

Increasing urban resilience through a Productive Urban Green Infrastructure in Great Porto



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Aim of the Research

The main of research question is "How can landscape planning contribute to create more resilient cities and food systems in Portugal?" The research explores concepts and planning strategies to promote urban agriculture and peri-urban agriculture and uses municipalities in the Great Porto region as case studies. It aims to find opportunities to intersect studies on urban and peri-urban green areas, food production, and urban resilience.



Expected Results

The concept of Continuous Productive Urban Landscape (CPUL's), which integrates food production into the traditional features and functions of greenways, could become feasible in Portugal by incorporating cultivated areas within the municipal green infrastructure (Estrutura Ecológica Municipal). This approach can offer protection and revitalization to agricultural areas through existing policy instruments. The final product of this research will be a strategic proposal for the planning of a Productive Urban Green Infrastructure (PUGI) in Portugal, shaped by the opinions and perceptions of public and municipal stakeholders.



Research Strategy

The research will do a comprehensive analyses of concepts and case studies of food producing landscapes in urban and peri-urban areas to develop a framework for a planning methodology regarding the integration of food systems in green infrastructures to promote urban resilience. Design will be used as a tool for operationalize these strategies through public and local stakeholders' participation.



Main Concepts used

CPUL's, Agricultural Urbanism, Food Urbanism, Agropolitana, Participatory Planning, Urban Commons, Urban Resilience.



Applied Methods

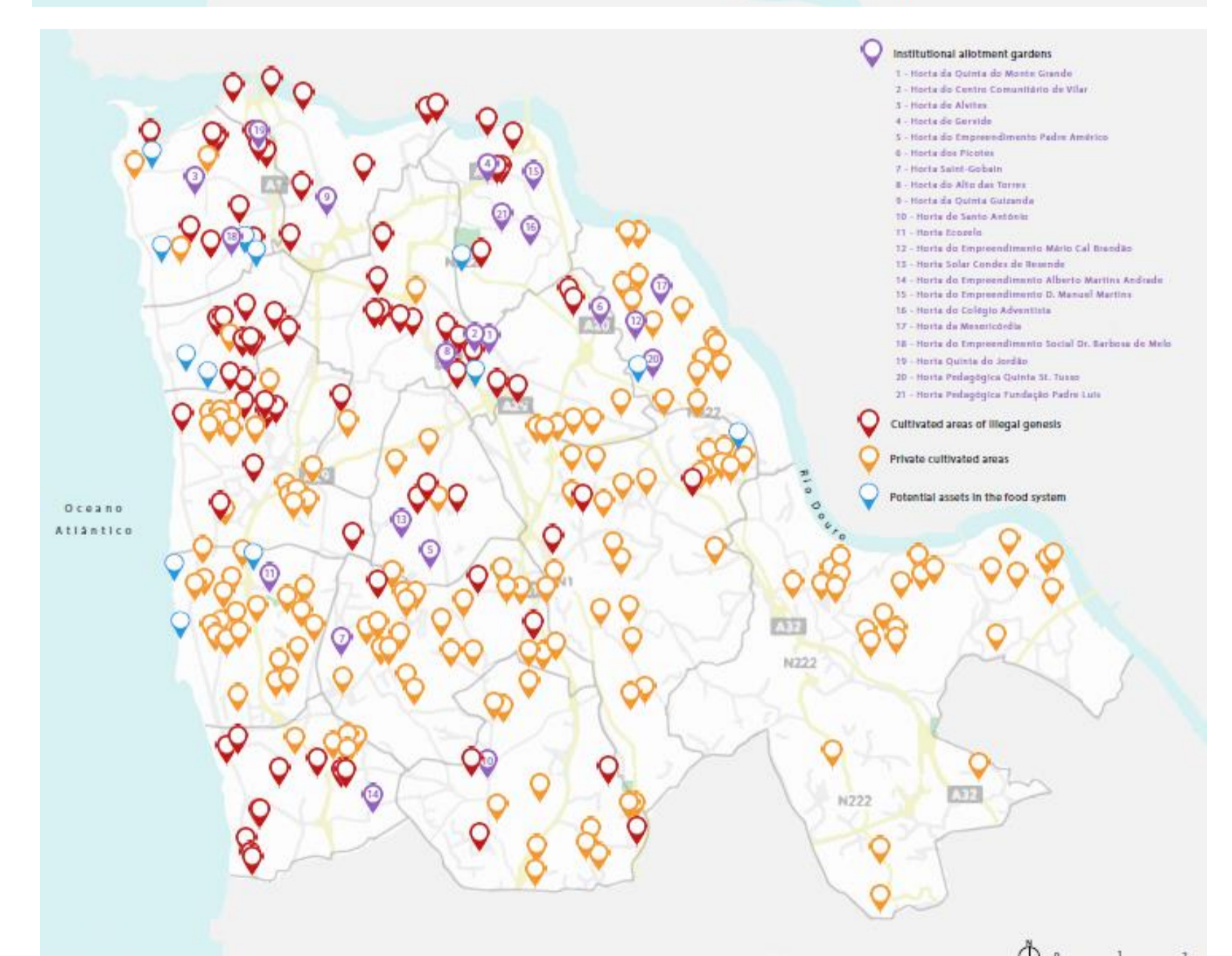
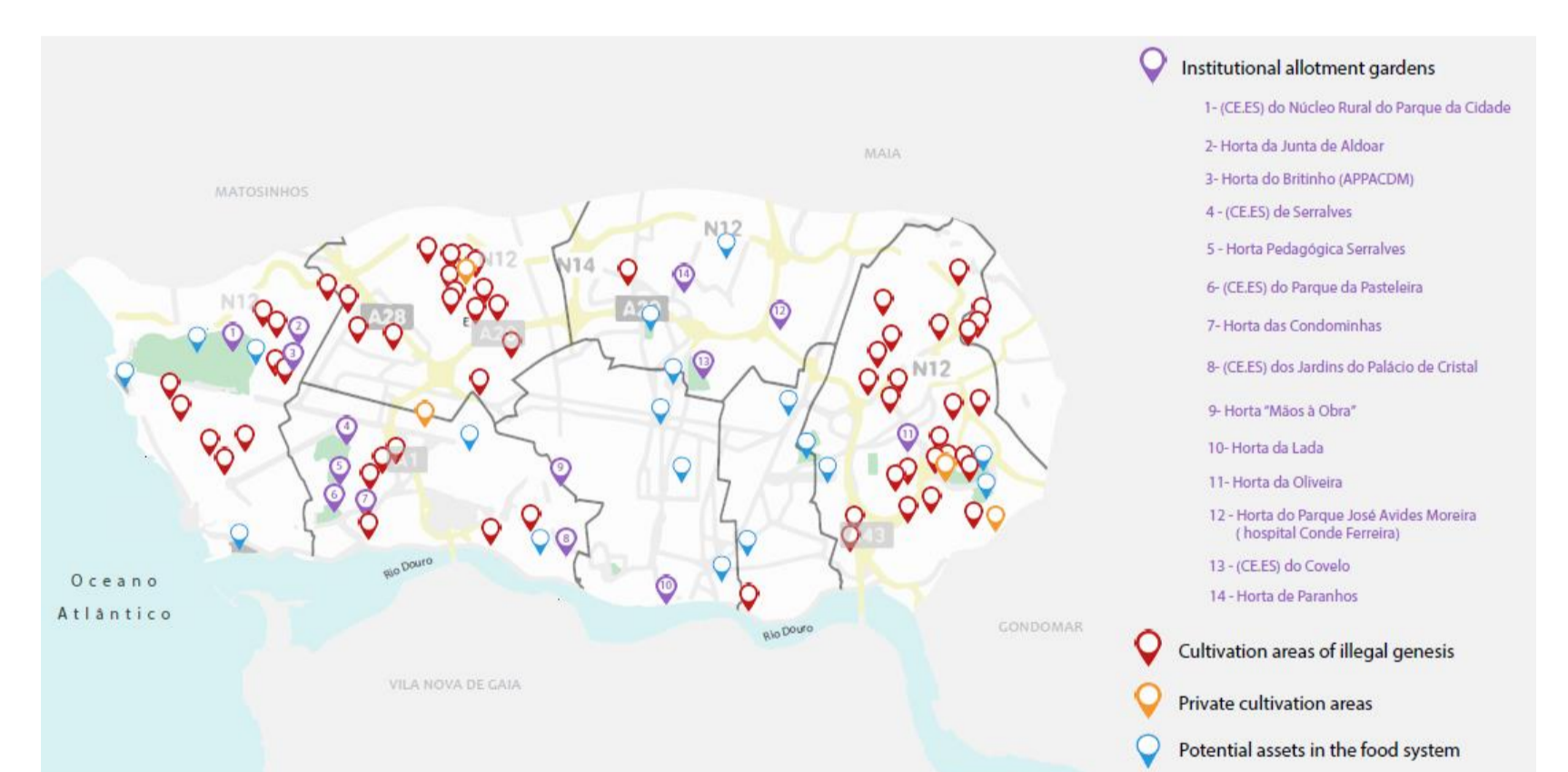
- Extensive literature review on concepts, theories, methodologies, and case of studies related to urban agriculture planning in the Global North;
- Analyses of land use maps, planning documents, existing projects for vacant areas, and proposals for new urban connections, among other relevant factors.
- Use of satellite images to map and classify the origin of food production areas (private, of illegal genesis, institutional allotment gardens, etc.), as well as significant elements and actors in the urban food system.
- Survey the public and local stakeholders of Great Porto about PUGI aiming to understand the degree of need, interest, and acceptance, and to identify the PUGI most relevant functions for the population.



CPUL's Concept
Source: Bohn & Viljoen (2004)



Institutional allotment garden in Porto, Portugal.
Source: <https://www.porto.pt/>



Analyses of satellite images to identify and classify food production land in urban and peri-urban areas in Great Porto, Portugal.

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