



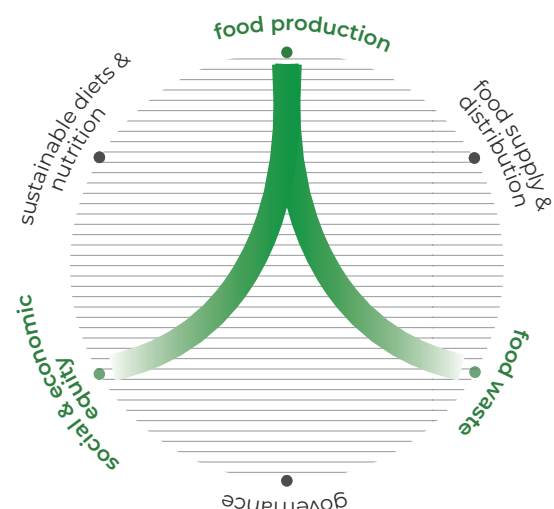
DAKAR SENEGAL

Title of Practice

DAKAR: CREATING MICRO- GARDENS USING RECYCLED MATERIALS

Milan Urban Food Policy Pact Category
FOOD PRODUCTION

*Main impacts on other
MUFPP categories*



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Context

Dakar, the capital city of Senegal, is experiencing unprecedented population growth, coupled with strong **rural-urban migration**. This has generated pockets of poverty among the population, often at risk of food insecurity. The urbanization process has also reduced the availability of arable land, already compromised by the effects of climate change. This has caused a general increase in the price of vegetables and further puts at risk the food security of the most vulnerable strata of population. For this reason, the Municipality of Dakar implemented a project in support of **micro-gardening** with the double aim of addressing **food insecurity**, while contributing to social stability.

Overview of the food practice

Micro-gardening consists of **gardening on standing tables**. The micro-garden uses recycled materials as supports (wooden pallets, tires, buckets, old vases and bottles). The soil substrate is composed of **peanut shells and rice straw**, which are recycled waste. The project covers the entire city of Dakar (19 municipalities), offers **trainings** in micro-gardening techniques and provides space dedicated for gardens within public spaces (e.g. schools). The programme targets **vulnerable groups** to be involved in the cultivation of micro-gardens such as women, young people, the elderly and the disabled or inmates of remand homes and prisons. The micro-garden technique requires **inexpensive technology** and little physical effort, which further enhances the inclusion of vulnerable groups. Micro-gardening is also a response to the negative effects of climate change. The practice of micro-gardening uses very little water and contributes to the greening of the capital, which in turn reduces greenhouse gases. The micro-garden is also a **learning space**, where children learn how to become eco-citizens, increasing their knowledge of the importance of environmental conservation and sustainable development.

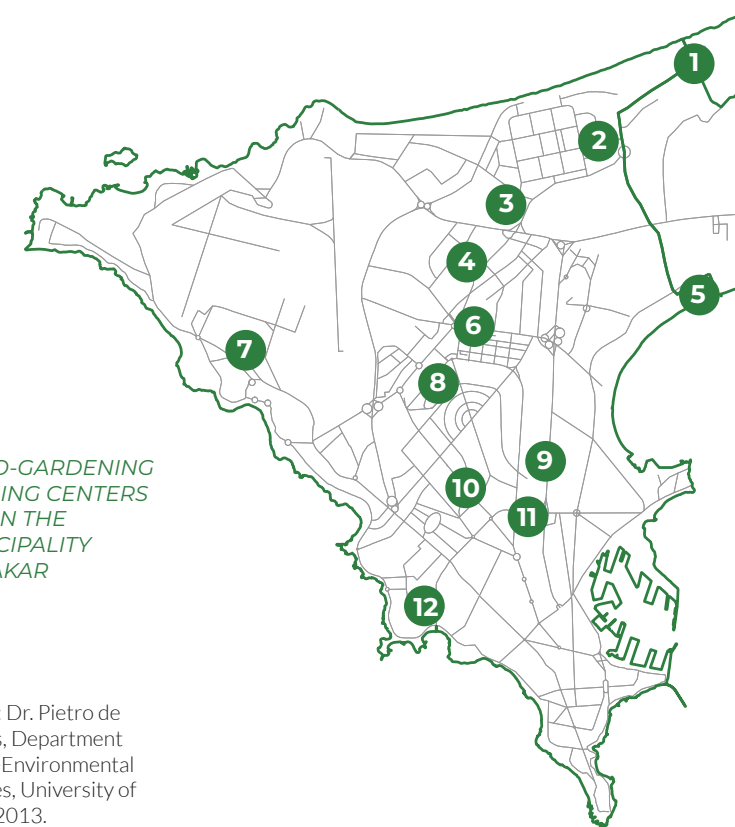
Results and lessons learned

Micro-gardening is quite innovative compared to traditional market gardens. Conventional gardens require more resources (mainly land and water) and are challenged by the effects of climate change. Indeed, micro-gardening needs very little space, and for this reason can be implemented almost anywhere, in the courtyards of houses or schools, in public spaces, etc. Even if little water is used, the **surplus is recovered and reused**. The micro-garden model is in this way an example of circular economy, recycling and reusing waste while producing healthy and sustainable food. Moreover, micro-gardens foster a higher degree of social cohesion, promoting the **integration of women and the elderly** in society, raising their incomes and



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creating a space for community meetings. Finally, the micro-garden sites represent actual “green lungs” in a grey, concrete city with very little other green space, further reducing emissions of CO₂. This model has a **high potential for replication**, both within Senegal and abroad, representing a valuable initiative to tackle **climate change** and food insecurity.



**MICRO-GARDENING
TRAINING CENTERS
WITHIN THE
MUNICIPALITY
OF DAKAR**

Source: Dr. Pietro de
Marinis, Department
of Agri-Environmental
Sciences, University of
Milan, 2013.



- <https://bit.ly/2J8BqMH>