

National Final Report

Portugal

WP5 Activity 6: Reporting



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Introduction

Being a project designed by RightChallenge in partnership with Gaiurb, the Municipal Company of Vila Nova de Gaia responsible for Urban Planning and Social Housing, the area of intervention for the implementation of the Co-Bio Portuguese local case were abandoned areas or small garden areas of social housing dwellings in Vila Nova de Gaia.

The project's main objective was to redevelop three abandoned green areas in three social housing dwellings by creating Tiny Forests, totalling an intervention area of 460 m² involving a multidisciplinary expert team and the resident population throughout the process.

The following criteria were used in the selection process for the sites targeted for improvement:

1. Location: Urban areas where habitat fragmentation is most evident.
2. Population density in the project area.
3. Promising areas: Areas with potential for development.
4. Identification of urban heat islands.

The main specific objectives include:

1. Requalify abandoned green areas by creating Tiny Forests, increasing the diversity of native flora and providing favourable habitats for urban fauna, especially pollinating insects.
2. Promote the active participation of resident communities, fostering a sense of belonging and shared responsibility for the maintenance of new natural spaces.
3. Integrate nature-based solutions into the management of public spaces, reducing degradation, increasing climate resilience and improving environmental quality. Simultaneously, raise awareness and educate the population about the value of urban biodiversity through participatory activities.
4. Create micro-ecological corridors which, even on a small scale, contribute to reducing the fragmentation of urban habitats.

Geographic and demographic context

Vila Nova de Gaia is located in the north-western region of Portugal, on the Douro Litoral coast, and covers an area of 168 km². Its territory is characterised by a combination of dense urban areas, industrial areas, rural areas and an extensive Atlantic coastline, factors that create a significant ecological mosaic.

Vila Nova de Gaia is the third most populous municipality in Portugal, with over 310,000 inhabitants and a population density of 1,847.5/km². The population is mainly urban, concentrated in the parishes closest to Porto and the riverfront.

High population density and urban expansion make green spaces, ecological corridors and microbiodiversity even more essential.

Initial state of urban biodiversity and green spaces

Vila Nova de Gaia has a diverse network of green spaces, including urban gardens, green areas integrated into urban developments, forest areas, forest parks, peri-urban agricultural areas and natural spaces such as dunes. However, these spaces are somewhat fragmented, with few continuous ecological corridors. Vila Nova de Gaia has 12 urban parks/gardens, seven of which are located in essentially urban areas.

In addition to these, Vila Nova de Gaia has:

- a Local Nature Reserve in the Douro River Estuary;
- a mini-reserve of the Aguda Beach Dune Ecosystem;
- the Castelo Botanical Park, located south of the Douro River, on the outskirts of the city, which has an important archaeological aspect, where it is also possible to find native species and endemisms from northern Portugal;
- the Biological Park located on the outskirts of the city, consisting of 35 hectares of agroforestry area where hundreds of species of animals and plants live in the wild. This park also has a Wildlife Recovery Centre, which receives, treats and returns wild animals to nature.

Key environmental challenges and opportunities identified

The area of intervention for the Co-Bio project was abandoned green areas or small garden areas in social housing dwellings in Vila Nova de Gaia. These spaces are often degraded, fragmented or underused, reflecting some of the main environmental challenges identified in the territory, namely the lack of ecological connectivity, the decline in urban biodiversity and the existence of areas with poor landscape and environmental quality. To respond to these challenges, the local case implementation adopted a renaturalisation strategy based on nature-based solutions, through the creation of Tiny Forests - small dense forests, consisting mainly of native species, which promote rapid ecological regeneration. This approach represents a concrete opportunity to improve the quality of urban ecosystems, increasing local biodiversity, creating micro-habitats favourable to pollinating insects, strengthening climate resilience and contributing to increased shade, water infiltration and mitigation of heat island effects.

At the same time, the project implementation made it possible to transform neglected areas into living spaces that are safer and more aesthetically pleasing, enhancing the well-being of resident communities. The creation of Tiny Forests represented an opportunity to promote environmental regeneration, community participation and a new approach to the ecological management of municipal green spaces, in line with contemporary urban sustainability practices.

Co-Creation process

a) Stakeholders

RightChallenge

Participated in the Co-Bio project as an official partner responsible for facilitating the local case in Portugal.

Gaiurb

Participated in the Co-Bio project as an associate partner. As the Municipal Company responsible for Urban Planning and Housing in the municipality of Vila Nova de Gaia, played a crucial role in the success of the Portuguese local case. In addition to owning the urban areas where the Portuguese local case was implemented, Gaiurb promptly provided a multidisciplinary team of senior managers, landscape architects and social action technicians who were deeply involved in the design and implementation of the Portuguese local case.

Once the collaboration with Gaiurb was agreed, and taking into account the context of the local case developed, the strategy of recruiting participants belonging to the main target group for its implementation was also initiated, namely the residents of the social housing dwellings selected for the implementation of the Tiny Forests. The continuous presence of social action technicians throughout the process proved to be fundamental in acting as a catalyst for the presence of the main target group. It was the pre-existing relationship between the residents and the social action technicians who carry out their daily work in each social housing dwelling that promoted the residents' confidence in the project in question and the continuity of their involvement. This intervention by social workers who are highly familiar with the main target group made it possible to identify the groups of people who generally engage in the type of activities planned for the project, allowing them to be invited individually to participate in the activities in question, while also acting as catalysts for the participation of other residents.

b) Implementation

Once the idea for the Portuguese case study had been conceived, the multidisciplinary team mobilised to carry out this project was involved in the entire process. A detailed action plan for the implementation of the idealised Tiny Forests was prepared by bringing together the contributions of all members of the multidisciplinary team. In addition to the multidisciplinary team of specialists, community involvement was also properly planned and monitored as a complete cycle: from dream to action, culminating in ongoing care after planting. All activities were designed to maintain the involvement of the different stakeholders throughout the process.

Of the methods used for the co-creation of Tiny Forests in Portugal, the following stand out:

Presentation sessions for each local community

One of the first steps taken to implement this project was to hold presentation sessions for the local communities of each social housing dwelling. These sessions were characterised by their interactivity and the space dedicated to considering the opinions and concerns of the residents of each site. A practical example resulting from these sessions can be the concern expressed by residents about the possibility of the project results being damaged by neighbourhood dogs, which led to the decision to put a fence around one of the chosen sites, adapting the general idea to the specific reality of that neighbourhood. To this end, there was also a need to adapt the language through which the project idea was conveyed to the target group, translating technical language into a symbolic and emotional one. The use of 3D images representing the intended final appearance of each project proved extremely useful.

Holding environmental education workshops and seminars

Throughout the project implementation process, various environmental education workshops and seminars were held, using theoretical and practical activities, such as activities with DIY components, composting and planting species. The main purpose of these activities was to raise awareness in the community about the concepts of biodiversity, sustainability and ecology, as well as to maintain the enthusiasm of participants throughout the project, especially while it was not possible to obtain visible results from its implementation.

Activities with children and young people

In addition to the activities carried out with residents in general; to involve the population of the dwellings in the best possible way, activities specifically aimed at children and young people residing in these sites were also carried out. These included dynamic presentations, educational games and drawing and painting competitions related to the themes of biodiversity, sustainability and the concept of Tiny Forests. In addition to capturing the attention of children and young people on the topics in question, these activities also contributed to the enthusiasm of their parents and other family members for the project.

It was precisely the coordination of all these activities by a team of dedicated professionals representing different stakeholders that enabled the co-creation process to achieve inclusiveness and representation from various community groups, namely different age groups, from children to the elderly, and different social groups, characterised by distinct backgrounds.

During the co-creation process, the biggest challenge encountered was related to the bureaucratic processes associated with public procurement. This dependence on external deadlines led to a delay in the physical execution of the project in two of the chosen sites and prevented the implementation of a Tiny Forest in the third chosen site. This particularly led to the direct challenge of maintaining community involvement without the appearance of immediate visible results. It was possible to manage this problem, especially due to the commitment of the entire team involved in the project to

prepare and promote activities with the target audience that encouraged this engagement and interest maintenance.

c) Developed Solutions

The management of human, financial and material resources was ensured by the multidisciplinary team, composed of senior managers, landscape architects, social action technicians and the residents of the social housing dwellings themselves. This diversity ensured an integrated approach, promoting dialogue and the development of solutions tailored to the real needs of the community.

At the financial level, each partner country received a budget of 6,000€ for the purchase of essential materials for the implementation of the local case. In the Portuguese case, this amount was used to purchase land, vegetation, gardening materials such as shovels and watering cans, among other items, as well as printing and other materials for the developed activities beyond the planting itself. In addition, the funding also included a combination of own and community funds, managed with rigour in view of the bureaucratic challenges, namely the deadlines required by public procurement, which demanded resilience and intensive planning on the part of the team.

The steps for implementing the co-created solutions included:

Analysis of the partner network and selection of locations, promoting meetings to identify needs and opportunities.

Detailed preparation of spaces, involving residents in participatory planning sessions.

Conducting workshops and educational activities to raise awareness and empower participants to implement and maintain green spaces.

Execution of physical interventions, namely the planting of Tiny Forests, always with technical support and active community involvement.

Monitoring of results and promotion of ongoing care by residents, accompanied by social action technicians through a role of mediation and support.

This process showed that the flexibility of the methods used, the valuing of local contributions and the facilitating role of the technical teams were decisive in ensuring the impact and sustainability of the solutions developed collectively.

Key outcomes and lessons learned

The main impacts of the implementation of the Portuguese local case can be divided into different areas, described below:

Environmental impacts

Conversion of land into new green spaces resulted in an increase in local biodiversity and a consequent increase in the resilience of urban ecosystems.

Improvement in air quality in urban areas due to the absorption of pollutants.

Mitigation of the effects of climate change due to CO2 capture, also reducing urban heat islands.

Social impacts

Active contribution to the environmental education of the local community, as well as to social inclusion, which is directly related to the well-being of the community.

Promotion of synergies and cooperation not only between the community, but also, for example, between NGOs and companies, also promoting increased dialogue, moments of sharing, coexistence and learning between residents and technicians.

Empowerment of the community through practical action, which has increased the sense of collective responsibility for the territory.

Cultural impacts

Tiny Forests have come to be recognised as a symbol of care, identity and community collaboration.

In addition to the set of impacts mentioned above and following on from the main lessons learned during the implementation of the project, there are some key perspectives regarding the process of community involvement and empowerment. Among these are:

Co-creation is a relational process, not just a participatory one, which involves active listening, empathy and translation between different worlds.

It is the development of a prior relationship that acts as a bridge to community trust and continued interest in getting involved in the proposed tasks, both in terms of training and local action.

Concrete actions are what transform concepts into experiences, and visible victories are crucial to generating motivation, pride, and commitment to ongoing care.

The Co-Bio project faced challenges mainly related to bureaucracy and mandatory public procurement, factors that significantly delayed and, in one of the chosen sites, prevented the implementation process and tested the ability to maintain participants' enthusiasm and involvement over time. However, the decision to maintain high ambitions was intentional, as opting for less demanding solutions would have facilitated execution but compromised the long-term impact and relevance of the project for the community.

Another critical challenge was sustained community involvement, especially given the context of social housing, where complex social obstacles and demotivation often exist. The role of specialised technical teams, particularly social action technicians, was

crucial in ensuring close monitoring, building trusting relationships and acting as a bridge between residents and the rest of the implementation team.

The project also revealed the ongoing need to translate technical language into more accessible, emotional and symbolic approaches, facilitating residents' appropriation and sense of belonging. The existence of a multidisciplinary team, open to dialogue and valuing diverse contributions, significantly enriched the co-creation approach and allowed for more integrated and innovative responses to the challenges that arose.

Among the main strengths of the project, the following stand out:

The multidisciplinary nature of the teams involved, which is essential for overcoming barriers, finding collaborative solutions, and strengthening links between different sectors.

The commitment to relational co-creation, characterised by active listening, flexibility, resilience, and visible victories.

The motivation provided by collective recognition of the project's benefits and the promotion of a culture of care and community identity in relation to the new green spaces.

The following weaknesses stand out:

Administrative constraints and the unpredictability of bureaucratic processes, factors that threaten scheduling, team cohesion and participant motivation.

The social complexity of the intervention territories, which required continuous and specialised monitoring, making it insufficient to rely solely on physical interventions without a social mediation strategy.

Strategies to improve future co-creation initiatives:

Ensure the involvement of all key partners from the outset of the project, promoting dialogue and a cross-cutting commitment to the objectives and methods to be adopted.

Focus on multidisciplinary teams and the value of social workers as a continuous link to the community, ensuring trust and resilience in the face of adversity.

Set realistic timelines for administrative procedures and strengthen internal communication strategies, ensuring motivation during any waiting periods.

Translate technical language into understandable and engaging content, promoting a true sense of belonging and active involvement.

Recommend greater openness and commitment from public decision-makers to unblock or simplify stages, enhancing replicability and impact in other communities.

The Co-Bio project thus shows that the success of co-creation initiatives depends as much on the quality of the partnership design as on procedural resilience and the active integration of all stakeholders over time.

Conclusion

The Co-Bio project has proven to have a positive impact both in terms of urban biodiversity and in promoting community well-being in the areas covered, especially in more vulnerable social housing contexts. The implementation of Tiny Forests has strengthened the local ecological structure, promoted micro-habitats and diversified green spaces, generating visible environmental benefits. At the same time, the active involvement of the community strengthened support networks, identity and sense of belonging, contributing to social cohesion.

Co-creation proved to be fundamental in addressing specific challenges in the area, mobilising technical skills and local knowledge, and facilitating the adaptation of solutions to the real needs of residents. The joint work between multidisciplinary teams and the community made it possible to overcome resistance, boost innovation and ensure the commitment of the different stakeholders throughout the process, even in the face of unforeseen obstacles.

To enhance the impact and replicability of this type of intervention, the following recommendations can be mentioned:

Invest in participatory processes from the outset, making room for active listening and dialogue between entities, technicians and residents.

Invest in specialised teams to ensure social mediation and maintain motivation, especially in complex contexts.

Identify and simplify administrative procedures, allowing for greater flexibility and responsiveness to the dynamics of the territory.

Adapt co-creation methodologies to different local realities, valuing the training of the agents involved and promoting a sense of belonging.

Promote institutional and political coordination to guarantee the means, resources and commitment of public authorities necessary for the sustainability and expansion of solutions.

In short, the Co-Bio project shows that the success of urban environmental and social regeneration depends on the effective involvement of all, the resilience of teams and the collective will to build innovative, adaptable and lasting solutions.



