







The initiative called The Economics of Ecosystems and Biodiversity for Agriculture and Food (TEEBAgriFood) aims at equipping decision-makers with the tools and information to recognise the value that ecosystems provide to food systems

TEEBAGRIFOOD

# BRAZIL

# Urban and Periurban Agriculture in the Metropolitan Region of São Paulo (MRSP), Brazil

## **Context & Focus**

Brazil is among the main food producers and suppliers globally, being the largest producer of coffee, orange juice and sugar, and the second largest producer of beef and soybeans. While much of mainstream agriculture is done in rural areas, food production in urban areas is becoming more significant. Urban and Periurban Agriculture (UPA) has great potential to supply food to the urban population, while at the same time providing a range of ecosystem services to society.



Picture by: **Alf Ribeiro** "Family of farmers in a beet plantation, "Apiai, Sao Paulo, Brazil"



## Location

The contribution of Urban and Periurban Agriculture is evaluated in the Metropolitan Region of São Paulo (MRSP).

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

# - Facts & Figures -

- Currently, 22% of the MRSP is comprised of agriculture and pasture areas
- If agricultural areas continue to give space to urban areas, by 2030 there will be a significant decrease of ecosystem services (as compared to 1985 levels) such as -7% regulation of heat, -5% of flood mitigation and -28% in water supply. With the transitioning to sustainable UPA, even with urban expansion, the ecosystem services provisioned could be maintained at similar levels of 2019 and produce fresh food for 13 million people.











- The MRSP, one of the largest urban agglomerations of Latin America, comprises 39 municipalities and is home to 21.6 million people in an area of 7,945 km<sup>2</sup>.
- The MRSP contributes with 52% of mushrooms, 52% of spinach, 16% of kale, 10% of cabbage and 9% of lettuce produced in the country.
- In the current context of COVID-19 pandemic, 53% of households in the southeast region of Brazil have some level of food insecurity, and 85% of these have no access to fresh food.









# Methods & Objectives

The objective of the TEEBAgriFood in Brazil is to recognize the value of productive systems immersed in complex landscapes, having natural, economic, social, and human capital at the center of the analysis. Two initial studies on the challenges and contributions of UPA in the MRSP were developed in partnership with Instituto Escolhas (Escolhas, 2020; 2021). The first study1 concluded that enough fresh and healthy vegetables could be produced inside the metropolis to sustain its 20 million inhabitants. The second study<sup>2</sup> explored how this production could maintain and enhance ecosystem services such as heat and flood mitigation - it also highlighted the importance of improved irrigation techniques and availability of water in order to do so. The next steps are to develop scenarios in municipal scale favoring the decision making process to include UPA as nature based solution on urban planning.

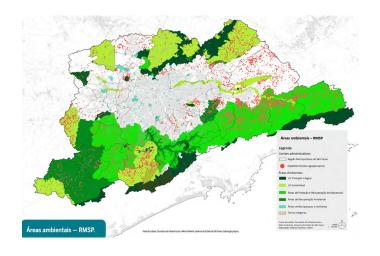


Figure 1: Conservation Units and other reserves and productive establishments in the RMSP (Source: Escolhas, 2020).

# **Project Duration:**

## November 2020 - December 2022

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#### **INSTITUTO ESCOLHAS**

- Escolhas, 2020. Closer than you think:
  the challenges for food production in the
  metropolis of São Paulo.
- Escolhas, 2021. Beyond food: the contribution of urban agriculture to well-being in the metropolis of São Paulo.