

Veggie pantry, a solution to urban food crisis

BY DR. CHAMEERA UDAWATTHE

Food safety and security are two complementary aspects of our long-term sustainability. But food security is becoming one of the world's most pressing issues. In the 1996 World Food Summit, food security was defined as "food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious foods that meet their dietary needs and food preferences for an active and healthy life." When looking at the major aspects contributing to food security, many of these are not fulfilled by the urban population, especially the urban poor.

Traditionally, urban areas are presumed to have less problems in relation to food security. But recent trends portray a different story. The abundance of food from fresh to pre-cooked doesn't mean that everyone living in urban areas has equal access to a healthy and a nutritional diet. The rapid increasing of food prices, unavailability of fresh produce and reduction in yields are affecting the urban population. The deep disparities resulting from variations in socioeconomic categories, ethnicity, migrant status, residential location, city size, and a variety of other issues afflict the food security of the urban regions the most.

Food insecurity

The urban poor are particularly prone to food insecurity due to the distinctive aspects of city life. Many rural households have access to land and grow a considerable percentage of the food they consume, whereas urban inhabitants are virtually exclusively reliant on the cash economy and hence require stable job and income to meet their food demands. The Covid-19 pandemic put more people at risk of food insecurity. It also gave people time to stay at home and engage in urban farming.

We require creative solutions to ensure future food security and sustainability without jeopardising food safety. Dr. Chameera Udawatthe, Dr. Upuli Perera and Sadani Kulathunga of the Department of Estate Management and Valuation of the University of Sri Jayewardenepura, are conducting a research in the field of architecture, and urban farming to create a solution for



'Veggie pantry' designed by the researchers of the University of Sri Jayewardenepura



Sadani Kulathunga

urban food scarcity.

After identifying the need of the people as well as vegetable plants, this 'veggie pantry' was designed. 'Veggie pantry' will stand as a free-standing structure. It will also be a self-watering structure. It will be created in a way that it would maximise the use of sunlight.

The 'pantry drawers' or the shelves with the plants and the planting medium will be detachable from the drawers. The watering shelves will be provided with an automated water circulation system.

People have lost sight of where their food comes from nowadays. We have no idea how to grow good, nutritious food.



Dr. Chameera Udawatthe

Urban gardening can help you learn more about how to grow food. You may teach your children about the importance of sustainable food and the health benefits it provides. That is something worth learning and passing on to others.

'Veggie pantry' shows you that growing your own food doesn't require a lot of room. Vertical gardening, container gardening, rooftop gardening, and hydroponic farming are some of the techniques used in this device.

The 'veggie pantry' allows you to maximise your area while growing as much food as you want.

In today's fast-food and instant-meal culture, there is a scarcity of healthy



Dr. Upuli Perera

foods. These quicker options are convenient, but they have a negative impact on our health. As a result of bad diet, today's generation faces a slew of problems, including diabetes, high blood pressure, and obesity.

Growing your own food entails growing nutritious, wholesome foods such as fruits, vegetables, and herbs. These are low in cholesterol, high in fibre, and include vitamins and elements that are healthy.

Healthy food at low cost

One of the finest ways to provide your family with good, nutritious food

is to engage in urban gardening. Food deserts, or regions where healthy food is either not available, or expensive to residents, like low-income settlements, are a continual problem in urban settings. 'Veggie pantry' can help alleviate food insecurity by allowing people to grow and harvest their own fresh, healthy food at a fraction of the cost of similar produce in a grocery store.

The issue with mass-produced food is that it is frequently laced with chemicals and pesticides to boost output and shelf life. You won't have to worry about this with the 'veggie pantry'. Without the use of such chemicals, organic food can be grown. You have complete control over the growing environment, including water, soil, and pest control.

This device has control over the weather condition as it is a closed system. This means you have more choice over what kind of food you grow and don't have to worry as much about weather conditions such as drought or cold. This allows you to receive the food you want, when you want it, without having to rely on the seasons.

By reducing fossil fuel usage, 'Veggie pantry' helps reduce the carbon footprint of the food chain. It also uses water efficiently. Hydroponic agriculture saves up to 90 percent on water compared to

traditional farming.

This device can be created in a community garden system. People who live in cities, have lost touch with what it means to be a part of a community. We tend to be isolated and self-sufficient, which can lead to despair, mistrust, and a lack of contentment. Men, women, children, friends, families, and neighbours can all benefit from participating in urban gardening.

The goal is to work together to create sustainable food. This helps bridge the gap between where we eat and where it originates from. It also aids in the teaching of important lessons about nature, our food system, and sustainability to our children.

Living in the city can be costly. The expensive food that you must purchase accounts for a substantial portion of this cost. Healthy fruits and vegetables are far more expensive than the readily available junk food. You can prevent this difficulty by growing your own food in 'veggie pantry'. You don't have to spend a lot of money to eat healthy and nutritious fruits and veggies. You can even sell your surplus food if you can grow a lot of it. This might assist you in starting a small business and earning money. It may also provide employment opportunities for others in your neighborhood.