

Policy development and planning on food and agriculture in the city region: some lessons learned

Ir. Henk de Zeeuw

RUAF Foundation

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www.ruaf.org

I. Urban agriculture?

- Agriculture within the city (intra-urban) and in the peri-urban area (with city focus)
- Production as well as local processing, distribution and food waste management
- Socially oriented initiatives as well as commercial enterprises (and mixed forms)
- On agricultural land as well as on hard surfaces, rooftops and indoors
- Producing food as well as providing recreational, ecological and social services

II. FUNCTIONS OF URBAN AGRICULTURE

ECOLOGICAL

- Reduction Ecological Footprint
- Adaptation to Climate Change
- Greening & Biodiversity
- Reuse of Urban Wastes
- Reduction urban heat

SOCIAL

- Food Security/Nut
- Social Inclusion
- Community Buildi
- Social Safety Net
- Cultural identity

ECONOMIC

- Income Generation
- Employment Generation
- Enterprise Development
- Market chain development

III Urban Agriculture and Food Policies and Plans

Earthscan Food and Agriculture

earthscan
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Cities and Agriculture

Developing Resilient Urban Food Systems



CASE Belo Horizonte: enhancing food security and nutrition of the urban poor

- High rates of poverty and hunger in the early 1990's
- Recognition "Right to food": establishment of Municipal Secretariat for Food Security and Nutrition (now 180 staff)
- 1995: Urban Agriculture Programme; 2003: national support (Zero Hunger campaign);
- 2011 formal policy on urban agriculture



- Training of support staff (local gov. + NGO's)
- Active support for the establishment of community-gardens and school gardens (2014: 233 cg / 11600 people; 130 sg)
- Establishment of a network of sales points for (intra- and peri-) urban farmer groups



- Low priced food sales in low income areas (ABasteCer food stores)
- School meals programme (2014: 100,000 students)
- Promoting that unsold fresh products are delivered to foodbanks for distribution to families in need

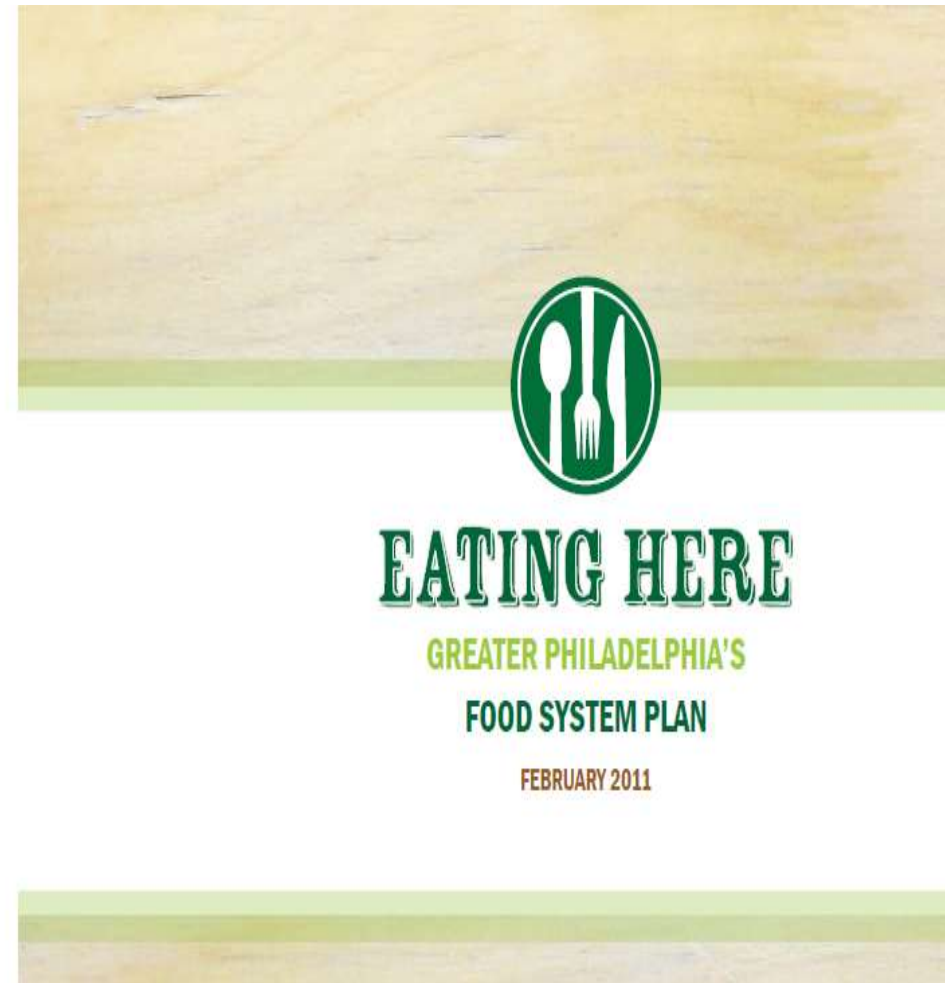


CASE PHILADELPHIA: stimulating local economy + provision of good food for the urban population

- 2010 *Food System Study* (100 miles zone): Many farms with deficits; 27 % of households are poor / food insecure; large potential to increase local food production
- 2011 Philadelphia Food Policy Advisory Council established; *Food System Plan: “Eating Here”*



- **Farmland preservation** programme
- **Land bank**
- **New land use zoning code**
- **Tax incentives** for local farmers producing fresh nutritious food for the city markets
- **Preferential food procurement** by city agencies for canteens and school meals programme
- Supporting **farm to buyer marketing schemes**





- **Co-funding for innovative agriculture programmes** by NGO's and farmer associations
- **Financial incentives** for the (establishment of) **retail stores providing fresh food in underserved neighbourhoods**
- Integration of **food/nutrition education** in school curricula



Cases urban agriculture policies with eco focus

1. New York, USA: UA to reduce storm water run off

- Research: enhancing green infrastructure is cost effective way to improve storm water management
- Grants for farms/gardens on rooftops, former industrial sites, parking lots, etc. to reduce run off (paid from sewer infrastructure funds)

Brooklyn Grange rooftop Farm
: 0,4 ha rooftop horticulture :
3.5 million m³ run off less



2. Almere (NL): Urban agriculture to reduce urban GHG-emissions

- Planned city extension includes space for animal husbandry, fodder, horticulture and arable farming
- Production will cover 20% daily food basket of 350,000 inhabitants, substituting “imported” products
- Leading to:
 - Reduction of food related transport with 16 million km
 - Reduction of energy use equal to 11.000 households /year



3. Burlington (USA) : agriculture for floodplain protection and conservation

- The Intervale area along the Winooski river has been legally protected as agricultural + conservation area
- Profitable ecological agriculture as the best way to keep the flood plain free from construction: supported in various ways



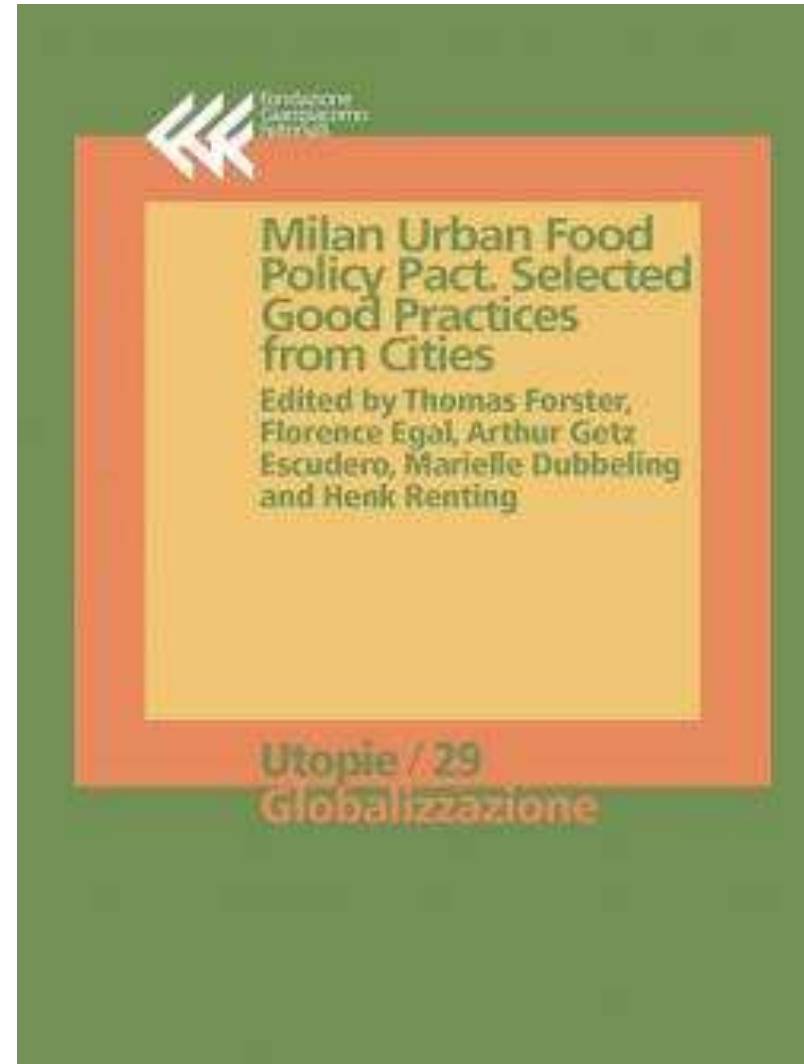
4. Amman, Jordan: reuse of wastewater in peri-urban agro-forestry and horticulture

- Urban agriculture was adopted as one of key strategies in the city climate change adaptation and mitigation plan
- Urban wastewater is reclaimed and used to irrigate over 11,500 hectares with year round production of vegetables, fruits and fodder crops

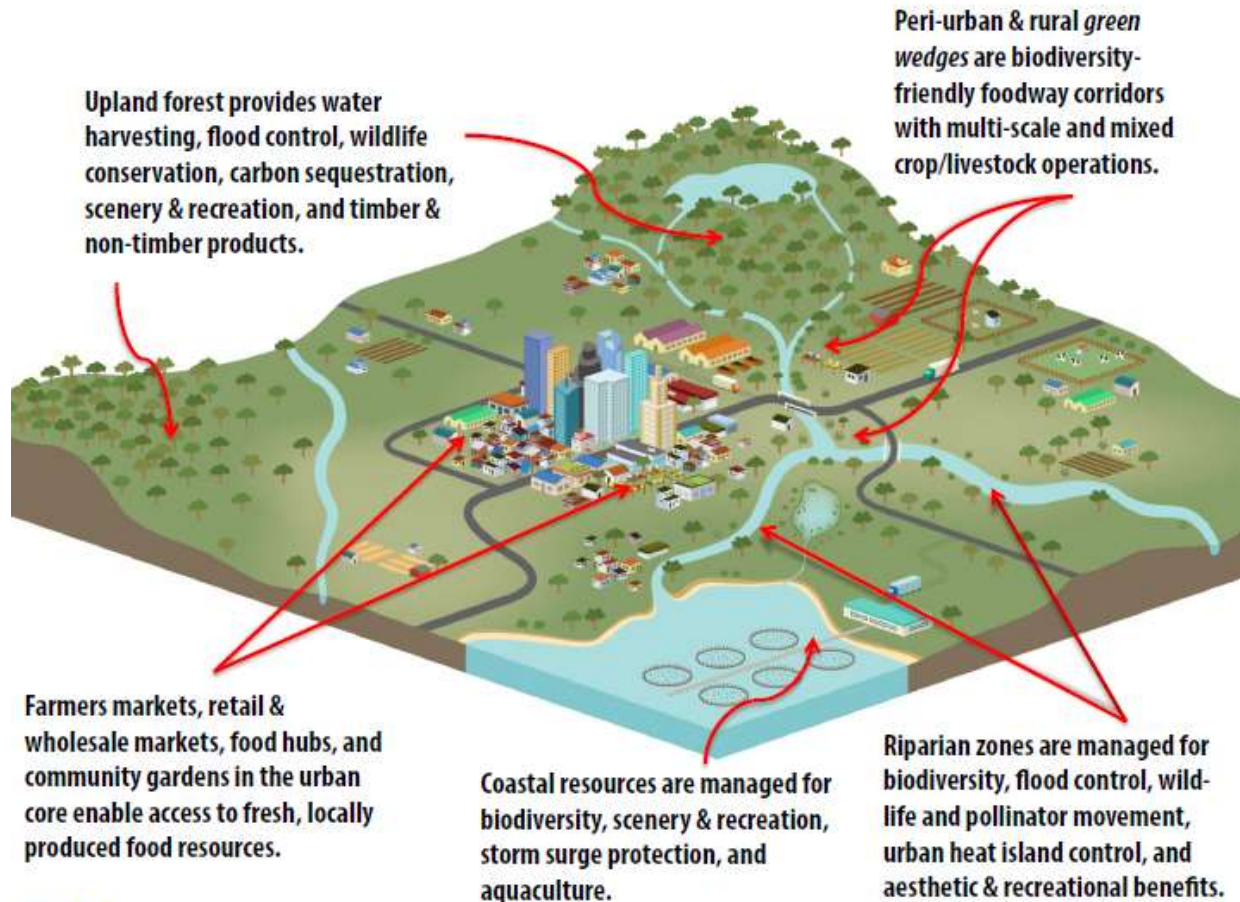


What show these cases us?

- Wide recognition nowadays that agriculture is crucial part of the **urban policy agenda** and a means to various policy objectives
- There is already a wealth of **examples** where other cities can learn from (**visit** the websites of **RUAF** network, **C40**-food network, **Sustain**, **Milan Pact**-project)



- Wide **diversity in approaches**
- Gradual shift to a **systemic & comprehensive** approach: food/nutrition + community building/social inclusion + local economy + urban ecology/resilience
- Gradual shift to a **city region** approach; intra-urban + peri-urban + enhanced urban- rural linkages



IV. Some lessons learned / challenges

- **Political will/leadership:** City government acting as a catalyst/enabler of the development of local food system
- **Active multi-actor participation** in the analysis and planning of the local food & agriculture system
- Developing a clear **shared vision** on and **strategic plan** for the development of the local food & agricultural system



- Overcoming institutional silos:
 - **UA and food in sectoral targets,** programmes and budgets
 - **Strong coordination** of Food & UA policy (e.g. in Mayor's Office)
- **Public-private partnerships; subsidiarity**
- **Creation of an enabling legal framework:** agriculture recognized as a formal urban land use; adaptation of zoning, building and food safety regulations; simplify procedures
- Overcoming funding problems:
 - Clear **priority setting** and **pragmatic annual action planning**
 - **Innovative and multi-source financing** of food and UA projects



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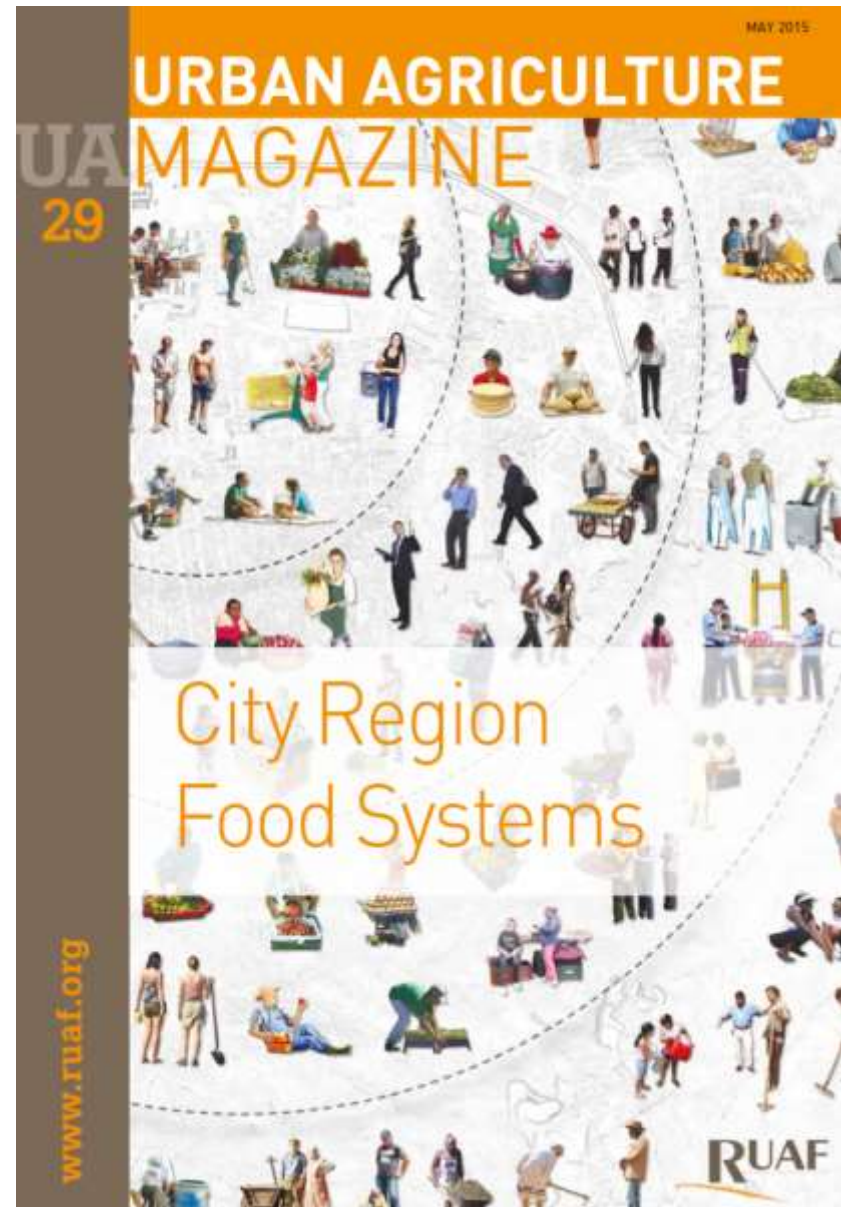
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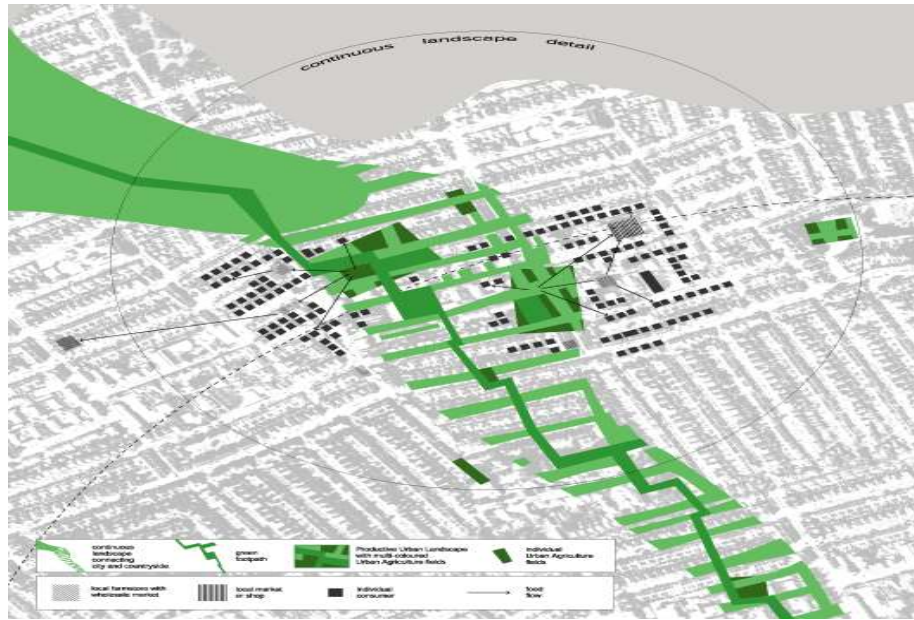
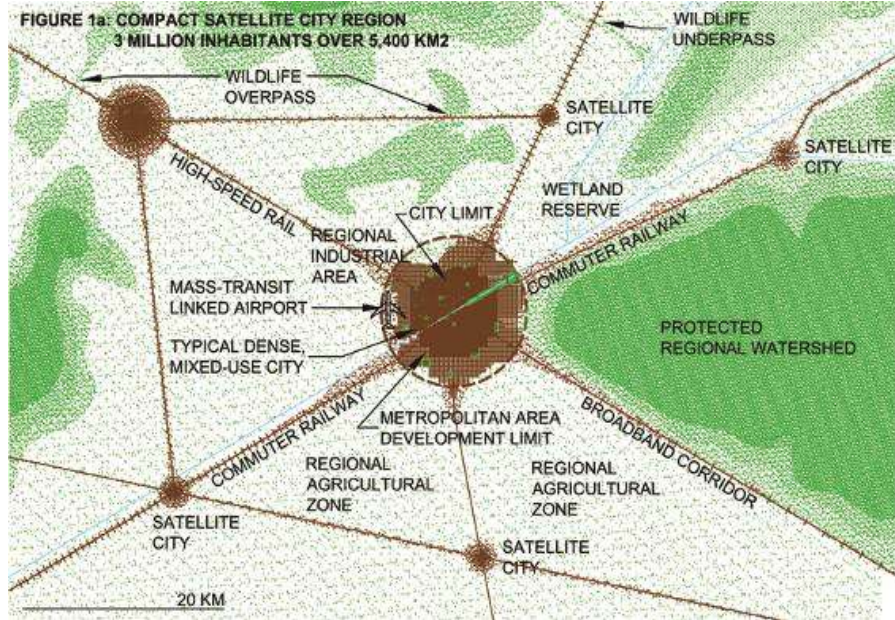
Developing Resilient Urban Food Systems



- Accountability, proper **monitoring** and sharing of results
- Foster **agricultural innovation and diversification** in the city region: transition to ecological farming, substitution of food “imports”, support food related SME start ups, promote shift to multi-functional farming, payment for eco- services.
- **Preferential procurement** of food by city agencies is a powerful tool
- Stimulate **recovery of nutrients and irrigation water** from wastes and wastewater and their use in local agriculture



- **Going to scale; seek system change**
- An effective UA and food policy requires **change in urban planning approach** (urban density + greening)
- No single best methodology: **Recognize local specific conditions;**



**Let us work together
for a healthy and
resilient city**

RUAF FOUNDATION
RESOURCE CENTRES ON URBAN AGRICULTURE & FOOD SECURITY

www.ruaf.org

info@ruaf.org



Urban food production as % of urban consumption

City	Vegetables	Eggs	Poultry	Milk	Pig meat
La Paz (2000)	30				
Dakar (2000)	70-80		65-70		
Dar Es Salaam (2000)	90			60	
Accra (2003)	90				
Shanghái (2000)	60	90	50	90-100	50
Hanoi (2000 and 2004)	0-75 (depending the season)	40	50		50

Potentials for increasing local food production?

Toronto Canada: To enhance consumption of locally produced fresh organically produced vegetables 2317 ha would be required; Available for taking in production:

- 1073 ha is available vacant small plots and public land
- 4984 ha of roof top space that might be suitable for production

Cleveland USA: If 80% of all vacant lots and 60 % of all available rooftops in the build up city were in agricultural use, 46-100% of demand for fresh fruits and vegetables and 94% of demand for poultry and eggs could be covered