

## Urban Agriculture in India: Advantages and Challenges

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### Introduction

The word 'urban' means city or town area and 'agriculture' means the practice of farming which includes cultivation of soil for the growing of crops and rearing of animals to provide food, wool and other products. So combinedly, urban agriculture can be defined as the practice of farming in or around city or town areas. According to Wagstaff and Wortman (2013) urban agriculture has been concisely defined as, "all forms of agricultural production (food and non-food products) occurring within or around cities." Urban agriculture may include all the other branches of agriculture such as floriculture, apiculture, animal husbandry, agroforestry, aqua culture and horticulture. These activities can be done in peri urban areas also which means cultivation in those areas which are in the form of transformation totally from rural to urban.

In India, the idea of urban agriculture is not very popular yet. The food crops and all other agriculture commodities in India have been supplied from the villages. The percentage of urban population growing their own food is extremely low and the population there is increasing in a rapid pace. According to a recent data, 34.47% of total population of India live in urban areas which is increasing rapidly day by day. By the year 2050, 50% of the total population would be living in urban areas. With the increasing urban population, the difficulty in living there is also increasing day by day. The Indian cities are facing various problems such as no clean and quality food, lack of greenery and fresh breathing air, scarcity of fresh water, no proper waste management, etc. The people living in these areas also do not realize the need for producing their own food. People must be made aware about the importance of urban cultivation, proper and quality nutrition, organic local produce, etc.

## Advantages

There is a high scope of urban agriculture in India. It has various advantages that can uplift the urban dwellers in various aspects. Some of the advantages are enlisted below:

- The urban population have very less control over the quality, price and supply of food that they consume. At times, there are very heavy fluctuation of prices of food which they have no control over. It has been reported that farmers grow organic chemical free food commodities for their own consumption and use high doses of chemicals to the food that for selling purpose. All these problems can be overcome through urban agriculture by producing their own quality and price managed food produces.
- It helps in reducing carbon emission in urban areas by cutting down the significant amount of fossil fuel consumption which was necessary for transportation, packaging and selling food.
- It generates employment opportunity. The maximum percentage of people migrating to urban areas are poor. They come to cities in search of employment and other facilities. So, this can provide employment to those in need.
- It provides food and nutrition security. It helps to meet the nutritional requirement of increasing urban population and reduce the diseases caused by various nutrition deficiency.
- It helps to provide fresh and quality food crops to the urban population.
- It motivates the people for innovative techniques such as hydroponics, rooftop gardens, landscaping, urban livestock, etc.
- It provides proximity to markets.
- It helps to make the neighbourhood green.

## Challenges of urban agriculture

Many cities of India such as Mumbai, Delhi, Chennai, Bengaluru and Kolkata has adopted urban agriculture under the leadership of state government, private sectors and individuals. However, still it is not that developed and is still facing many challenges. The challenges in urban agriculture are:

- Availability of land: The availability of land in urban areas is very hard and even if it is available then the price can be very high. The outskirts of town are also very highly priced. For example, according to the report by The Economic Times, in 2013 an acre of farmland in Vadicherla in Mehaboobnagar district currently Telangana which is not near any big city, which cost Rs.25000 in 2003 rose to Rs.12 lakh by 2012. So, by now, the price may have increased to a great extent.
- Water availability: For farming, huge amount of water is required for irrigation purpose. The urban areas in India are facing the water scarcity problems and could not meet the populations requirement.
- Soil and air pollution: There are high level of pollution in the soil and air of urban areas. Emissions from factories and vehicles lead to the presence of heavy metals and other toxic chemicals in water soil and air.
- Theft and vandalism: There is a high chance of food produces being theft and destroyed by the people, street dogs, etc.
- Viability: Farmers may get difficulty in earning a living by only growing and selling food produces and would be hard to pay for the land and workers. The yield also are very less which could not meet the demands of the people.

All these challenges can be tackled by preparing a proper plan or scheme by the government especially for urban agriculture. For the difficulty in availability of land each state government can make scheme to lease the empty plots for cultivation. People must be encouraged to utilize the rooftops, balconies and backyards of their houses, apartments and school colleges for cultivation. New sources of water should be found to meet the water requirements.

### **Conclusion**

One of the best strategies to contribute to local food security is urban agriculture and there is a high scope of it in India. It provides the availability and access to fresh and healthy produce. In near future, there is a high chance of urban agriculture to produce at least a portion of their own food supply.