

# Urban Agriculture

## *Food, Jobs and Sustainable Cities*

2001 Edition

### Appendix B Glossary

**By:**

Jac Smit  
Joe Nasr  
Annu Ratta

**Published by:**

The Urban Agriculture Network, Inc.  
A Non-Profit, 501 (c)(3) Organization

With the financial support and permission of the  
United Nations Development Programme (UNDP)

**Notice:**

This document is available for downloading, copying, distribution and transmission. Any use must be attributed to: Jac Smit, Joe Nasr, and Annu Ratta, *Urban Agriculture: Food Jobs and Sustainable Cities* (2001 edition, published with permission from the United Nations Development Programme). Photos and figures have been left out at this time, but they may be added in the future.

# B

## Glossary

*Note* — A few of the definitions below are based on the glossary in the book by Birley and Lock, listed in Appendix G.

**Aeroponics** — A method of growing plants, modified from hydroponics, where the plants are anchored in panels from polystyrene foam or other materials, and the roots are suspended in mid-air inside a sealed box and supplied with nutrients through a solution-laden fine mist.

**Agroforestry** — See Urban Forestry

**Allotment gardens** — An urban farming system that originated in the late 18th century in which small plots are allotted to members of an organized group on a permit basis, often based on an annual renewable permit. It may be differentiated from *tenant farming* by scale and *community gardens* by a greater focus on health and food security. In some instances, sale for profit is not permitted. Allotment gardens have sometimes morphed into leisure gardens.

**Apiculture** — Raising bees to promote pollination and produce honey. In urban agriculture, the beehives are typically mobile.

**Aquaculture** — Agriculture within various bodies of water. It includes seaweed, duckweed, rushes, water spinaches, lilies, shrimp, fish, and other seafood crops. In urban areas, aquaculture is often wastewater-based and frequently shares water space with recreational uses.

**Aqua-terra farming** — A system of agriculture in which water crops and land crops support each other. Land crops may include trees, vegetables, livestock, and flowers, while in the water, poultry, fish, vegetables, and crayfish may be produced.

**Biointensive agriculture/horticulture** — Usually refers to the *French Biointensive Method* developed in response to rapid urbanization during the 18th and 19th centuries, which spread to Africa and elsewhere. In the second half of the 20th century, this was modified in California. Chinese biointensive methods have spread over much of the world. A significant update was made in the 1990s in Cuba. The method is usually recognizable by raised beds with high organic content and little or no use of chemical inputs.

**Community food security** — Defined in the section on Community Food Security in Chapter 1.

**Community garden** — An agricultural system related to the allotment garden and the community kitchen, first recorded in the United States during the economic crash of 1892. A community garden is run by a member group and permits farming of a small plot under strict conditions.

- Community kitchen** — A community-based organization that includes communal food purchase and preparation. Some community kitchens have small farms.
- Companion cropping** — Growing compatible crops, with one protecting the other from attacks by insects or diseases (for example, marigolds with cabbage).
- Faecal coliforms** — A group of bacteria that are normally found in human and other animal feces.
- Farming system** — The various crop production methods used on a single farm or a system of agriculture — such as greenhouse floriculture or roadside vegetable horticulture — that has a distinct set of farming practices. Aqua-terra farming (defined above) is an example of a complex farming system.
- Food security** — Defined in the section on Food Security in Chapter 1.
- Food-shed** — A basic concept to define urban agriculture that derives from the concept of a watershed. Maps show the flow of a particular food from production to consumer (see Chapter 1).
- Food system/agriculture-food system** — A concept that portrays the geography and process of an individual, family, community, city, state, or region's food acquisition, distribution, and consumption. Analyzing and mapping food systems are critical for urban agriculture stakeholders to define their most constructive and productive role.
- Fungible income** — In urban agriculture, production of food as a substitute for buying it, a practice that frees part of the household income to pay for services and other goods (see Chapter 1).
- Helminth** — A common parasitic worm.
- Horticulture** — All crops cultivated on land, including vegetables, berries, and trees. Ornamental horticulture and forestry are special types. A more narrow definition is limited to vegetable production.
- Hydroponic agriculture** — A method of growing plants in a nutrient solution with or without an inert medium such as volcanic ash. Hydroponic agriculture may use either organic or chemical fertilization through the irrigation system, and may occur on a small scale on a range of surfaces, including rooftops. These crops are known for nutritional safety and uniformity.
- Intercropping** — Growing two crops together at the same time, such as a short-season tomato and a long-season sugarcane.
- Layering** — Growing complementary crops in the same space but at different levels, such as trees over bushes over ground-level vegetables.
- Leaching** — Removing readily soluble components from soil by percolating water. The product is called **leachate**.
- Market gardening, truck farming** — Production of horticultural crops in urban and peri-urban areas for a nearby urban market. Includes small-, medium-, and large-scale operations. Compared to rural agriculture, market gardening is typically both capital and labor intensive.

- Microlivestock** — Small livestock, including guinea pigs, guinea fowl, rabbits, pigeons, chickens, ducks, pigs, and goats. In this book, the term is used primarily in a narrower sense to mean small domesticated animals, as distinguished from poultry. Microlivestock are generally the type of livestock most suitable for small farmers in urban agriculture.
- Micronutrients** — Nutrients such as vitamins and minerals that are necessary in small amounts for normal health.
- Multicropping** — Broadly refers to growing a number of crops at one site, whether mixed together or not. Home gardens typically employ multicropping.
- Mycoculture** — Systematic production of mushrooms.
- Nightsoil** — A euphemism for human excreta stored in containers that are not connected to sewers. Commonly used as fertilizer or as an input to fertilizer.
- Outgrower** — A contract producer. Typically, a firm contracts with an outgrower for specified production by a specified date.
- Pathogen** — An organism — usually microscopic — that causes disease.
- Parasite** — An organism that lives on or in another organism, called the host, and draws nourishment from it.
- Permaculture** — A popular form of sustainable agriculture, particularly adapted to urban areas, which promotes closed-loop ecological systems. Developed in Australia, based on American, Japanese and French antecedents, and widely disseminated worldwide.
- Peri-urban area** — An area at the fringe of the city that is in the process of converting from rural to urban land uses. The size of the peri-urban area is defined more by transportation infrastructure and uses of the land than by either population of the city or distance from its center. Accessibility is a key factor determining the extent of the peri-urban area. These zones are a common locus of urban agriculture.
- Pisciculture** — Fish production, a type of aquaculture.
- Productive landscape** — A concept in which open spaces are perceived as potentially productive rather than simply recreational or aesthetic (see Chapter 1).
- Shallow bed/lazy bed** — First identified in Germany in the middle 19th century, this farming system produces horticultural products on solid waste or unprocessed vegetation such as tree leaves or seaweed, with or without soil mixed in. Can be applied on rooftops and abandoned building sites.
- Throughput** — The balance between inputs and outputs that flow through a community. Urban agriculture reduces a city's throughput by reusing its waste to produce food and fuel (see Chapter 1).
- Urban forestry, urban agroforestry** — A broad group of farming systems, such as mushroom production on logs, medicinal shrubs, bamboo for construction, neem trees for insecticide and basket weaving, vineyards, fruit and nut production, and fuel. Urban forestry is closely linked to environmental enhancement through cleansing air and water.

**Usufruct** — The legal right to *use and enjoy* (the Latin root of the word) something that belongs to another. In urban agriculture, a usufruct permits a farmer to exploit land or water owned by another (see Chapter 1).

**Vector** — A living organism (often an insect) that transmits an infectious agent from an infected animal to another animal (or human). Mosquitoes are the vector for the malaria parasite.

**Zero-grazing** — Maintaining and feeding livestock and poultry within an enclosed area (for example, a stable or pigsty or cages). Covers a broad range from mice for medical research, to pork factory farms raising thousands of animals, to ornamental birds and back porch guinea pigs for protein.

**Zoonosis** — An infectious disease transmissible to humans from other animals under natural conditions.