



Food and Agriculture
Organization of the
United Nations



Urban and Peri-urban Agriculture Sourcebook

From Production to Food Systems

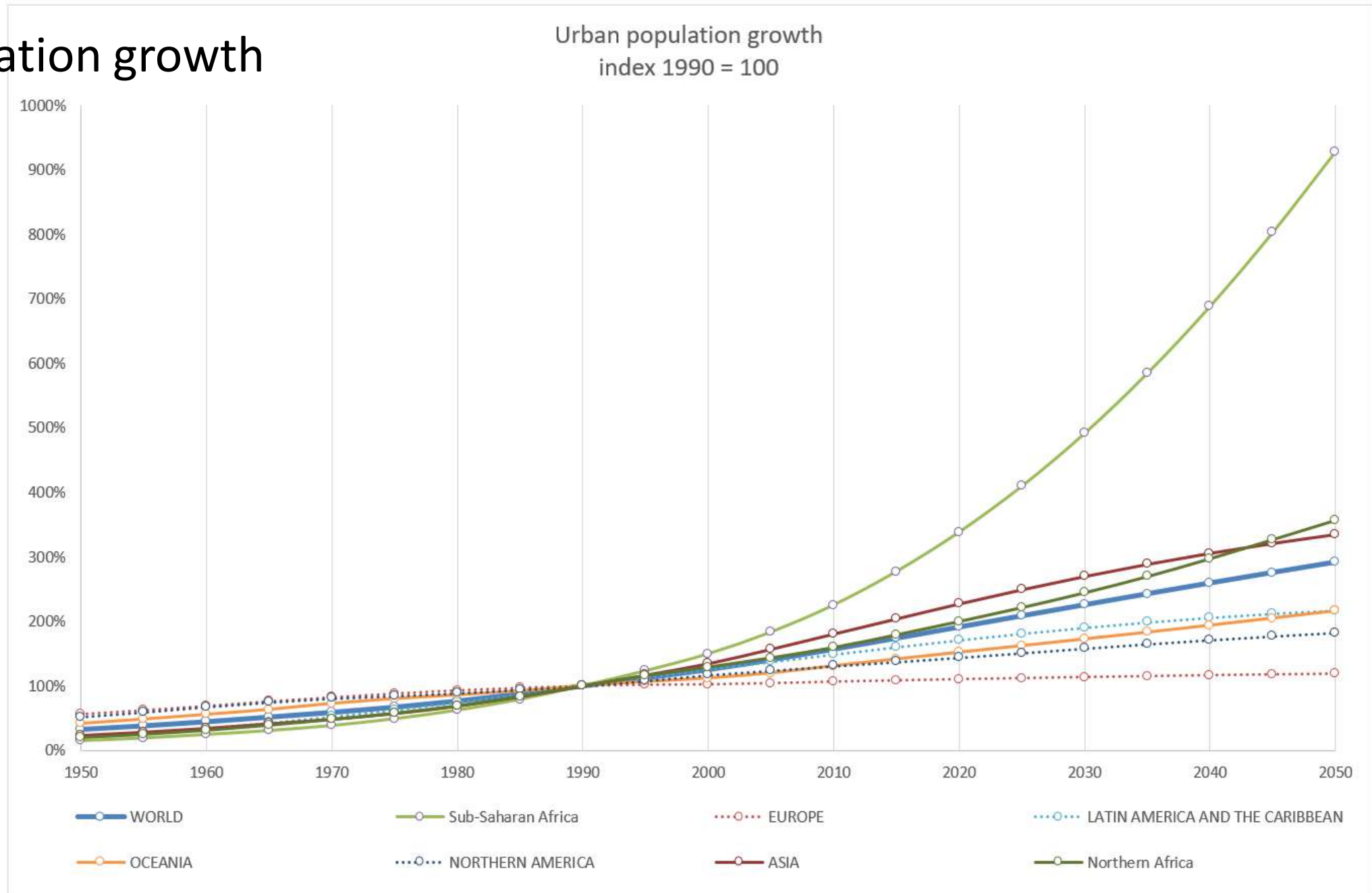
Guido Santini

FAO



Urban population growth

In Sub-Saharan countries, as well as in Asia, North Africa and Oceania, ne and bigger cities emerged, increasing the needs in infrastructure



Impact of growing cities



70%

**World food supply
consumed by cities**



70%

**Greenhouse gas
emissions produced
by cities**



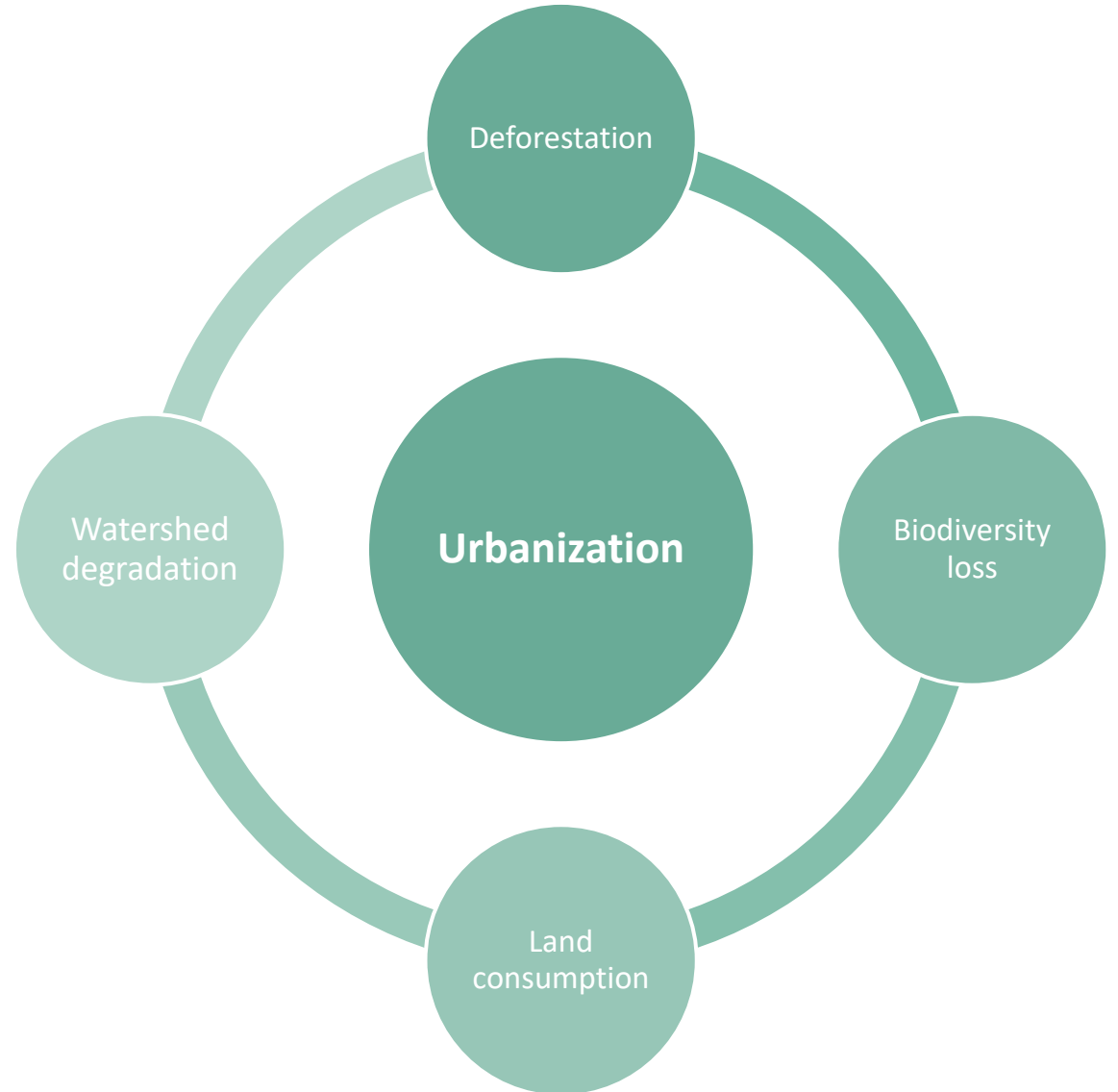
80%

**Total global
energy absorbed
by cities**



70%

**Global waste
produced by
cities**



... where slums concentrate poverty

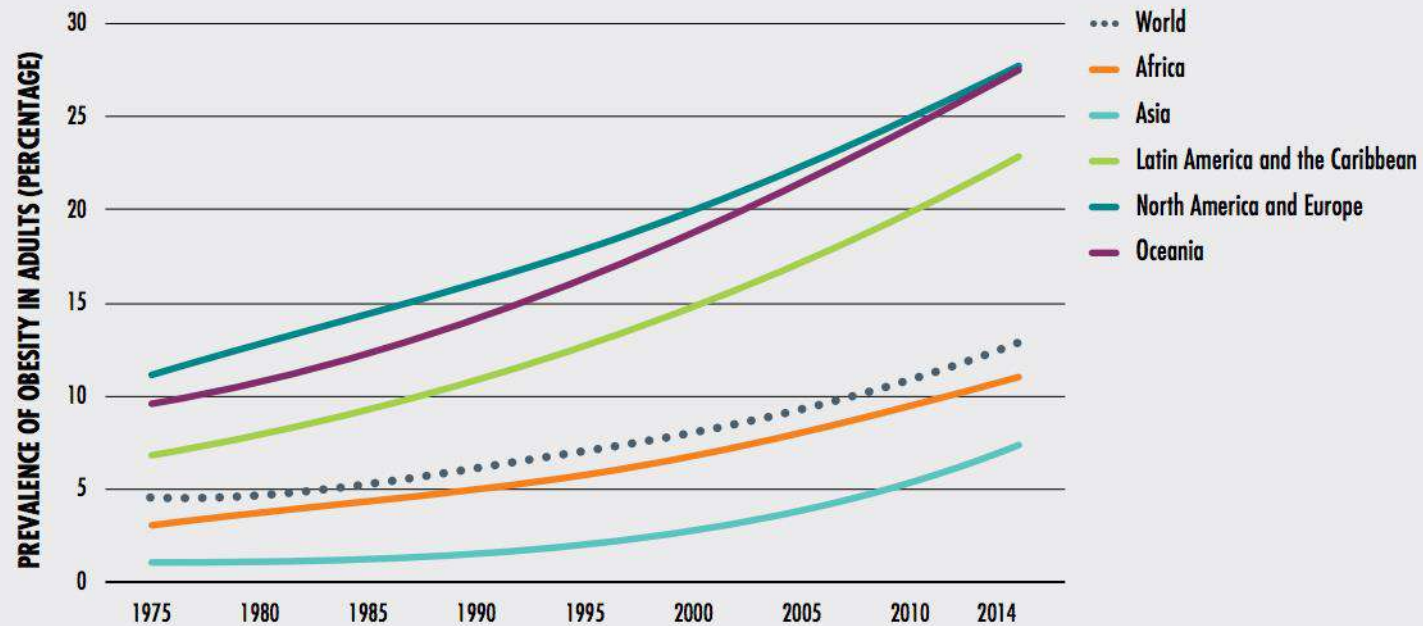
Mega Slums by 2025



Note: The numbers in the circle are in millions

Source: UN Habitat and Frost & Sullivan

...adult obesity is increasing



NOTES: Prevalence of obesity in adults 18 years and over, 1975–2014.
SOURCE: WHO/NCD-RisC and WHO Global Health Observatory Data Repository, 2017.



Risk and vulnerability to multiple shocks

- By il **2050**, **2,5 billion** people in more than **70 %** of **cities** face increasing climate shocks and stresses
- **Floodings** will affect **275 million people** worldwide should temperatures increase by 2030
- The **agriculture** and **food** sectors are expected to be most affected by climate change
 - By 2050, **2.5 billion people** in over 1,600 cities will experience a decline in agricultural production.
- **COVID-19** pandemic has further affected the functionality of food systems



- **Ukraine crises** is a further threat for food systems



Why this sourcebook?

- Increasing **demand** by **local decision makers** and **practitioners** to promote UPA
- Need to **stocktake** and **systematize knowledge** and information on UPA
- Need to **catalogue** documented **case studies** and **examples** and draw lessons to provide **recommendations**
- Need for guidance on **design** and **implementation** of **production** schemes, planning of **UPA** strategies and **policies**



Responses from the Sourcebook

- What is **UPA**? What are the **benefits** and **impacts** of UPA?
- What options are there for **different contexts** and **scopes**?
- Why and where to **invest** in UPA? How can decision makers identify the main UPA **typologies**
- What are the typical **challenges** of UPA?
- What are the **requirements** and **conditions** for **implementation**? How to guide practitioners to identify the most suitable practices?
- What **policy instruments** and institutions to scale up UPA?

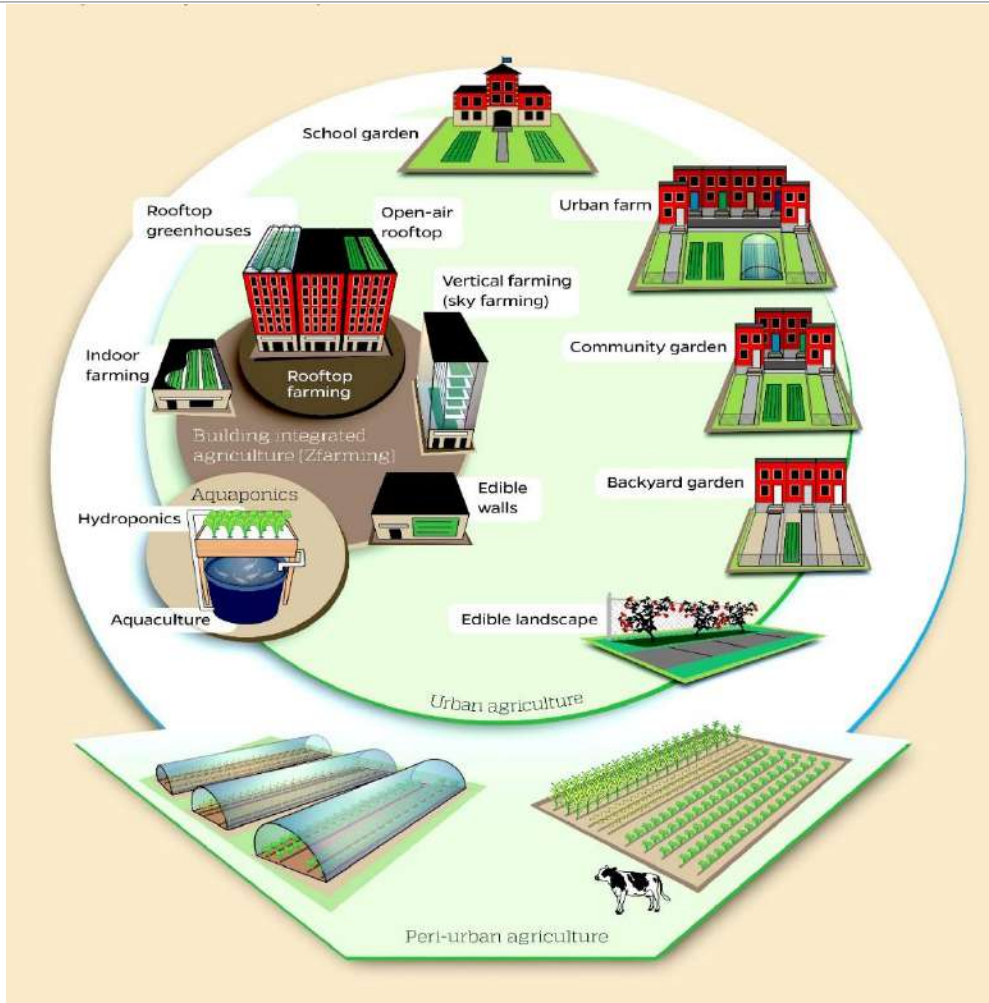


What is UPA?

- **Urban** vs. urban and **periurban**
- **Food** (and non-food) **production** and related processes on **land** and other spaces
- Part of the **food system**: Involves actors, methods, policies, institutions, systems, ecologies and economies
- meets **needs** of local populations while serving **multiple functions**



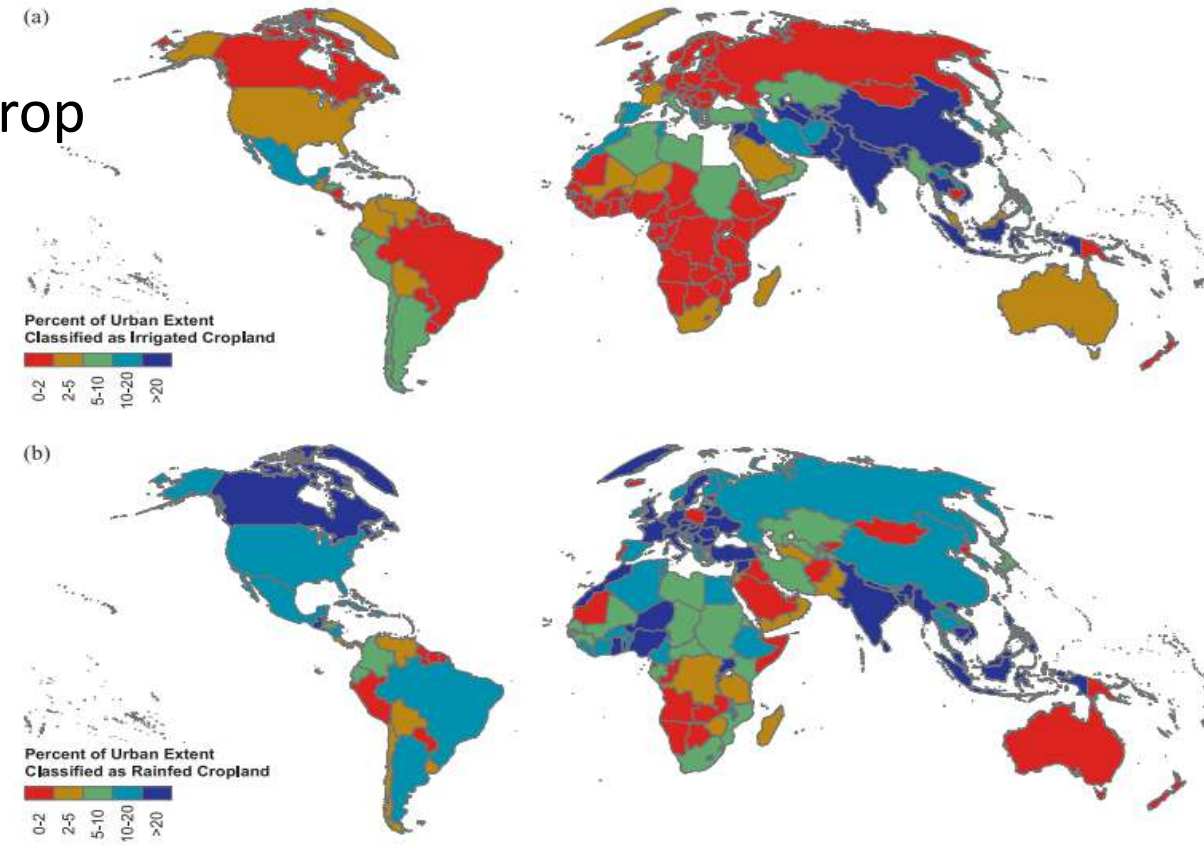
Defining UPA



- Location
- Type of production
- Scope and function
- Landownership, legality
- Scale
- Individual vs. collective
- Degree of market orientation
- Professional vs. subsistence or hobby activity
- Integration with other production activities or services

UPA is already a reality

- **800 million** people worldwide are involved in UPA (1996)
- **>250 million** urban households are involved in crop production in developing countries
- **40-50%** of urban dwellers in **African** and **Latin American** countries are engaged in UPA
- Global farm area of **> 60 million ha** within cities
- **60%** of irrigated crops within a **20km** from cities



Global assessment of urban croplands

Typologies and categories of UPA

- Home-based gardening
- Community-based and other shared gardening
- Commercial farming (crop production, livestock and fisheries)
- Institutional food growing (schools, etc.)



Multiple scopes and benefits

- Food security and nutrition: boosts **supply of fresh produce** and improves **access to nutritious food**
- Promotes **nutrition education**
- Creates **employment and livelihoods opportunities**
- Fosters **social inclusion and cohesion**
- Greening the cities, optimizes use of **scarce resources**, **reduces FLW**, contributes to **circular economy** and **urban metabolism**

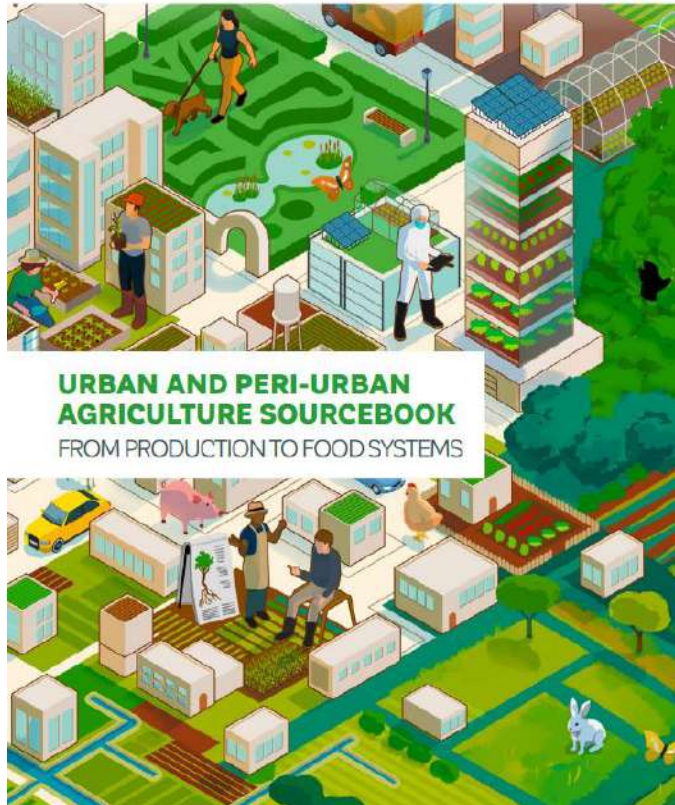
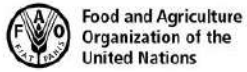


Implications and challenges of UPA

- UPA goes **unrecognized** in agricultural policies and **urban planning**.
- **Informality**: Growers often operate **without permits**. No public assistance or oversight in many cities.
- UPA can carry health and **environmental risks**: overuse and misuse of **pesticides**, and careless use of **wastewater**
- **Water and land tenure** issues, competition with other uses



UPA Sourcebook



- **200 global examples, 6 in-depth case studies**
- **Types of UPA** (commercial, home gardens community gardens, etc.)
- **Practices**
 - production, land and water management, labour, commercialization, etc.
- **Challenges** (land, water, tenure, etc.)
- **Actions to support UPA**
 - Water management, land use planning, training, credit and public insurance, public procurements, etc.)
- **Cross-cutting issues** (food system governance/multi-stakeholder engagement, urban planning)



The FAO UPA webpage

<https://www.fao.org/urban-peri-urban-agriculture/en>

UPA Sourcebook



Main report

Main report:

<https://www.fao.org/documents/card/en/c/cb9722en>



Case studies

Annex with the 6 in-depth case studies :

<https://www.fao.org/documents/card/en/c/cb9734en>



Database of examples and cases

URBAN AND PERI-URBAN AGRICULTURE TYPOLOGIES, DESCRIPTION AND EXAMPLES

Typology

Home-based gardening



Description

Home-based gardening is usually the most common type in urban and peri-urban areas. It contributes to household food security and nutrition by providing direct access to fresh and nutritious food that can be harvested, prepared and fed to family members. It is usually practiced on small areas in or on the house (balcony, windowsill, cellar, rooftop, and kitchen) as well as around the house (front and backyard, patio).

Example

The AGRUPAR in Quito promotes sustainable urban agriculture to ensure good practices among farmers and provides a safe space to connect farmers and consumers. Assistance includes supporting the development of home gardening, applying good agricultural practices like organic and agroecological production, and providing food safety training (mostly for livestock products). The project targets vulnerable people, and most participants are female-headed households.

Typology

Community-based and other shared gardening



Description

Community-based and other shared gardening can be found in different forms around the world. Community gardens and allotments are the most common labels for communal growing spaces in the richer Anglophone countries, with counterparts in cities of the Global North. Communal gardens are often on public, vacant or open land in the city. Land may be along railways and roads, under power lines, on the grounds of community centres, churches, and in public parks and other green areas.

Example

To deal with the low amount of farmland available per capita in the city, Dakar (Senegal) supports urban farmers to develop community gardens, and to preserve forests and green spaces in roundabouts, public parks and vacant lots. Community gardeners, usually composed of 20-30 people, produce their own inputs (fertilizer, seeds), share a water source and use hand pumps to draw water for themselves. They utilize micro-gardening techniques, sometimes raise small animals together with herbs, and sell their produce on the market.

Typology

Commercial crop production, livestock and fisheries



Description

Commercial crop production, livestock and fisheries are very common types of UPA around the world. Typically UPA practitioners are involved in horticultural production because of the high demand for fresh vegetables and fruits, and the comparative advantage given the proximity to urban markets. Growers in and around cities typically have access to better infrastructure, technical advice from institutions, market information, and, possibly, financial support. Producers range from small family-based growers to faster growing companies.

Example

In Surakarta (Indonesia), commercial farming contributes to 8 percent of the city's monthly food needs. Most commercial farmers reside in suburban areas where more land is available. They tend to hire the bulk of their labour on a seasonal basis while maintaining a base of full-time staff. Through financial support from banks, commercial farmers can ensure the set up and continuity of their operations. Hydroponic cultivation is especially popular among urban youth as it is energy efficient, relatively easy to use, and requires only a limited amount of land.

Typology

Institutional food growing



Description

Institutional food growing covers a wide variety of gardens and farms around the world. It includes projects on institutional land belonging to schools, universities, religious bodies, prisons, municipalities and other governments, public authorities, hospitals and clinics, prisons, among others. The projects include gardens for own consumption, therapy, leisure, development of knowledge and skills, and job creation, as well as commercial farms for profit and economic development.

Example

In Leuven (Belgium), some institutions organized community support agriculture (CSA) to support urban dwellers' access to UPA practices. The municipal government rented land to institutional producers while considering the provision of ecosystem services as a payment. The inclusion of women, the elderly, international migrants and persons with disabilities in the institutional workforce, enhances the social cohesion between producers and consumers.

To view more cases, please go [here](#).

Cataloguing criteria: geography, typology, practices, land use, water use, etc.

Looking ahead: UPA as part of the food system

- Integrate UPA into municipal policies and **urban and territorial planning**.
- **Land use and tenure**: Protect **access** to and **secure ownership** of land
- Look at the territory: Improve **relationships between the city and food production** in nearby rural areas
- UPA as entry point to develop **food system** policies and actions: **investments** are needed!
- **Governance**: partnership, multi-stakeholder dialogues, **beyond the city boundaries**
- Include UPA in in formal agricultural **censuses**. **Statistics**, data and evidence are lacking significantly at the global level:



Thank you

