It not only helps refugee families develop small scale domestic food gardens near their homes, but also celebrates their gardens with festivities, bringing together everyone in the community.

With the sweltering sun beating down on their flimsy makeshift homes, conditions are harsh for the hundreds of thousands of people living in the world’s refugee camps.

Their poorly-constructed houses, made up of plastic sheets, discarded plastic bags and pieces of cardboard, offer little protection from the burning sun and scorching heat.

The neglected soil is trodden on and blown about, but rarely harnessed to grow food or improve the environment. But researchers at the Centre of Agroecology, Water and Resilience at Coventry University, UK have worked with the Lemon Tree Trust to change this and to help transform the landscape of refugee camps with trees, plants and crops.

Their project is crucial in making refugee camps greener, healthier and more productive places to live. Their poorly-constructed houses, made up of plastic sheets, discarded plastic bags and pieces of cardboard, offer little protection from the burning sun and scorching heat.

The initiative has used an urban agriculture project to transform the Domiz camp in the north of the Kurdistan region of Iraq, between Mosul and Dohuk, which is home to more than 40,000 refugees.
At first, staff handed out seed packets and distributed olive trees within the camp, launched a garden competition and made a short film about the gardening and tree planting they were carrying out.

Within 18 months, 2,000 trees had been distributed, 420 rose bushes and potted flowers given out and 450 bags of fertilizer and numerous packets of seeds had been passed around the refugees living in the camp. Olives, lemons, grapes, figs, pomegranate, apricot and peach trees were all blossoming and the team have also developed a commercial garden within the camp.

Olives, lemons, grapes, figs, pomegranate, apricot and peach trees were all blossoming and the team have also developed a commercial garden within the camp. But one of the project’s biggest impacts will come from the construction of a large demonstration and training garden within Domiz camp, where camp managers and residents will offer their expertise on construction, irrigation and design. This will be the first such project of its kind within a refugee camp in Iraq.

ABOUT THE CENTRE FOR AGROECOLOGY, WATER AND RESILIENCE

The Centre for Agroecology, Water and Resilience (CAWR) is driving innovative, transdisciplinary research on the understanding and development of resilient food and water systems internationally. Food and water security is increasingly threatened by factors such as climate and environmental change, loss of biodiversity, conflict and market volatility. New knowledge, policies and technologies are needed to develop systems that are more resilient to change and which ensure the health of our food and water supplies. Resilient systems are better able to bounce back from stresses caused by longer-term change or short-term events - be it natural processes such as flooding, or human impacts such as war or water pollution incidents.

Through its focus on food and water, the Centre’s research develops and integrates new knowledge in social, agroecological, hydrological and environmental processes, as well as the pivotal role that communities play in developing resilience. Unique to this Centre is the incorporation of citizen-generated knowledge - the participation of farmers, water users and other citizens in transdisciplinary research, using holistic approaches which cross many disciplinary boundaries. CAWR also aims to advance resilience science through creative work on a new generation of key issues linked to the governance of food systems, hydrological change, urban water, river processes, water quality and emerging pollutants.
PROGRAM IMPACT AND SUCCESS

Including the refugee population in infrastructure discussions around urban agriculture would strengthen relationships between camp managers and camp inhabitants, while also tapping into an under-utilized resource of experience, knowledge and skills.

The benefits of greening innovation have been profound in their positive contribution to the overall concept of shelter through beautification of space, or the satisfaction of cultivating one’s own herbs for a meal.

Several jobs have been created for camp inhabitants – opportunities for both men and women to engage with their surroundings and earn income.

Most importantly, growing something in the earth has produced an important cultural mechanism for navigating the feelings of loss inherent to the refugee experience.

As one respondent told us:

“This garden reminds me of my childhood, my land. It also provides me with food, but it connects me to my homeland.”
SDG IMPACT

GOAL 1: No Poverty
End poverty in all its forms everywhere

GOAL 3: Good Health and Well-Being
Ensure healthy lives and promote well-being for all at all ages

GOAL 10: Reduced Inequality
Reduce inequality within and among countries

GOAL 11: Sustainable cities and communities
Make cities and human settlements inclusive, safe, resilient and sustainable

GOAL 17: Partnerships for the Goals
Strengthen the means of implementation and revitalize the global partnership for sustainable development
LOOKING FORWARD

Rather than imposing a master plan to increase the number of gardens in the camp, we chose to support those who had already shown an interest by planting a garden; we were then able to encourage the expansion of green space and get current gardeners to become mentors for new gardeners.

We provided funding to an already established small nursery to expand its range of trees, seeds and seedlings. In exchange, the owner distributed seeds and trees to households, and acted as a focal point for our project. We also recruited two women in the camp as facilitators to distribute seeds and encourage home gardening.

For future, we hope to extend the concept of ‘greening innovation’, a term which connects food production, tree planting, energy production, waste recovery and broader environmental practices.

By incorporating urban agriculture initiatives within refugee camp settings, the concept of shelter can be expanded to include providing protection from the climate, addressing nutritional deficiencies and increasing levels of human dignity, place making and self sufficiency.

www.coventry.ac.uk/research/agriculture-initiative-in-refugee-camps/