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Urban Agriculture

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Urban Agriculture is part of a local food system where food is produced within an urban area and marketed to consumers within that area. Urban farming can also include animal husbandry (e.g., breeding and raising livestock), beekeeping, aquaculture (e.g., fish farming), aquaponics (e.g., integrating fish farming and agriculture), and non-food products such as producing seeds, cultivating seedlings, and growing flowers. Urban farms can also contribute to the revitalization of abandoned or underutilized urban land, social and economic benefits to urban communities, and beneficial impacts on the urban landscape.

Types of Urban Agriculture

- 1. Backyard Gardens:** This is the growing of food on home property. Its produce is mostly shared among friends, family, and neighbors as it typically leads to a surplus in the harvest. The food can also be stored and preserved. Backyard gardens are beneficial to communities as neighbors can share each other's backyard and employ different methods of farming leading to better yields.
- 2. Tactical Gardens:** This involves using the limited space available to practice agriculture without having to incur hefty expenses. For instance, an urban dweller could easily make a keyhole garden to cover a space that was intended for car parking in the street. This puts to good use land that could have potentially have gone to waste and instead creates an activity that can be done for leisure or to make more food.
- 3. Street landscaping:** This is the landscaping of streets for different uses such as community gardens, which are tended to by the people in the neighborhood. They not only make the streets look beautiful but also purifies the air creating a clean environment. Since they are primarily located along the street, their added advantage is their capability of reducing urban stormwater runoff.
- 4. Forest gardening:** It pertains to the practice of having gardens grown within an urban forest. Forest gardening is achieved by having different crops, vegetables, and fruits grown within urban settings. Forest gardening can also be part of afforestation efforts, which encourages the planting of trees as a step towards the fight against global warming in urban areas.
- 5. Greenhouses:** It involves the practice of agriculture in residential, commercial, and communal urban spaces in greenhouses. They require a substantial size of land to set up depending on the crops being planted. Greenhouses give farmers the ability to grow a crop all year round as they provide a controlled environment where the crops can be subjected to specific conditions required for their growth.
- 6. Rooftop gardens:** Since urban areas have limited space, it does not mean agriculture cannot be practice. This is where rooftop space comes in as they can easily be utilized for cropping vegetables, fruits, and herbs. The advantage of rooftop gardens is that it can aid

in reducing urban heat island as well as improving the air quality. Aside from these, rooftop gardens can be used to beautify recreational facilities.

7. **Urban beekeeping:** This is a possibility but comes with a lot of restrictions and regulations from the local government depending on the location and the city. In other words, the requirements for beekeeping may vary from city to city. Bees are important to the ecosystem as they not only produce honey but act as pollinators and promote biodiversity.
8. **Aquaponics:** This entails the practice of rearing aquatic animals like fish in urban areas. It involves the use of a system that captures stormwater from within the city and then creating a self-sustaining a recirculating system in tanks or artificial fish ponds. It is an efficient way of rearing crops and a protein alternative.

Benefits of Urban Agriculture

1. Economic benefits

- Income generation
- Local government benefits

2. Environmental benefits

- Reduces stormwater runoff and improves urban environment quality
- Integrated pest management system
- Crop preservation and new crop development.
- Reduction of the local carbon footprint.

3. Social and cultural benefits

- Community participation
- Improves unity among members
- Maintaining of cultures

4. Education, skill-building, and job training benefits

- Training and development
- Creativity and innovation

5. Health, Nutrition and Food Accessibility Benefits

- Creates a sense of urban food security.
- Availability of a variety of fresh foods.
- Maintaining food nutrient content.

To me, urban agriculture can mean several things

- ✓ First, it represents a truly **hyper-local activity** within the broad local food movement (what can be more local than having entire blocks of urban residents enjoying fresh produce grown by the farm down the street).
- ✓ Second, food production has been a **vital part of cities** for as long as there has been cities, and will continue to be.
- ✓ Third, urban food production and distribution is a significant way for a community to gain some **control over its food system**.

Conclusion

Although there is less surface area of agricultural land available in the city, and although it would be difficult to feed the entire population of a city like Montreal with the available land, a multi-approach implementation of gardening in urban environments, such as land agriculture, container gardening on balconies and roofs and a vertical integration of elements, would certainly contribute to the social development of disadvantaged neighbourhood.

References

1. Akinbamijo O.O., Fall S.T., Smith O.B. (2002) The production environment of the horticulture-livestock integration. Option in Sénégal urban agriculture, in:

- Akinbamijo O.O., Fall S.T., Smith O.B. (Eds.), Advances in crop-livestock integration in West African cities, ITC, ISRA, CRDI, Ottawa, Canada, pp. 37–52.
2. Pearson, L. J., Pearson, L., & Pearson, C. J. (2010). Sustainable urban agriculture: stocktake and opportunities. *International journal of agricultural sustainability*, 8(1-2), 7-19.
 3. De Bon, H., Parrot, L., & Moustier, P. (2010). Sustainable urban agriculture in developing countries. A review. *Agronomy for sustainable development*, 30, 21-32.