



**CIUDADES POR LA NATURALEZA**

**Repensando los vínculos urbano-rurales para las personas y la biodiversidad**

# Sustainable and low-carbon agriculture

**Porto Alegre, Brazil**

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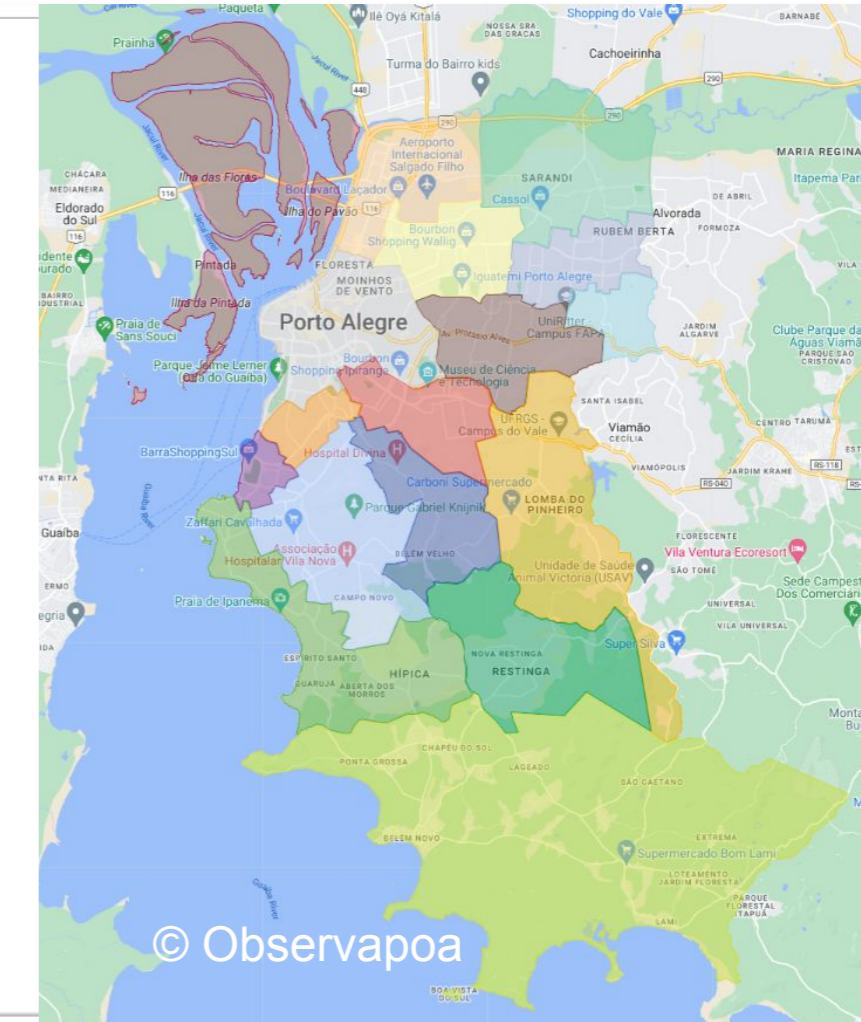
## Background

### MAIN CHALLENGES

- Promote the transition from conventional agriculture to organic systems and low-carbon methods;
- Promote and prioritize soil and water conservation practices and chemical reduction in rural and urban contexts;
- Encourage the implementation of community gardens, strengthening food security, promoting environmental education and strengthening the links between urban communities and sustainable rural practices.

### CITY PROFILE

- Population: 1,332,845 [2022]\*.
  - Size: 495,390 km<sup>2</sup> [2022]\*.
- \*IBGE Census



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## Approach



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### Actions

- Encourage the adoption of low-carbon practices and organic agriculture, through the purchase of inputs (fertilization, irrigation, seedlings of species), agricultural machinery, incentives for organic fairs, public-private partnerships, as well as technical and management assistance.
- Visits are being made to schools and public spaces, such as squares, for example, to set up urban community gardens that can serve as a model for other regions interested in promoting similar initiatives.

### Relevance for urban-rural linkages

- The relevance of this project lies in promoting sustainable and low-carbon agricultural practices, along with the expansion of urban community gardens, to strengthen food security, foster environmental education and establish replicable models that will drive the transition to a more conscious and sustainable agriculture in other regions.

### Solutions

- The project is based on scientific evidence and studies, focusing on reducing the use of chemicals in food production, protecting the soil through direct planting and mulching, increasing trees for nutrient cycling and promoting species diversity, thus contributing to the maintenance of biodiversity.
- The scientific basis supports the efficiency of these sustainable production practices, including agroforestry systems and soil protection with permanent cover.



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## Methodology



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### Initiatives

- **Reestablishment of the Rural Area - Complementary Law N° 775/2015:** Zoning of the Rural Area in the Master Plan, with focus on primary production, rural tourism and environmental preservation.
- **Pesticide-Free Rural Areas Law - Law No. 12,328/2017:** Established the Pesticide-Free Zone for Primary and Extractive Production in rural areas, within 15 years for adaptation (until 2032).
- **Implementation of the Food Acquisition Program (PAA):** purchase and distribution of food to people in situation of food and nutritional insecurity and the **National School Food Program (PNAE):** purchase of food from family farming, contributing to the growth, development and formation of healthy habits.
- **Ecological Fairs - Resolution 01/2023:** Spaces for direct sales from the producer to the consumer.
- **Construction of PLE 037/23 - Regulation of Ecological Fairs:** highlights the continuity of enclosures with current license and prioritizing the participation of local producers in eco-friendly systems.
- **Community Vegetable Gardens:** Space for sowing and community consumption with guidance and technical monitoring of design and planting of vegetables, fruit trees and tree lines.

### Objetivos

- Abarcan la apertura de nuevos mercados, abastecimiento del banco de alimentos, retención de población rural, promoción de asociacionismo, acceso a crédito rural, programas educativos y sanitarios, convenios para investigación agrícola, mejora de técnicas y especies, fomento de la producción agroecológica, y preservación de recursos hídricos y biodiversidad.



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## Outcomes



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### Next steps:

- The project will continue through the Porto Alegre Rural Development Plan, which unifies incentive initiatives for sustainable food production and preservation of natural resources, encouraging the transition from conventional to organic production.

### Challenges:

- Convincing the population to adopt more sustainable practices in soil management and water use, and the importance of the transition from conventional to organic agriculture, with consequent adaptation to climate change and reduced dependence on chemical inputs.

### Opportunities:

- Local production of fresh and healthy food, environmental and health education, waste management, ensuring food security in socioeconomically vulnerable regions and implementation of socio-educational measures in communities; promoting awareness of the importance of adopting low-carbon management practices to mitigate the effects of climate change.

## Lessons learned

### What were the key elements for the success of the project?

- Theoretical and practical lessons learned: Listening to the population and their demands, through technical visits to schools and communities, as well as meetings with rural producers.

### What could be improved, what would they have done differently?

- Availability of basic inputs, access to machinery, training, technical assistance, new sales spaces. All this process is already being implemented.

### How can your practice inspire or inform similar practices in other cities or contexts?

- The return of the population, through the demonstration of models that prove the effectiveness of the management adopted.