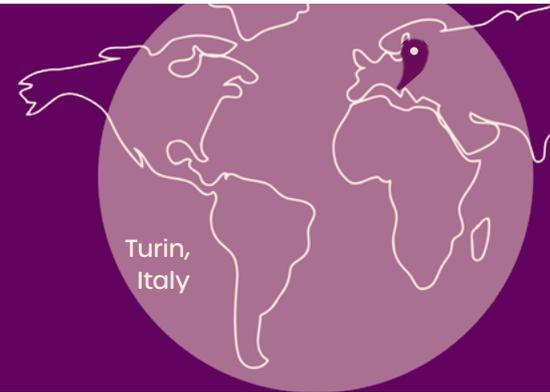


# Urban gardens "Orti Generali"

Contact: **Cristian Peña Alvarez -FAO**  
**Riccardo Saraco -**  
Comune di Torino  
**Matteo Baldo- Orti Generali**

Task: **T5.3**

Location: **Turin, Italy**



## Background (Step 1)

Mirafiori Sud, a large urban area located in the southern suburbs of the City of Turin, provided the context for the valorization study. The neighborhood enjoys a strategic location with 600,000 m<sup>2</sup> of green spaces and views surrounded by Colonnetti Park, the Sangone Stream and Piedmont Park. The latter park houses the Orti Generali, a hub for demonstrating Nature-based Solutions (NbS). The area is recognized for its exponential growth between the 1960s and 70s due to a massive migration of people, mainly from southern Italy, attracted by the job opportunities offered by the automobile company FIAT. Due to global economic and social reorganization in the 1990s, industrial facilities and green and community areas in the neighborhood were gradually abandoned. This downfall brought landscape, social, and economic problems related to housing availability, disservices, social conflicts, insecurity, and degradation of green areas. These structural problems urgently pushed the local government and civil organizations to foster urban transformations and harmony between residential and green areas in this city area.

## Core Vision Statement (Step 2)

“**Urban gardens initiative**” is part of the large NbS hub of “Orti Generali” in the neighborhood of “Mirafiori Sud. The initiative aims to **provide the local community with social, economic, and environmental benefits and services**, It particularly focuses on residents in disadvantaged and deprived situations. In the short term, the NbS project aims to promote and offer accompaniment to urban-environmental transformations in some areas of the Mirafiori Sud neighborhood, especially areas with high levels of degradation but high potential for urban agriculture. The NbS project is about building urban gardens and a community. The local community, local government, and local civil associations are encouraged to work hand in hand to transform this neighborhood into a safe, greener, and vibrant place through close and active collaboration between citizens and stakeholders, while enhancing a higher sense of belonging.

In this context, fostering a resilient, active, and sustainable participation of local residents, business owners, government, academia, and associations is key to achieve a successful NbS project and initiative. In the long-term, the NbS project is designed to demonstrate that facilitating and creating synergies between urban and countryside areas can represent a benefit instead of a factor that compromises urban ecosystems.



### NbS details (Step 3)

It aims to offer urban agriculture benefits in its various forms: vegetable gardens for self-consumption, spaces for social agriculture activities, and educational activities as well as the opportunity to give back the community an open and living green space.

The NbS project foresees building around 170 urban gardens plots in an almost 12.000 m<sup>2</sup> space within the Piedmont Park and close to the Sangone water stream provided by the Municipality of Turin. A large proportion of these urban gardens are rented and strive to keep rates low. The other part is destined for local residents being chosen by their different criteria, such as economic, social and aging situations. This creates an opportunity to contribute to the restoration and conservancy of the entire local ecosystem in perfect harmony with the local communities.

**The local landscape and green areas are restored using modern and innovative urban agriculture practices supported by tools, such as intelligent water irrigation systems, under the guidance of landscape and social experts. However, some surrounding businesses and local residents may find the NbS as an obstacle to quietness. For optimum results, a multidimensional sustainable approach is used. The comprehensive approach combines tradition and modern urban agricultural techniques that:**

- Use and enhance the existing water canal system in Piedmont Park. No changes are made to the landscape and local ecosystem.
- Promote urban agriculture and organic cultivation techniques to bring people closer to nature, adopt healthier food culture and foster local ecosystem through sustainable land use and management.
- Use an automatic and digitalized water irrigation system to reduce waste water and build resilience for drought episodes. Single sensors are connected to the urban gardens.
- Collect and integrate data in an online open-source database available for the community.
- Provide constant supervision and support to urban gardeners with extension services for garden management and technical surveillance. In addition, staff promotes community engagement and participatory approaches.
- Preserve biodiversity by introducing about 300 trees in the surrounding area and design tree avenues, hedges to surround the vegetable garden plots and vegetable gardens with fruit trees.
- Carry out panels and activities to promote good food production practices between vegetable gardeners, build grassed corridors with former irrigation canals and encourage insects - especially pollinators - to cross them for nesting and wintering.

## Business Model Canvas (Step 4-5-6)

<b>Value Proposition</b>	Eco-social mindset, restoring local landscape, food waste awareness, multidimensional sustainability, inclusive approach.
<b>Key Activities</b>	<ul style="list-style-type: none"> <li>• Urban and local agriculture (i.e. vegetables and local fruit trees and pots)</li> <li>• Social interaction (i.e food workshops, seminars, scholar activities)</li> <li>• Consulting (i.e expertise of local agriculture and permaculture)</li> <li>• Community building (i.e residents meetings, volunteer, festivals ect)</li> </ul>
<b>Key Resources</b>	Land use, farm animals, people and staff, farming structures and equipment.
<b>Key Partners</b>	Public and private actors, third sector, civil organizations, academia.
<b>Key Beneficiaries</b>	Direct beneficiaries (local residents, citizens with fewer economic opportunities, visitors, students) Indirect beneficiaries (public and private actors, local businesses, academia)
<b>Governance</b>	Peer-based approach, collaborative and community-oriented governance.
<b>Cost Structure</b>	Agriculture and operative staff, farm and technological equipment, personnel, operative services, visibility.
<b>Cost Reduction</b>	Green operative costs, food and ecosystem costs, public governance costs.
<b>Capturing Value</b>	Community and environmental value, governance and economic value.



Before NbS implementation



After NbS implementation





## Lessons Learned:

- The guide is very clear and easy to use with a step-by-step methodology. Having an open-mind approach is helpful when using the guide as this can help to go beyond common schemes, values, or benefits. In this sense, there is a better chance to explore alternatives such as different perspectives or values (i.e., governance or heritage value).
- Although the guide offers value tools, including templates or models, further research can help to keep up with emerging trends and identify new models that may better fit the local NbS initiative.
- **Using this guide in a multidisciplinary work team is a good idea to see and analyze the whole NbS development process from different views, knowledge and perspectives.**
- Giving room for flexibility during the valorization process helps to create plans that are better suited to the peculiar local needs and contexts.
- The guide is a **perfect tool for different types of users**, from those who already work closely to NbS context to those who are just approaching them.

This case study applies the valorization framework outlined in the guide "Capturing the Values and Making the Business Case for Nature-Based Solutions" (Konijnendijk et al., 2024). Tested in Turin, Barcelona, Lisbon, Lima, and Buenos Aires, the methodology provides a systematic approach to assess, communicate, and leverage the environmental, economic, social, and health benefits of NbS, ultimately supporting their implementation.

#### Reference:

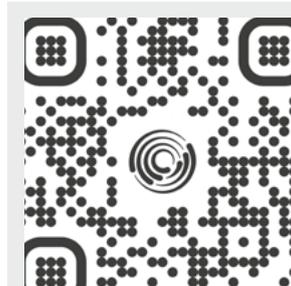
Konijnendijk, C., Di Cagno, F., Borelli, S., Wild, T. (2024). Capturing the Values and Making the Business Case for Nature-Based Solutions: A Step-by-Step Guide. Deliverable 5.3, H2020 CONEXUS project.

#### Photos source:

Guide "Orti generali\* la campagna arriva in città"



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 867564



Learn more at  
[conexusnbs.com](https://conexusnbs.com)