

# **Food Sustainability and Climate Resilience through Urban Gardens**

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A shortage of food was experienced during the Covid-19 lockdown. Many people lost their regular income and the disruption in the food supply chain limited access and availability of food, particularly in urban settings. The Ukrainian war highlighted the European countries food systems vulnerabilities. This was because of their food dependence on external countries. This prompted the EU states to transition to a circular economy model. These shortcomings in the food supply can be further heightened by the inflow of refugees. The EU states will continue to face such challenges; thus, innovative approaches are needed to ensure food security but to promote climate resilience.

Urbanization is expected to further compound food security issues. In 2023, 76% of the EU population lived in urban areas. This percentage of the EU is significantly

higher than for the rest of the world (57%). The Urban Heat Island Effect is one of the most serious problems that cities worldwide and in the EU face. Higher air temperatures and more intense heatwaves in urbanized areas are very frequent, and the consequence of the grey intensification, increase energy consumption and air pollution and reinforce climate change. They pose serious health risks to urbanites, particularly minority and low-income communities. Green infrastructure such as green roofs, green walls, rain gardens, street trees parks, gardens, urban riparian areas and wetlands provide an excellent alternative to mitigate these negative effects in urban environments.

Urban gardens, a form of urban agriculture, can address food security, climate change resilience and the Urban Heat Island Effect. It fits within the scope of the circular economy and is an effective nature-based solution. It aligns with the Sustainable Development Goals and meets the European Green Deal. This practice includes growing food and/or raising animals within or near urban areas. It is a solution that needs to be adopted, with the earth's population increasing and with most people living in urban areas. These changes are leading to an exponential increase in food, space, and natural resources usage. Urban gardens can offer local, sustainable food production while enhancing urban environmental sustainability and resilience.

Based on these social and environmental issues, the FEED4FOOD Driving Urban Transitions project has established on-the-ground pilot Living Labs (LL) to promote urban gardening. Three cities have been selected, Drama in Greece, Strovolos in Cyprus and Bucharest in Romania. Through these LL, the utility of sustainable urban agriculture for food security and greening urban areas for climate resilience is showcased. Empowerment and inclusion of vulnerable groups is another priority. FEED4FOOD is promoting the transition towards low-impact and regenerative urban food systems that provide healthy food, particularly for low-income consumers. Successful examples of the effective adoption of urban gardens are implemented to provide tangible proof and their utility to policy makers, communities, innovators, and entrepreneurs across the FEED4FOOD cities and for the rest of EU states.