

Growing green jobs: Can urban and peri-urban agricultural entrepreneurship generate livelihoods? Case examples from Pune and Bengaluru

Swarnika Sharma & Maitreyi Koduganti, Indian Institute for Human Settlements, Bengaluru, India

(With inputs from Parama Roy, Okapi Research & Advisory and Prathigna Poonacha, Indian Institute for Human Settlements)

Demand for high quality, safe, organic, and locally grown fresh food is growing relentlessly across urban India and appears to be catalysed by the COVID-19 pandemic. In response, agriculture and associated entrepreneurial efforts are blooming in and around urban centres. But, are they generating lucrative agricultural livelihoods?

Agriculture is closely intertwined with India's journey towards sustainability as it provides a livelihood for more than half its population. In September 2021, [The United Nations Food Systems Summit](#) highlighted the need for bold actions, solutions, and strategies to achieve healthier, more sustainable, and equitable food systems. The summit advocated leveraging the potential of food systems to achieve all 17 sustainable development goals (SDGs) by 2030. In India, agriculture is seen primarily as a rural affair and increasingly unprofitable, which is discouraging rural youth from choosing agriculture as a livelihood option. Therefore, a major employment shift out of agriculture has been reported across India, affecting millions of livelihoods ([Choithani, 2021](#)).

Cities, and their unprecedented growth, is the story of the 21st century, especially in the Global South. India is projected to witness 877 million people living in urban areas by 2050 ([UN, 2018](#)) that already grapple with issues like unplanned urban sprawl, unaffordable housing, environmental degradation, resource mismanagement, and extreme weather events. While problems are plenty, the solutions

remain scant, and therefore, urban centres must explore potential avenues that offer multiple simultaneous benefits.

Urban and peri-urban agriculture (UPA) is one such avenue that could potentially generate livelihood opportunities, address food insecurity, reduce the ecological footprint, and ensure better health and wellbeing outcomes. Multiple UN agencies and research studies also support UPA as a pro-poor development strategy that could contribute to food security, green jobs and income opportunities among economically weaker sections of the society ([FAO, 2007](#); [Frayne et al., 2014](#); [UNDP, 1996](#)).

Entrepreneurship through urban and peri-urban agriculture

Demand for high quality, safe, organic, and locally grown fresh food is growing relentlessly across urban India and appears to be catalysed by the COVID-19 pandemic. In response, agriculture and associated entrepreneurial efforts are blooming in and around urban centres. But, are they generating lucrative agricultural livelihoods? Many startups, social enterprises and collectives are stepping up with unique and effective solutions in urban and peri-urban regions, through numerous entrepreneurial models ranging from terrace gardening to vertical farms to hydroponics. A few notable ones include subscription-based mini-farms, e-commerce sites for organic certified products, gig marketplace for urban gardeners, training younger/migrant farmers, and premium food supply networks.

We highlight the working of two such models — Abhinav Farmers Club and Farmizen — in Pune and Bengaluru respectively that offer sustainable livelihood opportunities for many.

Abhinav Farmers Club, Pune

The seasonal nature of agriculture-based income, the growing frequency of weather extremes, water shortages, and fragmented landholdings force millions of farmers to migrate to cities and other urban centres every year in search of livelihood opportunities. Hence, in 2004, a group of farmers in the outskirts of Pune, a city in the state

of Maharashtra, India, came together to make a shift to sustainable farming and set up Abhinav Farmers Club. A forerunner to many of the present-day models, what started as a gathering of 11 farmers has, over the course of the last 14 years, grown to encompass 153,000 farmers spread over eight states in India. Organised as area-based groups, these collectives sell their produce directly to customers ranging from individuals, housing societies, retail chains, and even exporters. They have a dual mission: (1) to link peri-urban and rural farmers directly to urban consumers and (2) to supply chemical-free food. To do so, the club enrolls interested farmers, who pay a membership fee yearly. This fee sustains the working of the club, where it trains its members in organic farming techniques including sowing, post-harvest handling, packaging and marketing.



*WOMEN SORTING FRESH PRODUCE FOR DELIVERY TO URBAN CONSUMERS
PICTURE COURTESY: DYANESHWAR BODKE*

To increase its reach to a larger customer base, the club has developed a mobile app, where consumers can order fresh farm produce. In this way, more than a hundred thousand farmers across the country have been able to secure better prices for their produce and enhance their income. Aiming to make farming more lucrative and sustainable in cities, Dyaneshwar Bodke, the president of the club, also encourages educated youth to get involved in the production and marketing of fresh produce.

Farmizen, Bengaluru

As the food travels hundreds and thousands of kilometres—referred to as food miles—it contributes to millions of tonnes of greenhouse gas emissions. Addressing this challenge, Farmizen, a Bengaluru-based company, has developed a unique model that attempts to provide traceability and a supply of safe food to urban consumers, while supporting local farmers. Launched in 2017, this app-based platform has transformed itself into a farm-to-fork marketplace. They connect peri-urban farmers with urban consumers through multiple service formats including mini-farms and subscription-based delivery of fresh food. Farmizen has leased several farms in and around the city. Consumers can rent out a 600 sq ft mini-farm from these areas, where they can grow food, either on their own or by employing a local farmer to cultivate and harvest on their mini-farm. The company has also opened more than 400 'society tribes' in apartment complexes around Bengaluru. These tribes consist of groups of people who get delivery at the same time, reducing last-mile delivery costs and associated emissions.

Currently, over 300 local farmers in and around the city supply fresh vegetables to Farmizen's customers. Moreover, more than 600 farmers from across India are associated with Farmizen, selling organic fruits through their platform. Farmizen also directly employs people throughout its production and supply chain from harvesting, processing, packaging, transportation and delivery. Many of their employees are women, especially those working on the farms, harvesting and processing the produce. Several new-age organic farmers, who had generational landholding in peri-urban areas but were not growing, are starting to get associated with the platform.

Shameek Chakravarty, co-founder of Farmizen notes:

“It's very interesting to see that while many traditional farmers leave the profession, there is a new set of young farmers who are returning to the field. They might not have farming knowledge, but they have better business knowledge. They know that they cannot depend on just one buyer, they would try to diversify and sell to multiple people.”



GRAPHICAL REPRESENTATION OF THE FARMIZEN MODEL

Picture Courtesy: <https://www.farmizen.com/>

Growing forward:

Apart from these initiatives, there are multitudes of new businesses, like UrbanMali, iKheti, FarmFresh Bangalore and My Dream Garden that are providing livelihood opportunities for individuals, both with and without farming backgrounds. Some of these businesses also upskill farmers and gardeners to serve urban customers, thereby enhancing their earning potential. At a time when many younger members of traditional farming families are opting out of agriculture, models like the Abhinav farmers' club and Farmizen play an important role by hand-holding interested farmers to continue to grow profitably and sustainably.

In the Union Budget 2022, the Indian government reiterated its commitment to generating green jobs. As the nation redirects its focus on green livelihoods, these examples highlight how UPA models have the potential to employ the urban poor and grow healthy food within the peripheries of the city. Therefore, it becomes imperative to integrate such entrepreneurial avenues into policy and planning to foster their potential for livelihood generation.

This article draws from the project 'Urban and Peri-Urban Agriculture as Green Infrastructure' (UP-AGri) in India and Tanzania. It is funded by British Academy's 'Urban Infrastructures of Well-Being' programme, under the UK Government's Global Challenges Research Fund (GCRF). To know more about this project, visit our website [here](#).

Swarnika Sharma, Maitreyi Koduganti, and Prathigna Poonacha work as researchers with the Practice team at the Indian Institute for Human Settlements, Bengaluru.

Parama Roy is Lead Researcher, Okapi Research & Advisory & Adjunct faculty, Department of Civil Engineering, IIT Madras.