



## Una manera de Racer Europa



Implementation of the urban tree plan on Ramón y Cajal Avenue by increasing green cover and biodiversity.

EDUSI Cieza 2025 Ciudad Integradora

# Programa Operativo Plurirregional de España

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Fondo Europeo de Desarrollo Regional

# GOOD PRACTICE REPORT, CITY COUNCIL OF CIEZA. IMPLEMENTATION OF THE URBAN TREE PLAN ON RAMÓN Y CAJAL AVENUE BY INCREASING GREEN COVER AND BIODIVERSITY

This operation, part of the "Revitalization of the urban environment, improvement of parks and gardens and development of urban tree management", is the result of the implementation of the "Strategic Plan for Urban Ecology and Biodiversity 2017-2032 for green areas and road trees in Cieza", and the action included in the document "Planning and design of two pilot experiences for the implementation of the strategic plan for urban ecology and biodiversity 2017-2032 for green areas and road trees in Cieza" both also 80% co-financed by the European Regional Development Fund (ERDF) within the framework of EDUSI Cieza 2025 Integrating City, through the Multiregional Operational Program of Spain 2014-2020.

The action has a total budget of 128.323,08 € and the **co-financing of the European Regional Development Fund (ERDF) is 102.658,46 €**, which is part of the thematic objective : "Protect the environment and promote the efficiency of resources" and is within the line of action: "Environmental improvement".

The good practice consists of planting trees on Ramón y Cajal Avenue, from the junction with Pedro Massa Pérez Street to the intersection with Jesús y María Street, over a length of approximately 370 metres, with the aim of increasing and improving the urban green cover as a new green infrastructure.

The scheme involved the removal of paving and the inclusion of criteria to improve urban trees and biodiversity, increase permeability through sustainable drainage systems and improve the efficiency of water resource management, including a ground-breaking system to avoid interplant interference and ensure the establishment of trees through structural cells.





Photo of the action at Avda. Ramón y Cajal

## WHY THIS ACTION IS CONSIDERED A GOOD PRACTICE

1. The action has been properly disseminated among the beneficiaries, potential beneficiaries and the general public.

The dissemination carried out in relation to the planting of trees on Avenida Ramón y Cajal was extensive among the beneficiaries and in line with the approved communication study.

In relation to **regulatory communication**, it has been published in the contract profile within the State Contracting Platform that the actions are part of the EDUSI and are 80% co-financed by the

ERDF within the Multiregional Operational Program of Spain 2014-2020 <a href="https://short.link/DAM3bK">https://short.link/DAM3bK</a>

The link has also been published on the website of Cieza 2025 - Integrating City: <a href="https://acortar.link/SaO0Kq">https://acortar.link/SaO0Kq</a>

A **permanent plaque** has been installed to highlight the key role played by ERDF funding in delivering the project.



Photo of the plaque

The City Council's municipal website has several publications:

Cieza en la red: <a href="https://acortar.link/MMJ0wm">https://acortar.link/MMJ0wm</a>

https://short.link/PxIpKh

It was also disseminated through social networks:



Twitter post

In relation to **complementary communication**, various publications have been made in local and regional digital media, as well as through press releases published in **the written press**:

La Verdad: <a href="https://acortar.link/800bt8">https://acortar.link/800bt8</a> Murcia.com: <a href="https://acortar.link/ab9V9v">https://acortar.link/ab9V9v</a>

A **video** reflecting the impact of the actions and the public's impressions was produced and shared on social networks:

Link: https://youtu.be/i0bz 5UC5bE

This video was broadcast as a **television commercial** on the local Fibranet channel.

An **informative brochure** has been produced for the residents of Cieza:





Similarly, training sessions were held in six primary education centres to explain the Strategic Project for Urban Ecology and Biodiversity, called "Cieza Biofilica del Árbol Placebo al Árbol Medicina". Here, the importance of a change in philosophy was explained, so that information about the action would reach the public in a more direct way.

In addition, on 5th June 2021, as a pretext for Environment Day, an urban ecology and biodiversity action was held, with third-year primary school children from the Madre del Divino Pastor School, located on Ramón y Cajal Avenue, winners of the Third Prize in the XI National School Competition "Let's take care of the environment", with a video about the street works and the importance of trees in the city. Click on this link to access the video: <a href="https://acortar.link/cvah4Z">https://acortar.link/cvah4Z</a>



The children took part in the planting of three white ash trees on the school pavement. <a href="https://short.link/9BQ9tp">https://short.link/9BQ9tp</a>



Photo of the planting day with schoolchildren

**A conference** was held at the Teatro Capitol de Cieza, with the participation of two national leaders in their respective fields, Gerard Passola Parcerisa and José Antonio Corraliza Rodríguez, and the presentation of a striking and innovative 3D video, prepared to disseminate the actions and the strategy for improving the green infrastructure of the city. This video can be viewed by following this link: <a href="https://youtu.be/i0bz\_5UC5bE">https://youtu.be/i0bz\_5UC5bE</a>.

The speakers' interventions focused on the change of model in the management of green infrastructure in the city and its benefits, providing numerous scientific references and recent studies that relate urban nature to the health and well-being of the population, complementing what was shown in the video made.



You can find out more about the event by following this link to the published news: https://acortar.link/EbA0HD

For this intervention, which implements and displays part of the actions of the Cieza Green Infrastructure Strategy, the City Council has received the following awards:

- IX Local Good Practices Award for the Climate, Nature-Based Solutions category, of the Network of Cities for the Climate of the Spanish Federation of Municipalities and Provinces (FEMP)
- Special mention of the jury of the 1st 2022 Tree Prize of the IFEMA Cities Forum

The media picked up on these awards. The following news items were published:

Eldiario.es <a href="https://acortar.link/UOhMQx">https://acortar.link/UOhMQx</a> <a href="https://acortar.link/qAot3t">https://acortar.link/qAot3t</a>

https://acortar.link/ciTtQo https://short.link/W to qFmm https://acortar.link/3XG0us

Murcia.com

### 2. The action incorporates innovative elements

The municipality of Cieza is one of the municipalities in the Region of Murcia that has integrated green infrastructure into local urban planning, almost entirely funded by ERDF.

It is also committed to pioneering policies for the renaturation of the urban fabric and joins the ranks of municipalities around the world that are committed to what is known as "*urban forestry*", which goes beyond considering urban gardening as an aesthetic element, but as an element that improves the physical, mental and spiritual health of citizens, contributes to safer, less conflict-ridden and more liveable cities and, above all, mitigates the effects of climate change.

A pioneering system has likewise been designed to avoid disturbance and ensure the establishment of trees through structural cells. These are designed to provide the right conditions for the integration of the tree into the urban environment, promoting healthy growth without compromising or disrupting paved surfaces. Similarly, sustainable drainage systems and rain gardens have been installed to collect run-off water.



Also new is the multifunctional role that will be applied in all phases of the design and management of green infrastructure, using a combination of new technologies for assessing ecosystem services, nature-based solutions, urban biodiversity assessment and a participatory methodology, so that citizens are involved and aware of the changes taking place in their city. An example of this is the urban ecology and biodiversity action celebrated on 5th June 2021 in Ramón y Cajal Street, with the students of the Madre del Divino Pastor School, as a pretext for Environment Day.

The proposal of the City council implements a new management model for urban trees and biodiversity based on the principles of modern arboriculture, which allow pruning costs to be reduced by 30%, freeing up the rest of the budget for new plantings, maintenance, and to ensure plant health.

In this sense, it should be noted that in June 2022, within the framework of the 4th Forum on the Environment and Sustainability (FSMS), where good practices that allow improving the urban environment through green infrastructure are known and promoted, the **City Council of Cieza received a special mention from the jury for its project:** "Cieza Biophilica. From placebo tree to medicine tree", which explains the new management model for urban trees based on the principles of modern arboriculture.



Photo of the award ceremony at the FSMS

On the other hand, at the end of September 2022 the Mayor of Cieza collected in the Malaga Provincial Council, within the IX Awards of the Network of Cities for the Climate of the FEMP, the first prize in the category of Solutions Based on Nature for the project "Biophilic Science, from the Placebo Tree to the Medicine Tree", which brings together all the principles implemented in the city as a result of the approval of the Strategic Plan for Urban Ecology and Biodiversity, co-financed with FEDER.



Photo of the award ceremony of the Network of cities for the climate

#### 3. Adequacy of the results obtained to the established objectives.

The main objective of this action is to increase green coverage and biodiversity, so that the city obtains the maximum environmental and health benefit associated with urban nature and mitigates

and reduces temperatures and, consequently, the impact of global warming <sup>1</sup>and the associated energy consumption, calculated in the *Sustainable Energy and Climate Action Plan* (SECAP), which was approved by the City Council .

In addition, the green area was of low quality, so a tree planting plan was drawn up that prioritised the quantity of trees, their quality and their total coverage. It includes species of trees and shrubs that are better adapted to the climate of Cieza, and a management system that seeks to achieve natural or modified natural sizes, minimising aggressive and unnecessary pruning and allowing maximum health and environmental benefits to be obtained, which, according to numerous studies, are linked to the amount of leaf biomass.



To achieve this, large and medium-sized trees have been planted in places specifically designed according to the reality of the street, and will be pruned according to their natural shape, so as not to interfere with the façade and to achieve the maximum benefit of covering, starting with the right tree in the right place.

On the other hand, an attempt has been made to calm the traffic on the avenue, since parking in certain sections was very dangerous, being one of the areas with the highest number of recorded accidents, as it is a regional road with high traffic intensity.

The project has solved this problem by creating more space for pedestrians through the design of pavements that are more comfortable to walk on, including rest areas with benches and shade, and by matching the available space to the real possibilities for traffic and parking.

<sup>&</sup>lt;sup>1</sup>The Sustainability Observatory, based on historical data recorded by weather stations, considers that the average temperature in Spanish cities has risen gradually over the last thirty years, even registering increases of over 2°C in the last fifty years.



On the other hand, the different tall and short species, used in the continuous flower beds, create an ecological corridor for urban fauna, a habitat with natural elements that prevent pests and reduce the use of toxic pesticides for humans.

Likewise, in addition to the purely aesthetic factor of the city, the efficiency of the management of water resources is improved by increasing the overall permeability through sustainable drainage systems, necessary to reduce the effects of the torrential rains that are common in the area, and by using, for the first time in the region, a system of structural cells that makes it possible to demonstrate the feasibility of implanting large trees with pavements that guarantee road traffic without affecting soil compaction.

## 4. Contribution to the resolution of a problem or weakness detected in the territorial scope of execution.

Despite the great natural heritage that surrounds Cieza, during the preparation of *the EDUSI Cieza* 2025 Integrating City, the scarcity of urban green areas was detected as one of the great weaknesses of the municipality, which, in Cieza, has a value of 5.7 m<sup>2</sup> per inhabitant<sup>2</sup>.

The percentage of street trees is also far from European standards (20%), being 8.9%. In turn, the Vegetal Biodiversity Index of urban trees is extremely low (more than half of the individuals belong to only three plant species, in breach of the 30:20:10 principle).

Before the action, the presence of trees on the intervened street was minor and of little environmental, functional and landscape value. It was excessively intervened; it was expensive to maintain and had hardly any benefit (placebo tree).

Between Cuesta del Molino and Pedro Massa Perez Streets there were nine  $Ligustrum\ lucidum$ . This small tree requires continuous pruning maintenance <sup>3</sup>to prevent fruit set. This is why it was decided to replace it.

After the action, the tree cover of the street was increased, since large and natural trees have been planted with less management costs and more benefits (medicine tree), such as: Fraxinus americana or Raywood angustifolia, (16 units); Styphnolobium japonica (5 units); Celtis australis

<sup>&</sup>lt;sup>2</sup> The World Health Organization recommends a value of between 10-15 m <sup>2</sup> of urban green areas per inhabitant.

<sup>&</sup>lt;sup>3</sup> It is estimated that approximately 70% of the budget allocated to green infrastructures in Spanish municipalities is spent on their pruning .

(3 units); Fraxinus angustifolia (3 units) and numerous shrub species that add colour, smell, plasticity and modernity to the space, using nature.



The project has also solved the problem of accidents by calming traffic, making the road safer and quieter.

It has also repaid a debt to the children, who now have more urban recreational areas with gardens, parks and trees.

## 5. High degree of coverage of the target population.

The benefits to the citizens of Ciez, in terms of biodiversity are very significant, taking into account a distance of 100 m to the areas of action, it is estimated that 20,164 people, that is, 65% of the population of the urban area of Cieza, benefit directly from the project.

On the other hand, the child population that gets larger urban recreation areas, with gardens, parks and trees, is particularly favoured.

Likewise, people with respiratory diseases, who see their quality of life improved, as well as strengthen their immune system, are particularly benefited. The benefits can also be quantified in savings for public health.

There is no doubt that local traders also benefit. The existence of this green area improves local economic activity in the street and contributes to a revaluation of its buildings by improving its aesthetic quality.

Finally, this action will also provide more shaded areas, more pleasant spaces in the urban area, which will allow both residents and tourists who are getting to know the municipality to enjoy walks around the city.

In short, the action has a great impact for the entire population of Cieza, as well as for its visitors.

## 6. Consideration of the horizontal criteria of equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability.

In this action, the horizontal criteria of equal opportunities and non-discrimination have been taken into account, generating green spaces that have an overall impact on the physical and mental health of all the inhabitants of Cieza.

In terms of social responsibility, it should be noted that the project incorporates a participatory approach through training activities that increase learning about the contribution of urban vegetation to the urban ecosystem, thus promoting environmental awareness and improving the knowledge of the population.

In addition, the quantity and quality of green areas improves social cohesion, reduces social and economic inequalities and minimizes the spatial segregation of disadvantaged groups, which live in the most vulnerable areas of the municipality.

Likewise, after all that has been said in this report, there is no doubt that the criteria of environmental sustainability have been taken into account by the municipality, which is not carrying out an isolated action, but is taking the opportunity to draw up a document of long-term strategic policies that will be implemented in other areas of the city and serve as an example to other cities in Spain through the numerous requests to participate in talks and conferences on the subject the municipal team has received.

#### 7. Synergies with other public intervention policies or instruments.

This action is in line with the Spanish and European Urban Agendas, with the Spanish Green Infrastructure Strategy, the 2030 Biodiversity Strategy and the Climate Change Adaptation Strategy.

In addition, the action establishes an integrated approach to naturalize the city and improve the urban ecosystem, creating synergies with six of the specific objectives of the Urban Agenda, which Cieza is developing, and with six adaptation measures present in its SECAP.





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