

## **Issue Brief # IB-16-2020**

# Dec 20, 2020

### Understanding the Future of Farming in Urban Areas- Peri Urban Agriculture

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#### By

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#### Introduction

Peri Urban Agriculture is a project of supplemental food production in or near cities, beyond conventional rural farming operations. Peri-urbanisaton relates to those processes of dispersive urban growth& outbreak of population influx that create hybrid landscapes of fragmented urban and rural characteristics. The scope of urban and peri-urban food production varies from continent to continent. This variation derives from many factors, e.g., the economic status of the country and the households (which determine their needs), the household itself (determined by its size, labour force, assets etc.), partly cultural aspects which determine the kind of crops grown), the infrastructure and availability of fossil energy and inputs (which determine transportation capacities, availability of seeds and fertilisers), climate, soils and water. To define this concept it can be said that,

"urban agriculture also called as urban and peri-urban agriculture (UPA)/ horticulture (UPH) produces, processes and markets food and fuel in order to meet the challenge of consumer's increased need for extra nutritional daily requirements of fresh and safe food within the towns, cities, or metropolis, using/reusing natural resources / wastes to yield a diversity of crops and livestock, applying intensive production methods acknowledging the aspects of economic growth, regional health, food safety & security on the lands throughout the urban and peri- urban areas".

Urban agriculture is practiced on small to medium size areas within the city for growing annual and tree crops, raising small livestock and fish for home- consumption or sale. Urban agriculture can be found in a multitude of ways (See Figure 1):



Figure 1

#### History of the Concept and its Relevance to us Today

This idea of extra supply of agricultural products is not new. It has a history and still in operation in many countries now a days. During the First World War potentially damaging situation aroused the need to produce sufficient food supplies to be shipped to the effected communities. Thus the Urban agriculture was introduced in USA. By the year 1919 over 5 million plots were growing food and over 500 million pounds of produce was harvested. A very similar practice came into use in other countries during the period of Great Depression that provided a hobby, a job, a business and food to those who would otherwise be without anything during such harsh times. In this case these efforts helped to raise spirits of socially as well as boost economic growth. During the Second World War, the War / Food Administration of United Nations, (National Victory Garden Program start up in US, Canada, and UK) systematically established the functional agriculture within cities. These were the gardens of fruit, vegetable, and herbs in above countries. In this plan in USA, as much as 5.5 million Americans took part in the victory garden movement and over 9 million pounds of fruit/vegetables grown a year, accounting for 44% of U.S. grown produce throughout that time.

Today Cuba has become a prime example of this practice. In 2003, more than 200,000 Cubans worked in the expanding Urban Agriculture sector. In Havana (Cuba), 90% of the city's fresh produce come from local urban farms and gardens. Other counitres such as China, India, Turkey Indonesia and Singapore, Australia New Zealand are successfully transforming their communities' needs with similar Hi Tec practices to make their urban areas greener and more food secure. Localized agriculture can also improve resilience by ensuring that there will be a more certain food supply in times of shortage, instability, and uncertainty. Particularly, the fresh fruits, vegetables and local foods that are available for communities and neighborhoods that live in food deserts. Indeed, peri-urban agriculture can be advantageous because of the proximity of production to the consumer. To facilitate food production, many cities have established community-based farming projects or independent farms on common land. Independent / individual urban gardeners also grow food in individual yards.

Given that Pakistan is experiencing over 3% of annual growth in its rate of urbanization every year, one of the fastest in the South Asian region, it seems like a practical approach to introduce this practice to the urban and peri-urban areas of the large, intermediate and small cities across the country. Not only will they serve as nutritional purpose but also be excellent for mitigation the impact of climate change by supporting localized eco-friendly farming at a community level.

However, to fully harness the potential this issue brief will evaluate differences between urban and peri-urban agriculture so that they can effectively be implemented in target landscapes and communities (See Table 1).

"Urban" and "urban agriculture"	"Peri-urban" and "peri-urban agriculture"
1. Attitudes differ between urban and peri-urban dwellers	1. Peri-urban production is economically dependent on the city
2. Different kind of people, often women	2. lower population density than urban
3. Different activities, often small scale subsistence	3. More land/space available
4. Concept of "urban" varies a lot cross- nationally	4. PU area has more natural resources
5. UA is part time job	5. PUA is a full time job
6. UA technology is different from PUA due to smaller plot sizes and different motivation for agriculture	6. PUA technology is different from UA, due to larger plot sizes and more commercialized agriculture
7. Knowledge of urban farmers is different	7. knowledge of PU farmers is different
8. urbanized	8. land under threat of urbanization
9. more infrastructure/construction	9. less infrastructure/construction
10. More services (banks, schools, medical centers etc.)	10. Fewer services (banks, schools, medical centers, etc.)
11. Different land use than in peri-urban areas, smaller areas cultivated, more subsistence production	11. Different land use than in urban areas larger areas cultivated
12. Availability of natural resources	12. higher availability of natural resources
13. Differences in policies/incentives/disincentives, institutional responsibilities (urban)	13. Differences in policies/incentives/disincentives Institutional responsibilities (urban/rural)
14. Easy access to markets	14. less access to markets
15. Poor air quality	15. better air quality
16. High cost of labor and land	16. lower cost of labor and land

### Differences between Characteristics of "urban" and "peri-urban"

17. Primarily subsistence production	17. Primarily market oriented production
18. Management strategies different from PUA, mostly small scale agriculture	18. Management strategies different from UA, medium to large scale agriculture
19. Small-scale, scattered and low- value crops produced in cities	19. Intensive, market-oriented, high value crops
20. Practiced by poor urban dwellers for subsistence	20. Practiced by groups and individuals with ready access to capital markets
21. UA can never become UPA again, but expand when zones of "urban blight" evolve	21. UPA can become UA with accelerating urbanization