



Ajuntament
de Barcelona

ROOFTOP GARDENS. GROWING GREENS FOR SOCIAL INCLUSION

Barcelona City Council



The Municipal Institute for people with disabilities

Goal: to promote the equal participation of people with disabilities in all areas of community life. To this end, it seeks to promote accessibility in the various municipal services and facilities.

Structure and staff: a district support officer in each of the city's districts (10), two central support officers and one service coordinator.



*The 10 districts
of Barcelona*





Project Background - Public Gardens and People with Disabilities

- Labour agreement with the Parks and Gardens dept. of Barcelona City Council.
- 18 plots of land in Barcelona made available for associations of people with intellectual disabilities and/or mental disorders.
- Barcelona as a high density city without the possibility of new ordinary plots.
- 2016 saw the start of the rooftop gardening experience for NGOs of people with disabilities working in Barcelona.





Main goals

The project consists of entities of people with disabilities managing urban hidroponic gardens on rooftops of municipal facilities.

Main goals of the project:

- The promotion of people with disabilities in an area that brings benefits in different aspects (leisure, training, relationships, etc.).
- Empowering the users by changing their role in society.
- Making use of disused spaces like the rooftops of municipal buildings and the opening up of a public space to citizens.
- Contributing through these projects to creating a greener city and testing the healthiness of the vegetables grown inside the city.



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Implementation

1. April 2016 saw the start of the rooftop garden project at the Municipal Institute for people with disabilities, with NGOs of people with intellectual disabilities.





Implementation

2. October 2017 marked the beginning of a new rooftop garden in Sants-Montjuïc District with NGOs (people with intellectual disabilities and / or mental health issues)





Implementation

3. December 2018, 2 new rooftop gardens launched in the Ciutat Vella District (people with intellectual disabilities, mental health issues and physical disabilities)

4. June 2019 saw the start of the experience at the “Espai Jove Fontana” civic centre in the Gracia District (people with intellectual disabilities and mental health issues)





Implementation

Next steps

5. A study is under way for 3 new gardens, one of them in a Public School
7. Replica of the project in another Catalan city.
8. Pilot project of a new type of hydroponic garden with a vertical structure.





Implementation

- Profile of the people taking part: mild or moderate intellectual disability, people with mental disorders or physical disabilities.
- Operating costs of each rooftop garden around 600 and 700 € per month.
- Frequency of attendance: 3 days a week from September to July.
- Crops: 4-5 plantings during the course.
- Type of crops: great variety of green vegetables and aromatic plants.





Stakeholders

Networking: participation of different professional profiles from the “third sector” and public administration.

Participating NGOs of people with disabilities :

- 11 participating entities.
 - 7 entities of people with mild / moderate intellectual disabilities
 - 3 entities of people with problems derived from mental health
 - 1 entity of people with physical disabilities
- Number of participants per entity: 6-10 people per group
 - Year 2016: 50 farmers
 - Year 2019: 120 farmers





Stakeholders

Other relevant players:

- Different departments of Barcelona City Council hosting gardens on their rooftops and collaborations in educational and environmental dissemination.
- IRTA (Institute of Research and Technology in Food and Agriculture)
- Social canteens and Food Banks of the nearby territory (mainly people at risk of social exclusion and in the process of detoxification).
- Media (various press reports, audiovisual, radio, documentaries, etc.)
- Derivative academic research: high school final projects; degree, master and doctorate projects; research projects teams of national and international universities.





Stakeholders

Other relevant players:

- Educational and recreational services present throughout the life cycle of a person:
 - Kindergartens
 - Primary schools
 - High schools
 - Universities
 - Public services for young people and the elderly





Success criteria

As a social innovation project, the initial objectives were focused on:

- Improvement in the quality of life of the participants
 - Innovation in the use of hydroponics and testing the food quality of agronomic production in the city.
- However, the project has exceeded the initial expectations so we had to incorporate new implementation criteria.

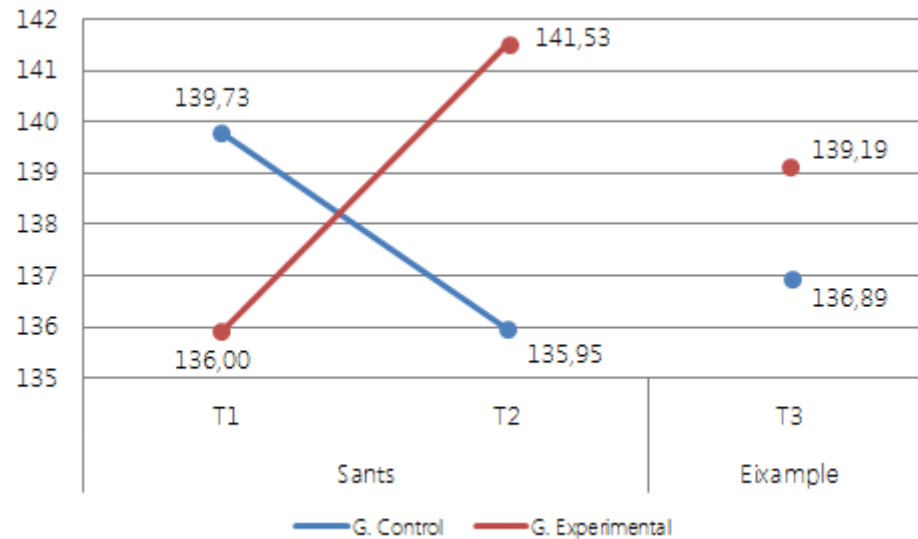




Results compared to success criteria

1.- Sociological study. BCNUEJ, UAB, ISGlobal. 2018.

- Main results: Improves quality of life index.
- Verification of the role change of the participating users





Results compared to success criteria

2.- Agronomic study. IRTA 2018.

- Main results:
 - Healthy foods promptly treated with phytosanitary products suitable for organic farming
 - Control of consumption, recirculation of water and reuse of nutrients.
 - High productivity outcomes. For example, tomato production in the Valencia Street garden:
 - 2017- 528.84 kg
 - 2018-578.84 Kg





Results compared to success criteria

Improvements based on the evolution of the project

- New profiles of people with disabilities.
- Improvement of the bidding process
- Giving production surplus to vulnerable groups, thereby improving the quality of their food.
- Learning and service project.





Results compared to success criteria

- High valuation on social interaction with other users and social interaction with municipal workers (from caretakers to managers)
- Increase in the tasks of the participants
- Improvement in waste management and water recirculation.
- Improvement in accessibility of municipal roofs and infrastructure.
- Greater variety of cultivation (cucumber, pepper, beans, courgettes ..)





Adaptability

- The project has explicit political support that guarantees its continuity.
- We have developed a defined work methodology that has been successfully replicated in each rooftop garden





Adaptability

What are the weak points to overcome... and the new paths to explore?

- We have looked for formulas to reduce economic costs without losing quality and, at the same time, improve energy efficiency and sustainability.
- We are looking for formulas with the aim of obtaining self-financing of the project itself taking advantage of a Km 0 products. Ex. City Markets.
- The new proposals include the establishment of networks with links to other closely related groups, such as the elderly.
- Overcome the limitation of locating roof gardens with vertical gardens.



Thank you for your attention!

Municipal Institute for People with Disabilities

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