

# Urban Trees Technical Manual

Portoviejo, Ecuador

Arch. Estefanía Vega  
Arch. Ligia Vera



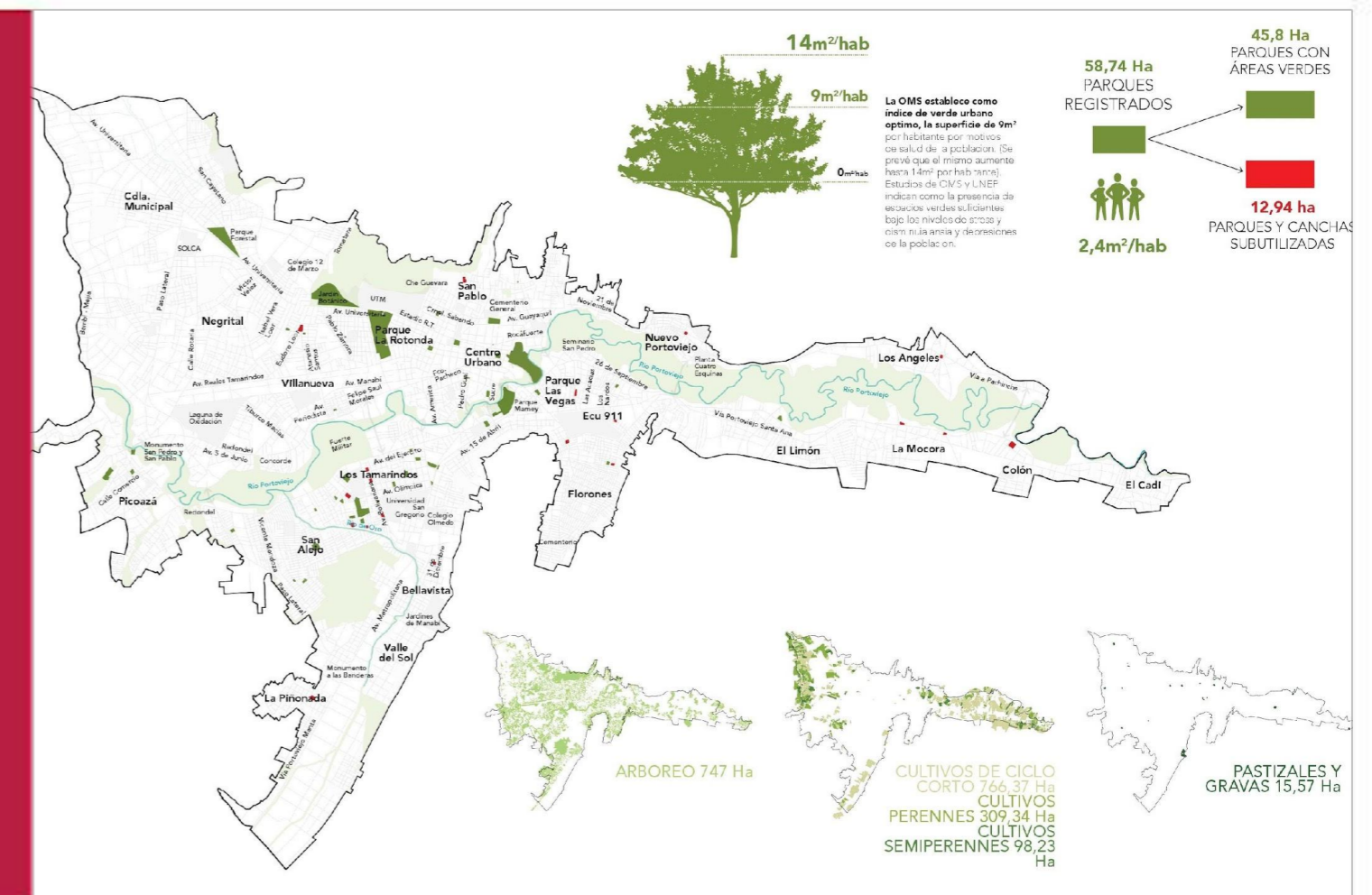
## Background

### MAIN CHALLENGES:

- Cantonal population: 81% urban and 19% rural.
- Surface area: 7% urban and 93% rural.
- The city of Portoviejo is surrounded by hills and is crossed by the Portoviejo River.

### CITY PROFILE

- It is characterized by a natural environment of great scenic value, a tangible and intangible cultural wealth and, above all, by the nobility of its inhabitants.
- The cantonal capital (year 2021) is 291,188 inhabitants, 15% of the population is located in the Portoviejo River Corridor.



## Approach



- The Urban Trees Technical Manual includes the identification of tree species, both endemic and introduced, for their application in urban planning with a focus on ecosystem restoration through urban trees.
- Urban trees contribute to risk mitigation in hilly and flooded areas.
- Appropriate use of urban trees as a measure to address the challenges of climate change.

As of 2022, to strengthen green infrastructure, the creation of the Technical Manual was initiated through a multi-stakeholder approach, including the collection of data on tree species and technical documentation.



## Methodology



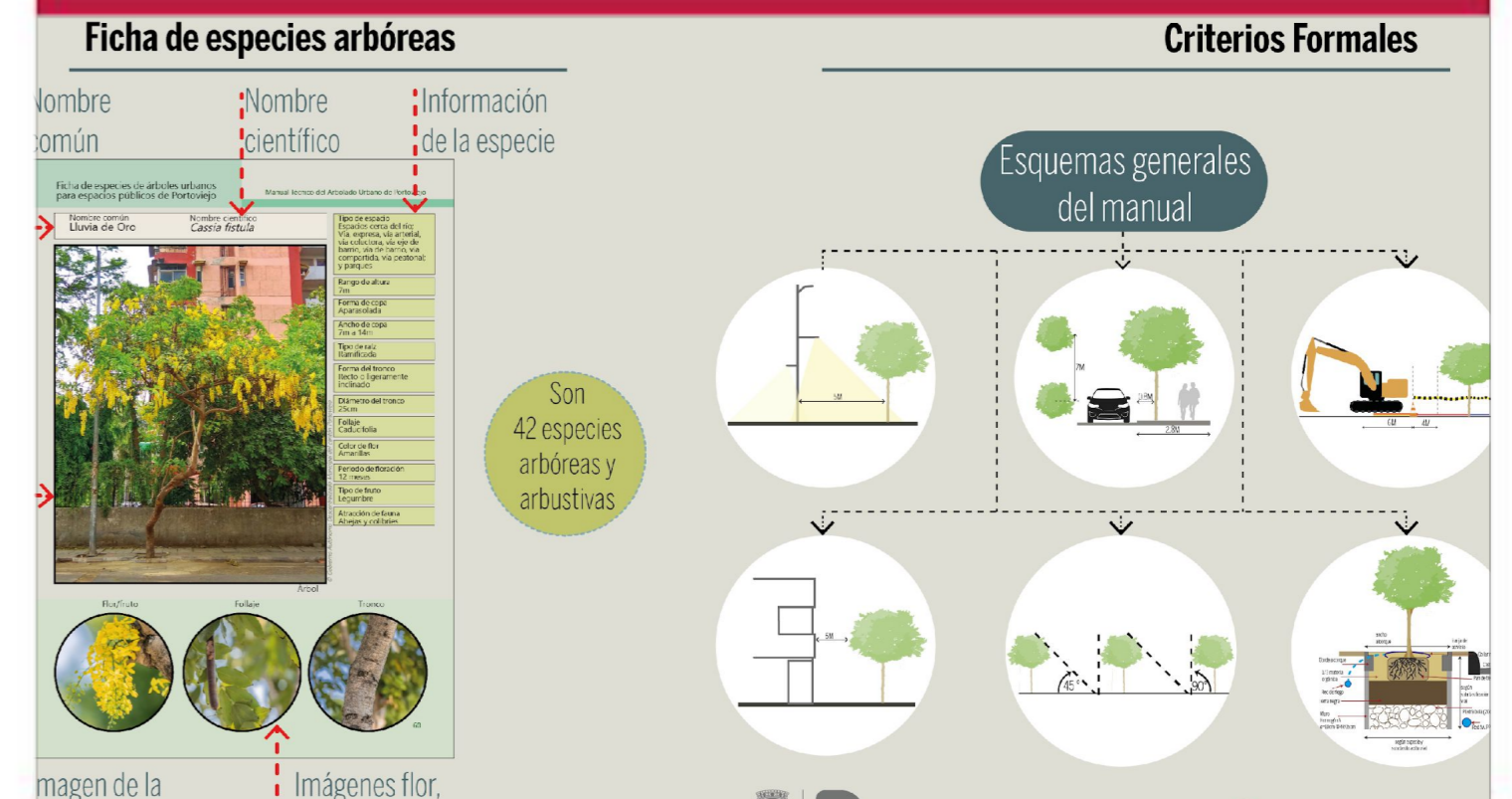
The process of participatory construction of the Urban Trees Manual has been carried out in two phases:

1. Elaboration of the base document in collaboration with the municipal directorates.
2. Incorporation of contributions from stakeholders both internal and external to the municipality.

The project is led by the Municipality of Portoviejo as the city's regulatory and planning entity, and involves the participation of municipal officials, academia, trade associations and nursery owners.



## Outcome



- The Urban Trees Manual has been proposed and is currently in the process of being approved.
- A register of tree species suitable for planting in the city has been compiled.
- Work has been done to raise public awareness of the importance of trees in sustainable urban development.

### Next steps:

- Approval of the Manual
- Socialization with stakeholders to promote its implementation.
- Promote this good practice with other municipalities.

## Lessons learned

- El Manual de Arbolado Urbano facilita la implementación de soluciones basadas en la naturaleza en entornos urbanos, que ayudan a abordar desafíos urbanos y a hacer que las ciudades sean más sostenibles y resilientes.
- El Manual proporciona directrices y recomendaciones para la gestión adecuada de los árboles en la ciudad, promueve la plantación y el cuidado adecuado de árboles, aumenta la biodiversidad, mejora la calidad del aire, lo que conlleva beneficios como la reducción de las islas de calor, la mejora de la calidad del aire, la captura de carbono y la creación de espacios verdes.
- El compromiso y la corresponsabilidad de los actores directos son elementos fundamentales para una planificación urbana sostenible y resiliente.
- En resumen, el manual es una herramienta valiosa para reforzar la infraestructura verde en las áreas urbanas.