in West Africa: Highlights of lessons learned

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Overview

1. Why is there a need for more resilient urban food systems?
2. Can urban and peri-urban agriculture play a role?
3. Lessons from an approach to promoting UPA at a larger scale drawn from RUAF experience



1. Need for more resilient urban food systems



Rapid urbanisation and increasing urban poverty



Growing urban food insecurity; especially for vulnerable groups



Commodity price insecurity and climate change aggravate this vulnerability

Uniting agriculture and nature for poverty reduction

Need for more resilient urban food systems

“Creating healthy, happy and sustainable communities in our cities requires resilient food system for the city region. Until now this aspect of sustainability has largely gone unaddressed by cities, but the time has come for local governments to put food systems on the table and take the lead on sustainable food systems, and the right to food, for their urban populations.”

- Konrad Otto-Zimmermann, Secretary General, ICLEI – Local Governments for Sustainability.



There is a need for more resilient urban food systems, which are:

- Less dependent on food imports
- Less vulnerable to food price increases
- Enhance access of the urban poor to fresh, nutritious and safe food
- More resistant to climate change impacts



2. Can urban and peri-urban agriculture play a role?



Urban Agriculture

- the production, processing and marketing of food and other agricultural products such as , ornamental plants, tree seedlings, herbs etc **within** and **around** the city.
- growing of plants and the raising of animals for food and other uses within **urban** and **peri-urban** areas as well as related activities – production and delivery of inputs and the processing and marketing of products



Production systems: Crops



Accra



Kumasi



Lome



Kayes



Open space
farming



Timbuktu



Backyard farming

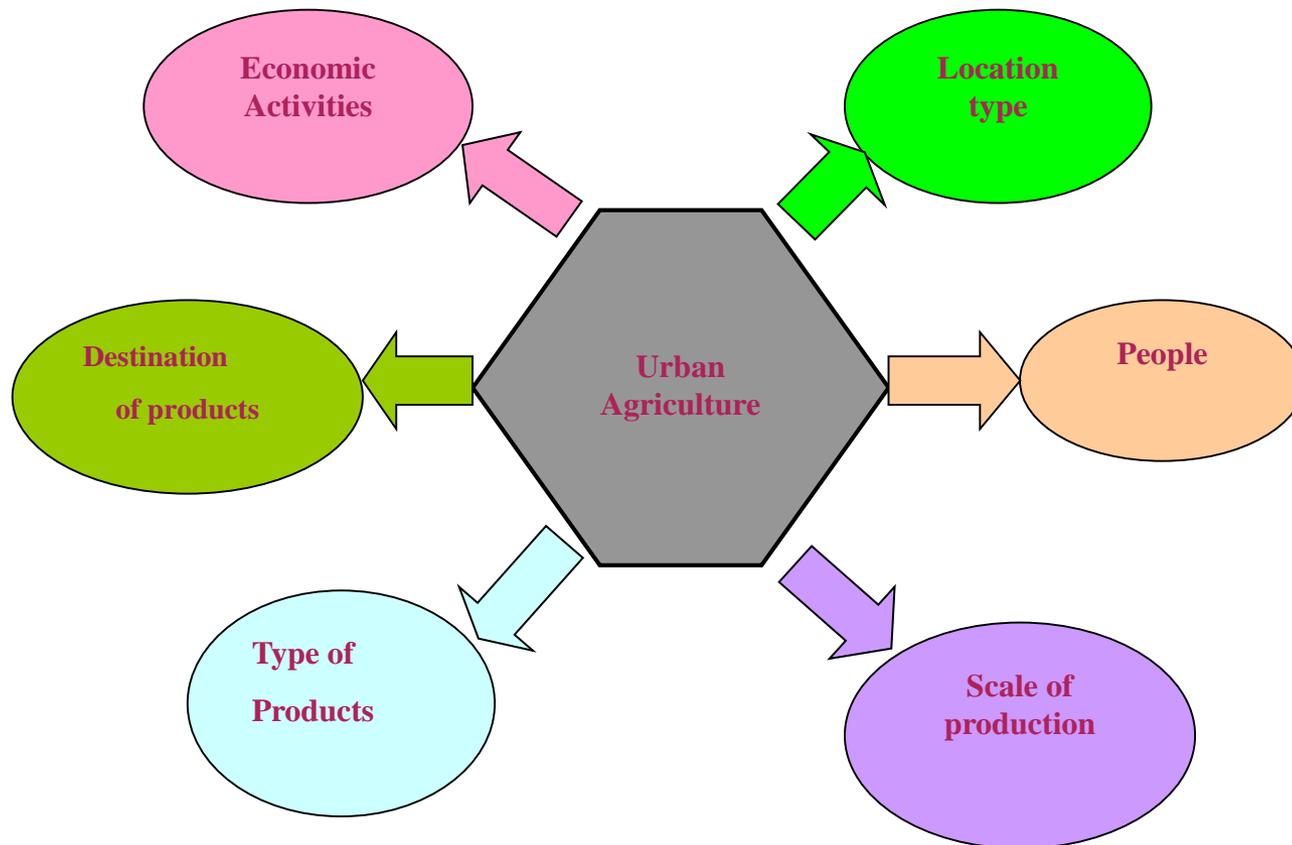
Livestock and others



Some Features of urban agriculture

- dynamic concept that comprises of a variety of farming systems
- exists within heterogeneous resource situations, e.g. under scarce as well as abundant land and/or water resource situations
- under a range of policy environments that can be prohibitive or supportive to its existence and development

Important variables that characterise different forms of UA



Can urban and peri-urban agriculture play a role?

- Diversification of sources of food supply and income (production, processing and marketing) will reduce vulnerability to food price hikes and economic crisis

Data from a World Bank-RUAF survey in Accra, Nairobi, Lima and Bangalore:

Large numbers of households consider it an important source of income (with around 20% of populations doing UA of which 30% generates an income = 1,364,000 of households in 4 case cities practice commercial UPA)





- Local production increases access of urban population to fresh and nutritious foods



- By making use of urban waste resources, greening brownfields, keeping flood-zones free from construction and producing food more locally; UPA may be able to contribute to climate change adaptation and mitigation

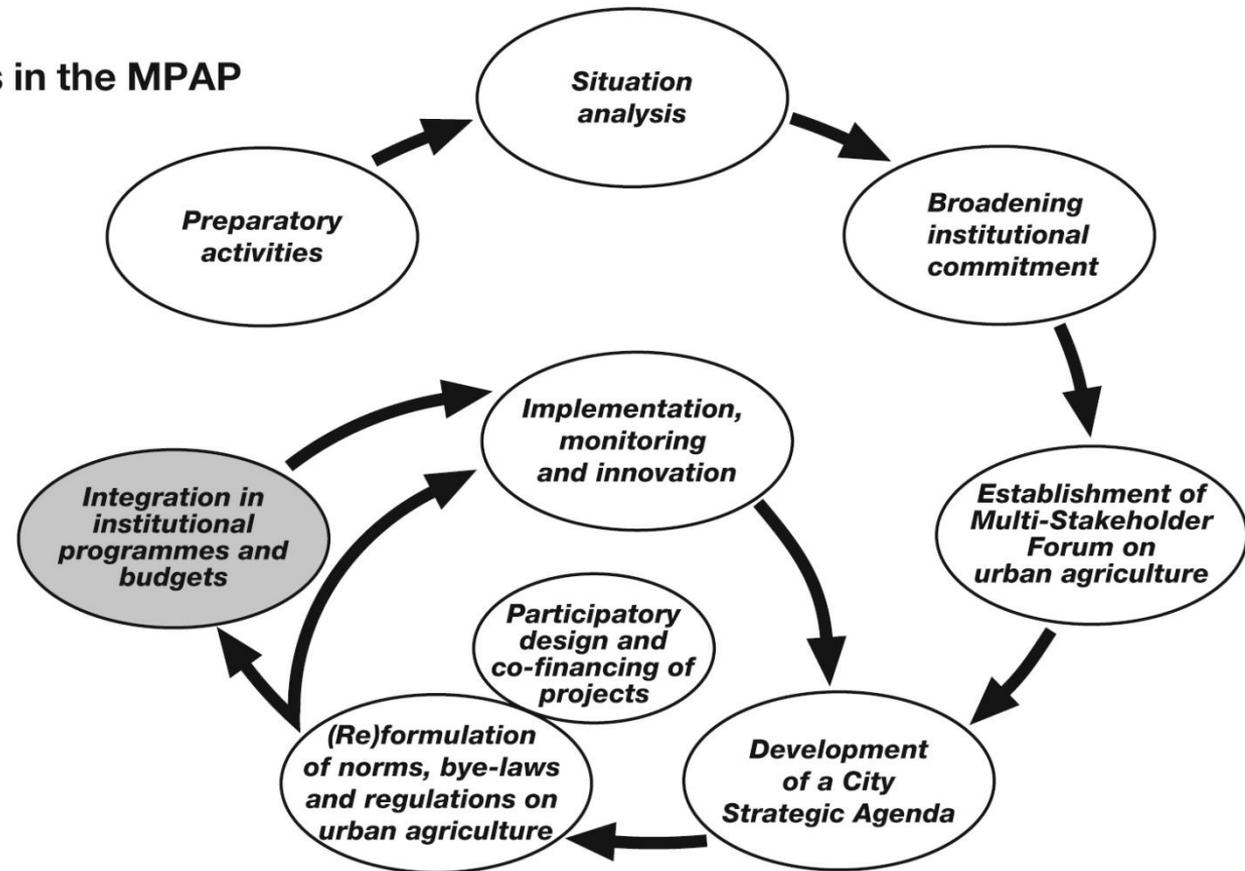


3. The RUAFA approach to promoting UPA at a larger scale

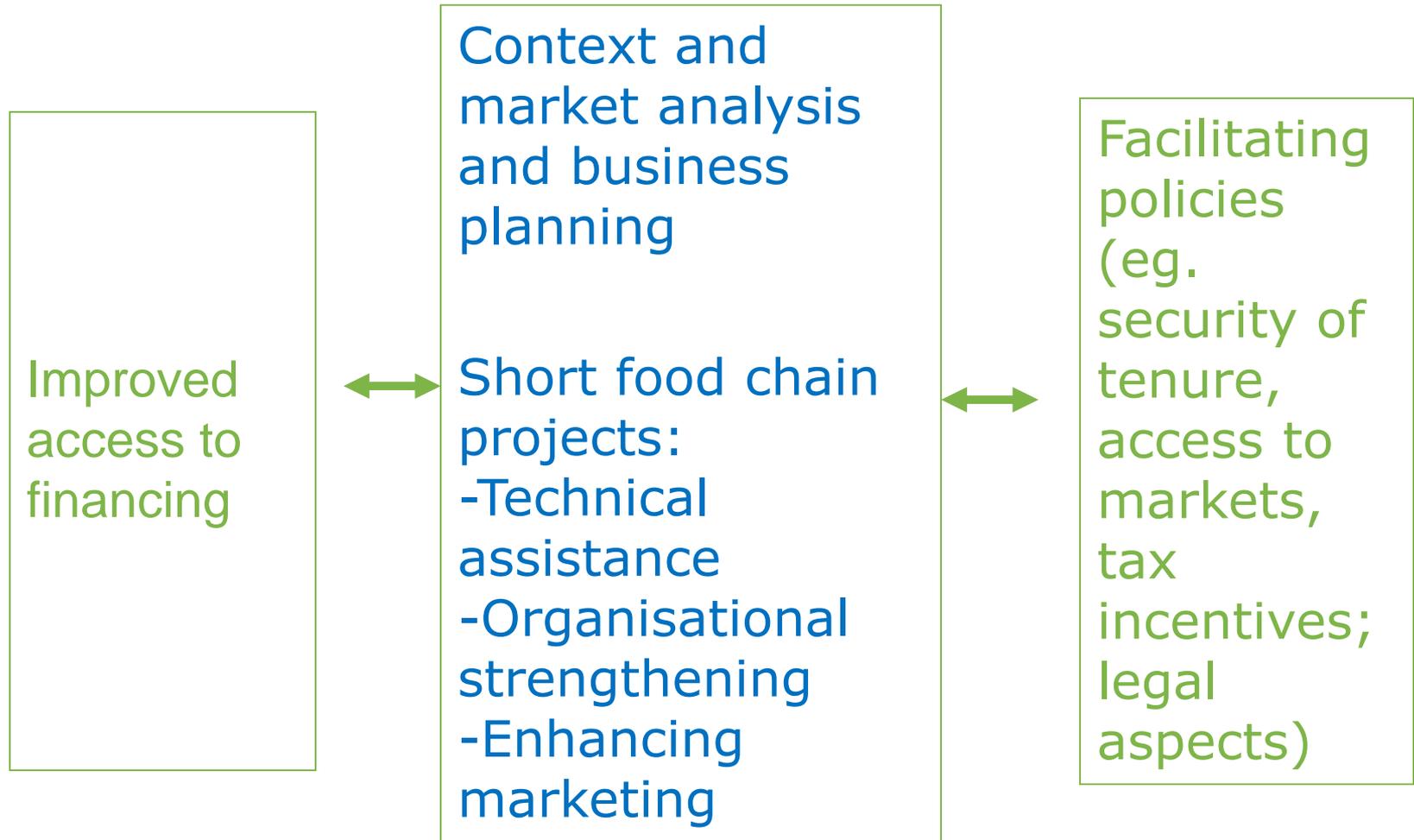


3.1 A multi-stakeholder process for action planning and policy formulation on UPA

Figure 1: Steps in the MPAP

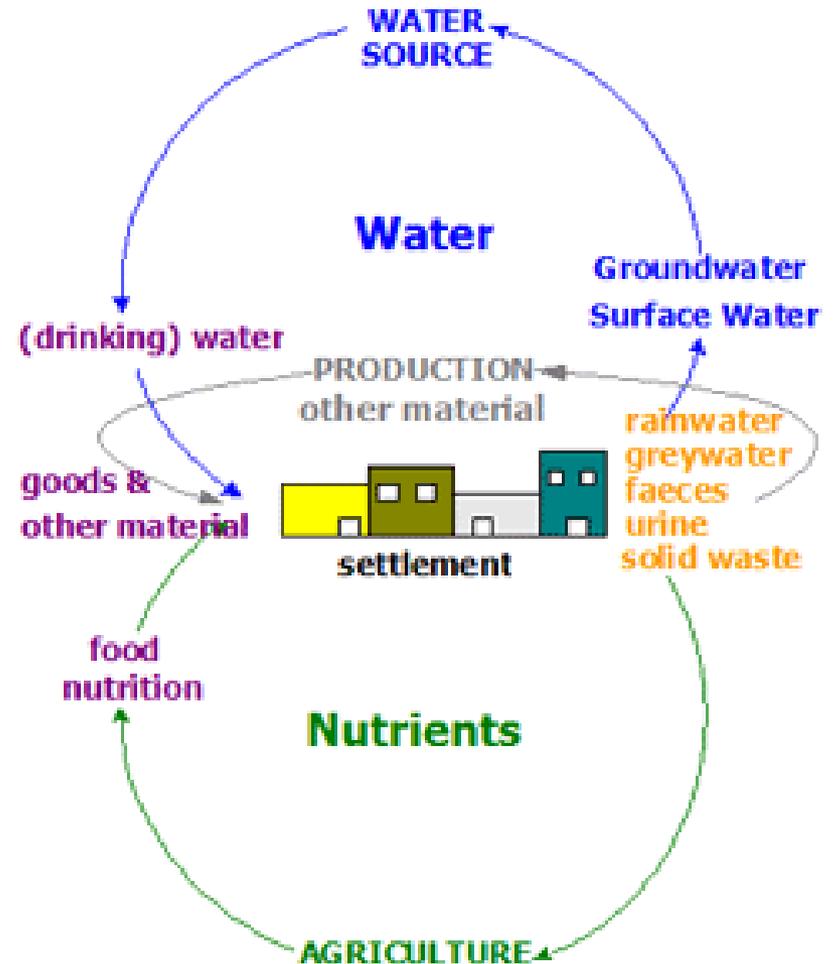


3.2 Promoting short food chains and social commercial enterprises



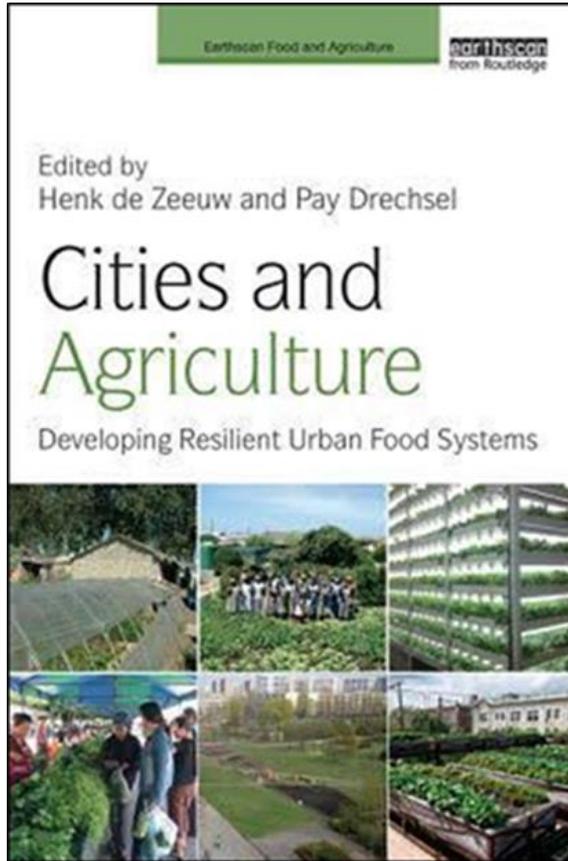
3.3 Provides opportunity for recycling / reuse of urban waste and wastewater in agriculture

- can capture resource value of human waste to **finance sanitation**
- protect the **environment**
 - » protect surface water quality
 - » mitigate water scarcity
 - » decrease demand for non-renewable resources
- protect **public health**
 - » eliminate indiscriminate discharge of human waste



Source: Mels 2007

Over 15 years with



Significance for urban food supply for balanced nutrition

Percent of food consumed in Kumasi, Ghana, derives from.....

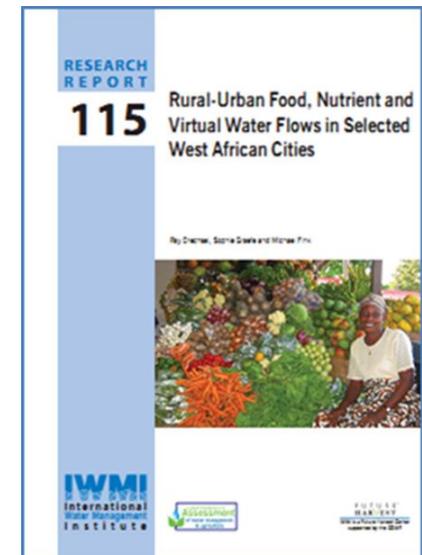
Urban
farming

Peri-urban

Food item (examples)	Metropolitan area	Peri-urban Kumasi	Rural and import*
Cassava	10	40	50
Maize	< 5	5	90
Plantain	< 5	< 10	85
Yam	0	0	100
Cocoyam	< 2	< 10	90
Rice	0	< 5	95
Lettuce	90	10	0
Tomatoes	0	60	40
Garden eggs	0	60	40
Onions	0	0	100
Spring onions	90	<10	0
Poultry/eggs	15	80	< 5
Livestock	5	10	85
Fresh milk	>75**	< 25	0

* Imported are mainly rice, onions and part of the livestock

** University farm (same in Accra)



Economic of urban farming (main focus on irrigated open-space vegetable production)



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Fay Crechschil, Sophie Gravelle, Mousse Sonou and Chaturika O. Dzifa

IWMI International Water Management Institute

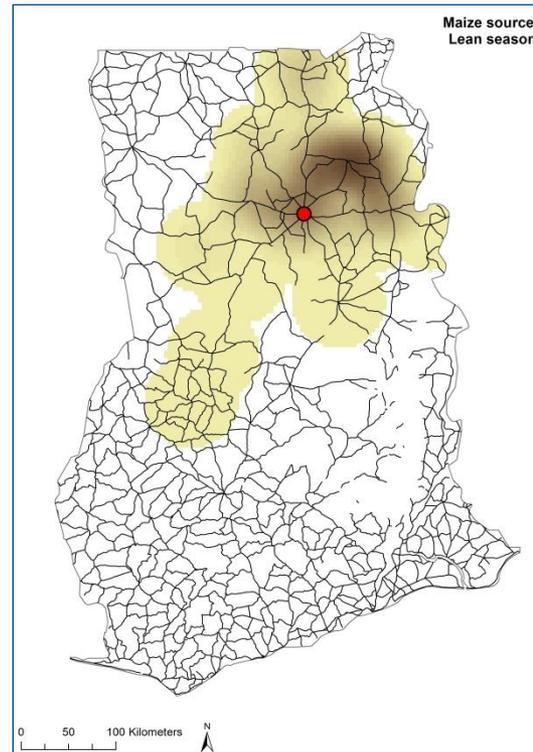
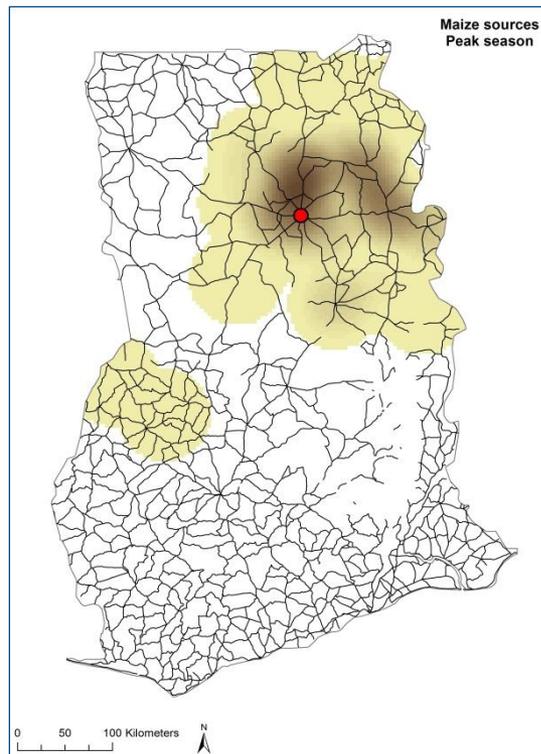
RUAF Assessment FUTURE WATERS



IN PARTNERSHIP WITH:



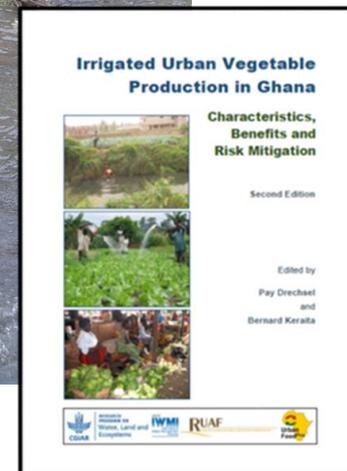
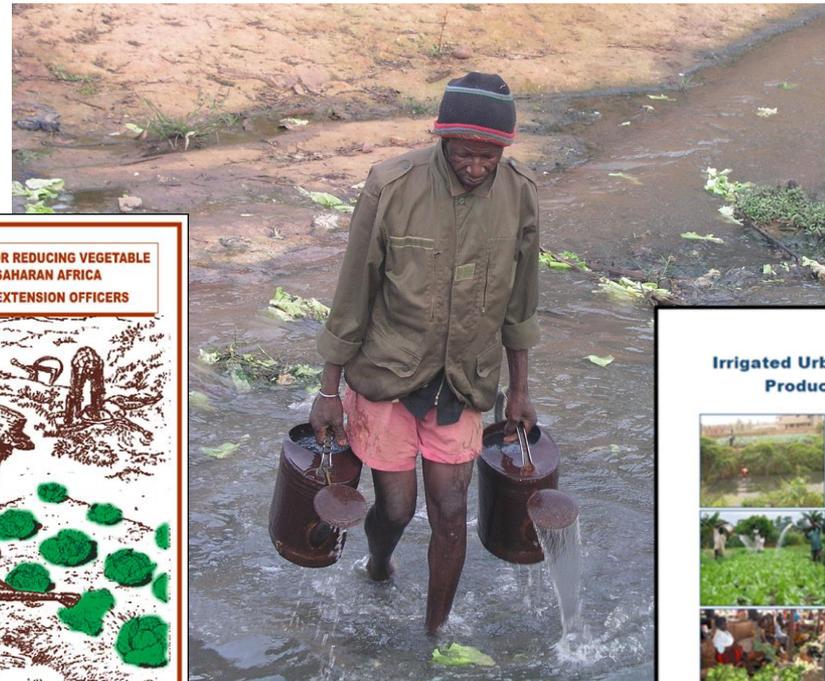
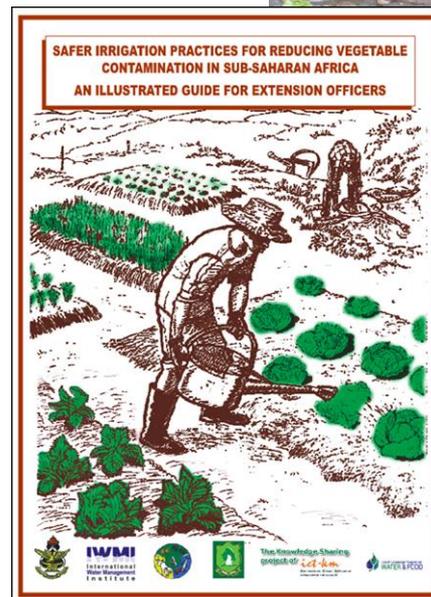
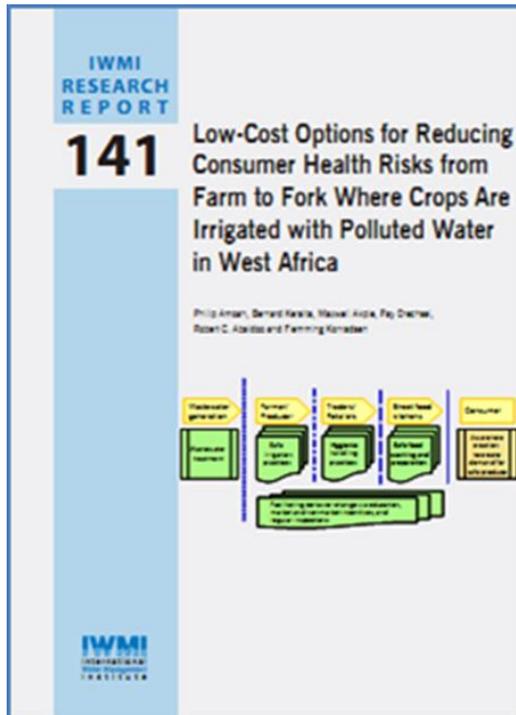
Role of urban vs. peri-urban and rural food production for urban consumption (UrbanFood+)



Maize foodsheds in lean and peak season in Ghana



Main focus with WHO and FAO: Risks and safety options for wastewater irrigation



Participatory video development of training materials



Good farming practices to reduce vegetable contamination

Options tested in wastewater-irrigated farms in Ghana

Bonnes pratiques agricoles pour réduire la contamination des cultures maraîchères – des options testées dans les parcelles irriguées avec des eaux usées au Ghana

Rule No. 1 << Hand Washing >>

Rule No. 2 << Clean Towels >>

Rule No. 3 << Washing Vegetables >>

Rule No. 4 << Clean Kitchens >>

Rule No. 5 << Safe Storage >>

Rule No. 6 << Clean Handling >>

Rule No. 7 << Trained Staff >>

Rule No. 8 << Healthy Staff >>

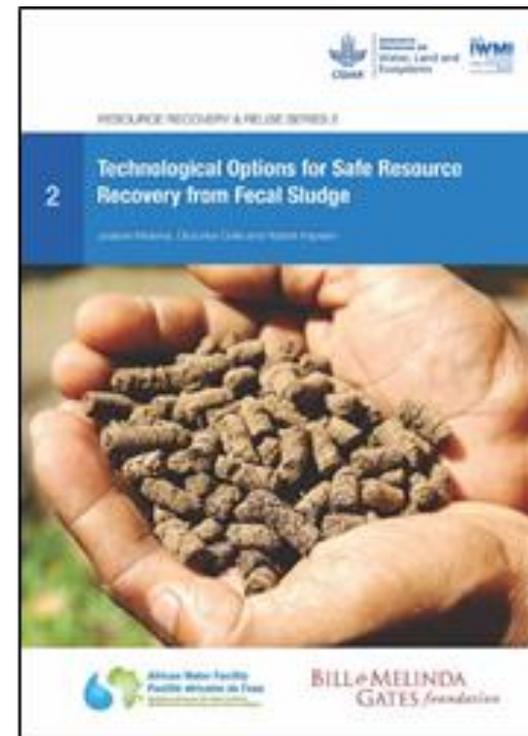
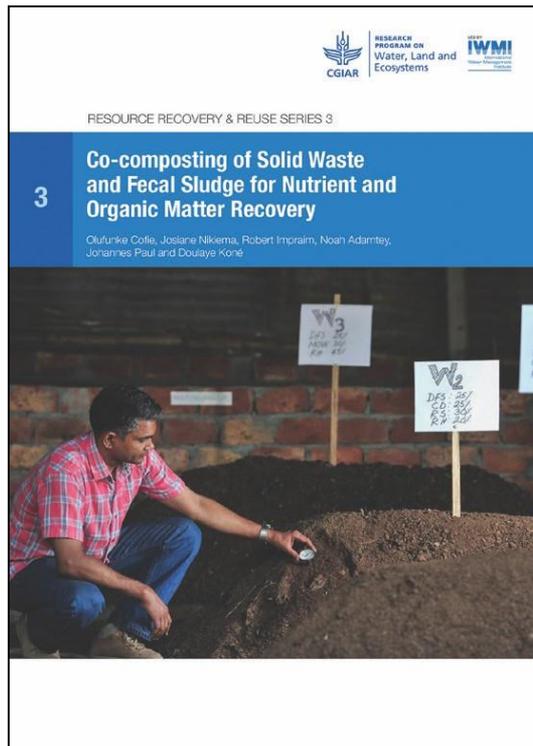
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Essential Rules
of Food Hygiene

Improving Food Safety in Africa
where vegetables are irrigated
with polluted water

RUAF IWMI
International
Water Management
Institute



Resource Recovery and Reuse with special focus on organic municipal waste and fecal sludge



Other results of the MPAP process

Accra, Ghana

- Improved production techniques
- Sale of different vegetables in farmers kiosks placed at the University and in the City centre
- Increased farmer income



Freetown, Sierra Leone

- Integrated UPA in urban land use and zoning plans: zoning of all wetlands and low-lying valleys in the city for food production and adaptation to climate change

Lessons

- UPA, of sufficient scale, can contribute to more resilient urban food systems if well **integrated in city planning, development and climate actions plans**
- A **Charter for Feeding Cities** could include a statement on UPA production:

"Cities should produce 10-20% of their urban food consumption (F&V, milk and eggs) in their city or city region"



Lessons

- Link to city pressures (challenges) and opportunities, e.g. the search for alternative water sources for agriculture
- Involving policy makers in action research influences decision-making and researchers
- Link technological innovation and organisational innovation to institutional innovations in the city



- Local UPA value chains can compete in the urban food retailing system, though mainly through niche (and somewhat protected) markets
 - > vegetable box schemes to schools, international organisations, offices
 - > producer fairs and markets
 - > restaurants and supermarkets
- Local and safe production are main marketing arguments (social and health concerns)
- Need for more research on optimal urban food production, value chain development, interaction between rural and urban food supply, and more financial support for urban agriculture

Facilitating Outcomes: Multi-stakeholder Processes for Influencing Policy Change on Urban Agriculture in Selected West African and South Asian Cities ●●●

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Thank you