



ROOFTOP GARDENING

THE OPEN UNIVERSITY OF SRI LANKA (OUSL)

PREPARED BY:

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ROOFTOP GARDENING AT OUSL

Rooftop gardening at universities can align with multiple Sustainable Development Goals (SDGs) set by the United Nations, contributing to a more sustainable and responsible approach to urban spaces. Here's how OUSL has supported various SDGs by rooftop Gardening.





HOW DID WE GROW?

Our rooftop spaces were used to grow fresh produce such as bitter guard, okra, brinjal, bell pepper, cauliflower, chili, leafy greens, etc. It serves as a source of local, sustainable, and nutritious food and helps reduce food insecurity.

Considering factors such as structural integrity, weight-bearing capacity, and access to sunlight, we planned our garden layout, including raised beds or containers, irrigation systems, and pathways, ensuring the maximum use of available space.

As a growing medium, we chose a mix of compost, soil, and organic matter for selected vegetable crops that are well-suited to our climate, available sunlight, and rooftop conditions. Also, we have considered factors like local preferences and crop yields. To ensure that our plants receive an adequate amount of water, we have installed an efficient irrigation system.

HOW DOES ROOFTOP GARDENING SUPPORT THE UNIVERSITY?

- A source of fresh, organic produce for the campus community, reducing the need to source food from distant locations.
- Hands-on learning experience for students in agriculture, sustainability, and environmental science. It can also serve as a living lab for research projects.
- Help reduce the urban heat island effect, absorb rainwater, improve air quality, and support biodiversity in urban areas.
- Demonstrates sustainable practices to the campus community and encourages environmentally responsible behavior.
- Foster a sense of community among students and faculty, offering a shared space for relaxation, collaboration, and social interaction.
- Engaging in gardening activities can promote physical and mental well-being among participants, providing a therapeutic and recreational space.
- Surplus produce can be sold or donated to local communities, supporting local economies and addressing food insecurity.





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HOW DOES ROOFTOP GARDENING SUPPORT THE SDGS?

Rooftop gardens can be used to grow fresh produce, providing a source of local, sustainable, and nutritious food and helping to reduce food insecurity.



Fresh and locally grown produce from rooftop gardens can promote healthier eating habits and improve overall health.



Rooftop gardens can serve as educational spaces, providing students and the community with opportunities to learn about agriculture, sustainability, and biodiversity.



Rooftop gardening contributes to greening urban environments, improving air quality, reducing the urban heat island effect, and enhancing the overall livability of cities.





13 CLIMATE ACTION



Rooftop gardens help combat climate change by sequestering carbon, reducing energy consumption in buildings (by providing insulation), and mitigating the heat island effect.



Rooftop gardens can provide habitat for birds, insects, and other wildlife, contributing to urban biodiversity and the preservation of terrestrial ecosystems.



Innovation in green roofing and sustainable agriculture can drive progress in urban infrastructure and industry, providing opportunities for research and development.



Rooftop gardens promote sustainable consumption by providing fresh, locally grown produce and reducing the need for long-distance food transportation.



Rooftop gardening initiatives can provide employment opportunities and support local economies, potentially reducing poverty in the surrounding communities.



Rooftop gardens can contribute to energy efficiency by providing natural insulation, reducing the need for cooling and heating, and conserving energy.

