Urban Agriculture Observatory: Social and Ecosystem services

The Urban Agriculture Observatory is a partnership aiming to establish a database of environmental and social aspects of urban allotments and their benefits. Based on the database, a public web platform is created to share collected data and bring urban agriculture closer to citizens. It is intended to position Barcelona as a reference in urban agriculture policies.

47 allotments

Estimated annual production
357,919 kg/year

Nature-based Solutions Benefits

Human Wellbeing

Resilience

Challenges

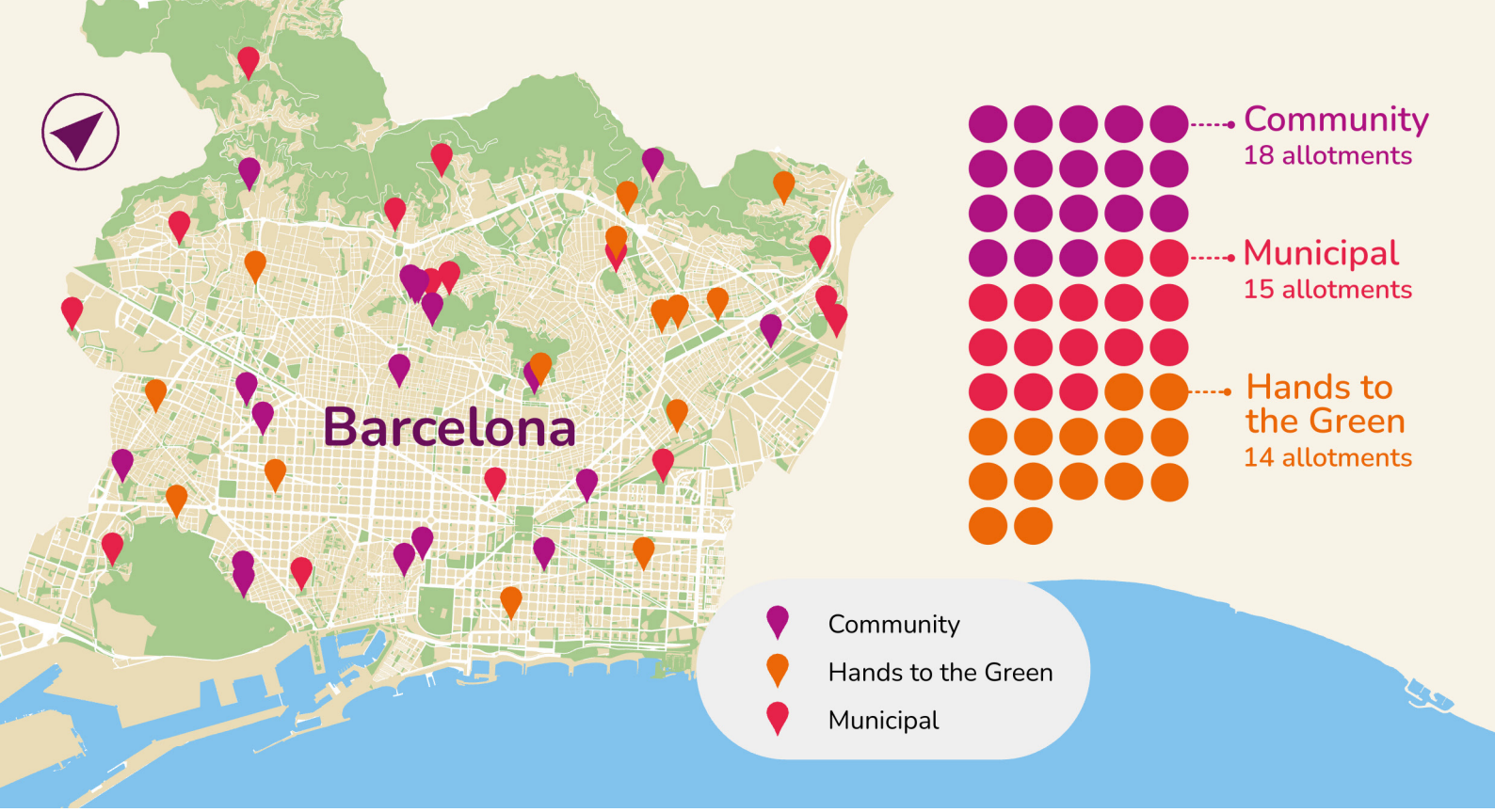
Provide management tools and support to the city administration.

Create a space for communication and participation.

Background

The importance of living in cities, that are environmentally and socially sustainable, is more and more acknowledged. In Barcelona, this led to an increase of urban allotments and urban agriculture in recent years. Urban allotments offer a variety of ecosystem services within the city. Originally, urban allotments were developed for food production for urban areas, nowadays people see them more as spaces for recreation and social interaction, where they can experience nature and improve their health. Yet, they are also an important component of the urban green infrastructure network in Barcelona. The Urban Agriculture Observatory intends to link urban agriculture with green infrastructure to provide ecosystem services and enhance biodiversity in the city, as well as to provide management tools to the administration.

Photos by Barcelona Regional



Urban Allotments in Barcelona

In Barcelona, there are different types of urban allotments: allotments managed by the City Council, community allotments, allotments on roofs and balconies, hydroponic allotments, and therapeutic gardens. The Urban Agriculture Observatory focuses on a representative sample of urban allotment types in Barcelona. It is made up of all the municipal gardens, the gardens of the "Hands to green" program, and a selection of community and social gardens.

The Barcelona approach

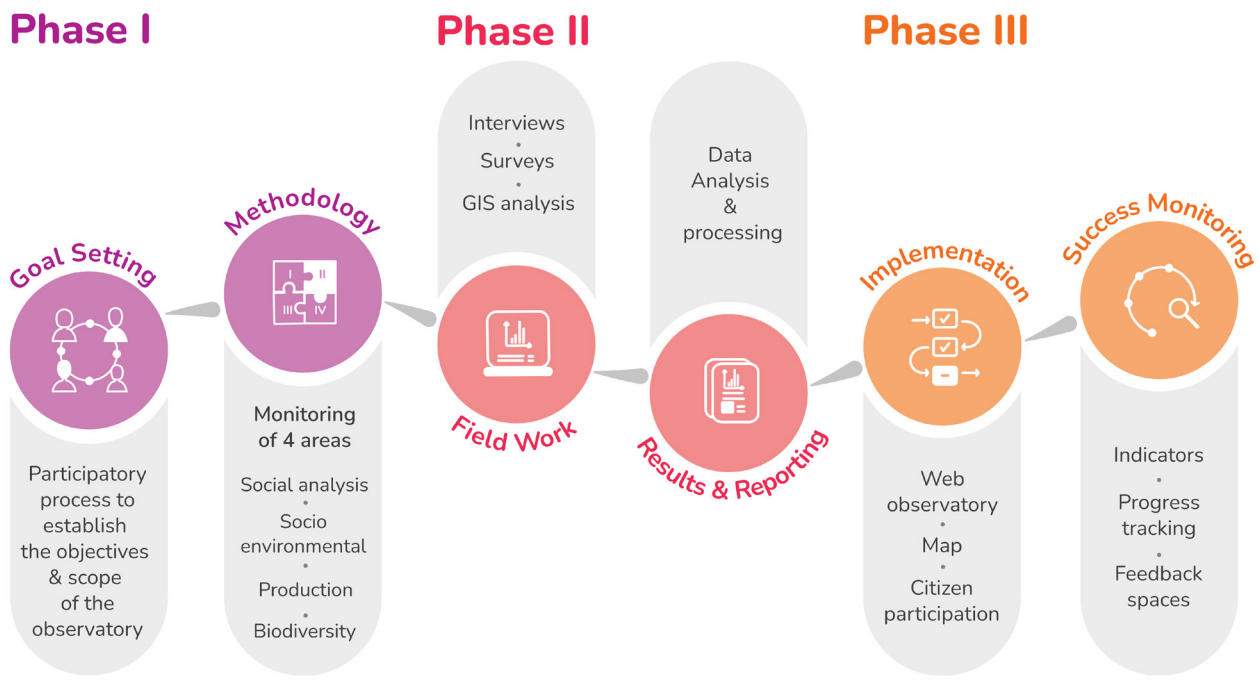
The development of the Urban Agriculture Observatory has been designed in 3 phases and 6 stages. During the first phase, the objectives, expectations and methodology to be followed at the observatory were discussed by technicians from Barcelona Regional, CREAF and the Barcelona City Council. The second phase included field work on the urban allotments involved in the pilot and the data processing. During the last phase, we will launch the Web Observatory for Urban Agriculture to monitor and evaluate the data collected in phase two.

Monitoring methodology

The monitoring has been divided into 4 areas: users, socio-environmental services, estimation of agricultural production and cultivated biodiversity. We developed a methodology based on a combination of field and desk work. In terms of fieldwork, 242 surveys have been carried out with users and entities. In addition, socio-environmental indicators were collected across all urban allotments, where people who have participated in the production study were surveyed. Some of the main results are summarized in the following section:

Users

The average profile of a municipal allotment user is a retired person between 65 and 85 years of age. 80% of users are



men and 20% are women. For cultural and generational reasons, women in this age range generally tend to stay at home. Knowing this information, future policies can be applied to encourage women to participate in urban agriculture.

Social and environmental services

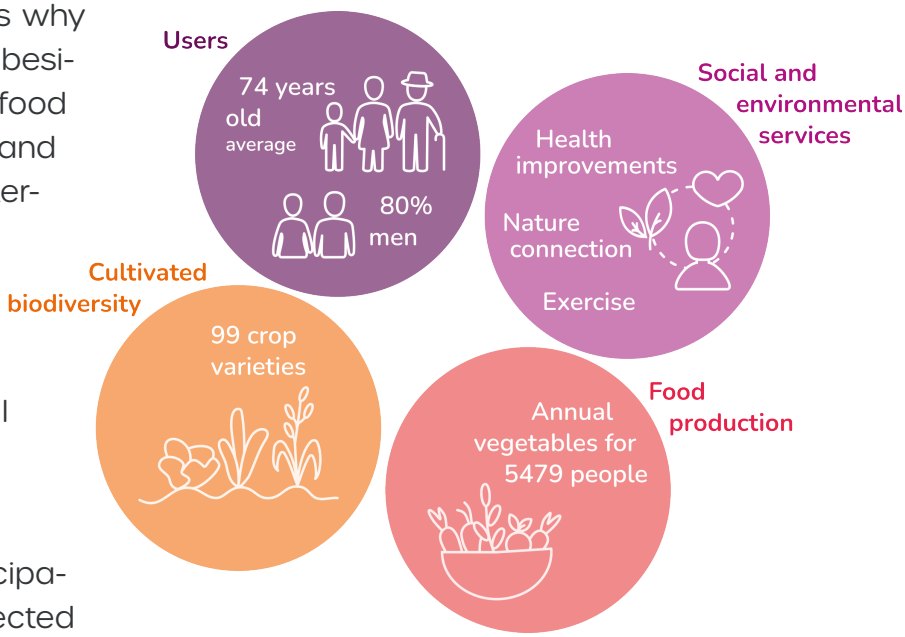
Our results indicate that most of the users perceived improvements in physical and mental health since joining a garden. The main reasons why people visit the allotments besides growing their own food are social relationships and the opportunity to do exercise, while connecting with nature. Almost all users practice organic farming on the allotments and use ecological phytosanitary products.

Food production

The users, who have participated in the study, have collected 1.497 kg of products from 26 different varieties. It is equivalen to an estimated annual production of 357.919 kg/year, which would cover the vegetable needs of 5.479 people.

Cultivated biodiversity

There is an outstanding diversity of cultivated species: 99 crop varieties were detected. Vegetable and aromatic



species stand out. Fruit trees are grown mainly in community urbans allotments. With the aim of increasing cultivated biodiversity, in the framework of the CONEXUS project we have carried out several participatory workshops for users to promote local varieties.

Implementation

The Urban Agriculture Observatory is implemented with the aim of publishing the results obtained and involving citizens in participatory activities around urban agriculture. In total, eight actions have been defined to implement the observatory. Some of these actions have already been launched, such as conferences to disseminate results and seed exchange workshops. One of the most important actions is the creation of the Urban Agriculture Observatory Website, which will serve as an exchange platform for users and strengthen the knowledge about the benefits of urban agriculture.

Related Projects

AGRUPAR, Quito.
https://oppla.eu/casestudy/23366

ProGIreg, nature for renewal.
https://progireg.eu/

Edible Cities Network, Europe.
https://www.edicitnet.com/

Learn more in
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Key messages

1. Bringing together all stakeholders and define common objectives in a participatory way helps to optimize subsequent results.
2. The use of simple vs technical language proved to improve the communication with the users on the allotments.
3. Citizens are sometimes reluctant to participatory processes. The distribution of seeds of local varieties proved to be a successful way to involve and engage people in this pilot.

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City Partners

BR BARCELONA REGIONAL URBAN DEVELOPMENT AGENCY

Ajuntament de Barcelona

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