

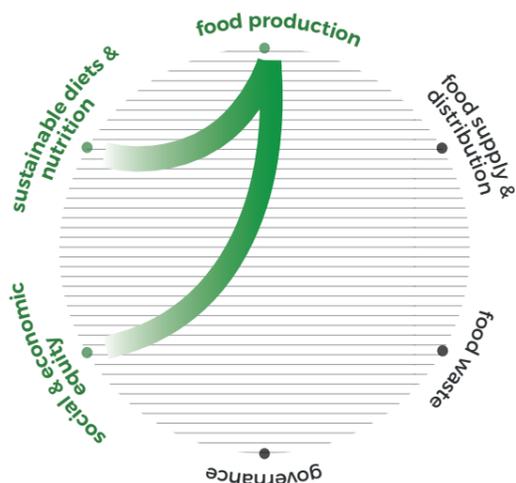


DAEGU REPUBLIC OF KOREA

Title of Practice DAEGU: MITIGATING CLIMATE CHANGE THROUGH URBAN AGRICULTURE

Milan Urban Food Policy Pact Category
FOOD PRODUCTION

Main impacts on other MUFPP categories



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Context

Daegu is an inland city of the Republic of Korea, well known for its high temperatures during the summer. In 2012, the city government launched an **urban rice paddy pilot project** to provide additional green area while simultaneously cooling the urban climate. Rice was chosen for a double purpose: it emits a lot of oxygen, further contributing to **climate change mitigation**, and it can be donated to people in need, becoming an additional source of **food security**.

Overview of the food practice

Rice paddies were set up in **eight busy places** such as train stations, a stadium, an urban park and downtown areas, all designated by the Municipality. The Daegu Agriculture Technology Center provided the necessary technology, equipment and seedlings needed to start the cultivation in plastic pots. A total of 2 500 rice pots were placed and they served as a green area as well as an **educational space** for citizens, who had the chance to get involved in cultivating and then harvesting rice. Some kindergartens in Daegu organized group study tours to the rice pots for their children. Rice farming on these plots was done voluntarily by citizens and nearly **12 000 people participated in the harvest**, while taxi drivers voluntarily cleaned up around paddy pots. After the harvest, rice has been replaced with barley, which helped to recreate rural scenery within the urban area context.

Results and lessons learned

The pilot project had several positive impacts on different levels. From an environmental point of view, geothermal heat showed a **15°C decrease in temperature** between the road's concrete without rice pots/paddies and the same surface covered by the rice pots, which means the rice paddy was successful in addressing and mitigating these urban heat islands. Concerning the social impact, the project fostered **social interaction**, encouraging citizens to get involved in harvesting and donating 300 kg of harvested rice to needy neighbours. This highlights the importance of agriculture in addressing social exclusion, contributing to happier and more **inclusive communities**. Additionally, the presence of rice paddies within the city creates a space for environmental education and learning, while increasing the attractiveness of the city.

