

## How to access land for producing organic food? Land policy options grounded in Torres Vedras, Portugal \*

### ¿Cómo acceder a la tierra para producir alimentos orgánicos? Opciones de políticas de suelo en Torres Vedras, Portugal

---

CECÍLIA DELGADO

PhD in Urban Planning

Post PhD Researcher, Faculdade de Ciências Sociais e Humanas, Centro Interdisciplinar de Ciências Sociais

Universidade Nova de Lisboa (Lisboa, Portugal)

[ceciliadelgado@fcsb.unl.pt](mailto:ceciliadelgado@fcsb.unl.pt)

ORCID: [0000-0003-4211-0614](https://orcid.org/0000-0003-4211-0614)

Recibido/Received: 29-09-2020; Aceptado/Accepted: 26-03-2021

Cómo citar/How to cite: Delgado, Cecília (2021), "How to access land for producing organic food? Land policy options grounded in Torres Vedras, Portugal", *Ciudades*, n°24, pp. 99-118. DOI: <https://doi.org/10.24197/ciudades.24.2021.99-118>

Este artículo está sujeto a una licencia "[Creative Commons Atribución-No Comercial 4.0 Internacional](https://creativecommons.org/licenses/by-nc/4.0/)" (CC BY-NC 4.0) / This article is under a "[Creative Commons License: Attribution-NonCommercial 4.0 International](https://creativecommons.org/licenses/by-nc/4.0/)" (CC BY-NC 4.0)

**Abstract:** Organic food demand in Portugal swiftly increases due to local governments willingness to include organic and locally produced food in school meals. We argue that local production is limited because there are no multi-sector or multi-actors approaches regarding land access, a necessity to secure local organic food supply. Based on a stakeholder's mapping approach and semi-structured interviews and taking Torres Vedras as a pilot study we conclude that local policies require a bundle of instruments which should be made suitable for local realities. Nevertheless, local authorities have a key-role to play as facilitators for accessing land for organic food production.

**Keywords:** land access, food policies, food governance, local authorities, Portugal.

**Resumen:** La demanda de alimentos ecológicos en Portugal aumenta rápidamente debido a la voluntad de gobiernos locales de introducir este tipo de dieta en las comidas escolares. Argumentamos que la producción local es limitada por la ausencia de un enfoque multisectorial y multi-actor en relación con la tierra necesaria para producir alimentos locales y ecológicos. A partir de un mapeo de actores y de entrevistas semiestructuradas en Torres Vedras, concluimos que las políticas locales requieren un

---

\* This policy study would not be possible without Foundation Calouste Gulbenkian-LEAP-Policy Development Initiative support, in addition to Torres Vedras municipality and local actors' collaboration. I would like to express my gratitude to the two anonymous reviewers whose comments helped to clarify this final version. A special thanks to Yves Cabannes for the edition of this version. The researcher is funded by national funds through the FCT – Fundação para a Ciência e a Tecnologia, I.P., under the Norma Transitória – [DL57/2016/CP1453/CT07].

conjunto de instrumentos, a ajustar en función de las realidades locales, y que las autoridades locales tienen un papel clave como promotores del acceso a la tierra.

**Palabras clave:** acceso a la tierra, políticas alimentarias, gobernanza alimentaria, autoridades locales, Portugal.

---

## 1. INTRODUCTION

In spite of the extensive debates among scholars and some practitioners, food has been neglected for decades whereas urban planners treated agricultural land as potential building ground and agricultural policies focused on rural areas (Lohrberg, 2016). Two authors, Pothukuchi & Kaufman (1999) and Tornaghi (2014), with a gap of 15 years between their publications, corroborate that: food production has been forgotten in city planning and moved away from urban agendas. More recently FAO (2019), Cabannes & Marocchino (2018) and Morgan (2015) highlight once again the missing and needed integration of food into urban planning. This lack of consideration can largely explain why only few European cities have a coherent food policy regarding land for local production as we will later expose in the case of Portugal.

Since 2010, an increasing number of Portuguese local authorities have developed an interest in food and urban gardening as part of their local sustainable development policies (Delgado, 2017, 2018; Gonçalves, 2014; Pereira Fernandes, 2014; Mendes, 2015; Rodrigues, 2012). The reasons are very diverse: promoting social cohesion, food awareness, reduction of food waste, helping people in need to be able to access food.

In this paper, we argue that it is time for Portuguese authorities to expand those interests to a more holistic food vision aligned with the Urban Food Agenda (FAO, 2019) by means of: promoting local organic food in public schools (the first subject considered in this paper); developing a land policy to increase local food supply (our second subject); supply restaurants and local markets; supporting local businesses and job creation; promoting friendly environmental forms of farming as a way to manage environmental risks, preserve assets and landscape; or improving local food resilience as part of a climate change adaptation and mitigation strategy.

Fostering local food system land is needed (Gunilla & Olsson, 2019). We recognize the governance tensions related with land source and accessing (Manganelli & Moulaert, 2019), therefore we argue that a collaborative stakeholders' approach is needed.

To illustrate our argument, we will use Torres Vedras as pilot study. The municipality was selected due to its unique profile regarding city active and dynamic approach linked to food procurement, territory, and governance. Furthermore, the city demonstrated clear willingness to integrate production in

the local landscape as a way to supply local public's school canteens. The methodology used included empirical observation, primary data collection, grey and scientific literature review, and inclusion of results from previous action-research. In addition, in-depth face to face interviews were carried out, following a set of open questions.

Although this paper is an exploratory attempt to identify policy options for local land access for food production, political choices grounded on insights from our study case might illuminate decision-makers to claim for the role of communities to manage land, resources, and landscape.

## **2. THEORETICAL FRAMEWORK: MISSING LINK BETWEEN LAND AND FOOD**

Some authors as Perrin & Nougaredes (2020) or Tornaghi (2017) have been discussing land access for agricultural production through the lens of social justice. Others as Petrescu-Mag et al. (2019) are picking up the topic from the affordability and security side. Still only few authors as Manganelli & Moulaert (2019) and Wubben & Isakhanyan (2011) did focus on how local authorities are endorsing land access notably by reclaiming the use of public land.

On the other hand, food procurement either in school or public catering has been pointed out by several authors as Sonnino (2009), Wahlen et al. (2012) or Palacios-Arguello et al. (2018). The main subject is sustainability and healthy food procurement, here understood on how to balance price and nutritious value.

Nevertheless, some cities have been considering local food production. The Brussels Food Strategy (Bruxelles Environment, 2015) and the Paris Strategy for Sustainable Food (Mairie de Paris, 2018) are among the leading cities and regions where access to land for local production is being considered and tracked. Cities as Ljubljana (Slovenia), Zaragoza (Spain), Zagreb (Croatia), Tirana (Albania) or Modena (Italy) defined local food production as their next ambition (De Cunto et al., 2017). According to De Cunto et al. (2017), cities want localness as a driver to achieve self-sufficiency. However, the bridge between sustainable school supply and local production is clearly missing due to the absence of territory as part of the food debate.

The Urbact project BioCanteens Transfer Network, which started in 2018, is led by the French city of Mouans-Sartoux (10,000 inhabitants). Torres Vedras, our study case, is one of the partners along with: Lag pays des Condruses (Belgium), Vaslui (Romania), Trikala (Greece); Rosignano Marittimo (Italy) and Troyan (Bulgaria). The core of BioCanteens Transfer Network is to strengthen the supply of sustainable school meals in participating cities as a key lever to develop an integrated local agri-food approach. The project aims to transfer Mouans-Sartoux's practice in collective school catering<sup>1</sup>, to other cities across

---

<sup>1</sup> For more information, see: <https://mead-mouans-sartoux.fr/en/la-regie-agricole/> (Accessed: January 2020).

Europe. Mouans-Sartoux's practice is based on the daily distribution of meals that are 100 % organic and mostly composed of local products; the drastic reduction of food waste thereby fully compensating the higher cost of switching to organic products; and the organisation of dedicated educational activities to raise children's awareness about sustainable food.

Mouans-Sartoux is a good example of integration of the territorial dimension into the food system approach. Considering the increasing land speculation, the city bought in 2015 four hectares of land. In 2009 it was decided to turn that piece of land in a Municipal Farm in order to produce fresh vegetables to supply the three school canteens. After a successful first year, the municipality hired a farmer as a "civil servant". In parallel, Mouans-Sartoux invested in farm assets. The production in 2009 amounted to 10 tonnes and covered 30 % of the school canteens needs. In 2012, production met 50 % of the needs with a production of 15 tonnes. In 2015, production covered 85 % of the needs (about 1,400 daily meals). In 2016, the municipality bought in addition two more hectares of land to be able to meet 100 % of the vegetables consumed in school canteens (Rodrigo & Rioufol, 2017).

As a result of its huge international success, Mouans-Sartoux will launch an international appeal to cities in 2021 for food sovereignty in public procurements. Torres Vedras, as partner of the Urbact-BioCanteens Transfer Network, aims to replicate Mouans-Sartoux's practice. These dynamics addresses our research question: How can local authorities access local land for organic production to supply local school canteens?

### 3. TORRES VEDRAS AS A PILOT CASE

Torres Vedras municipality is located on the outskirts of Lisbon (Figure 1) and comprises 79,465 inhabitants (2017) within an area of 407 km<sup>2</sup>. Its main economic activity is the third sector (services) that employs 67.1 % of the active population, followed by the secondary sector (industry), with 26.7 % and last the primary sector (agriculture and fisheries) with 6.2%, higher than the national average (3.4%). Torres Vedras is one of the most prominent Portuguese municipality in relation to conventional agricultural, noteworthy by its diverse crops, such as beans and potatoes, and with the largest wine production nationwide<sup>2</sup>.

The municipality started in 2014 a successful Food Program for School Canteens (*Programa de Sustentabilidade na Alimentação Escolar*, PSAE). In a nutshell, the program aims to promote local economy, environmental sustainability and improve school diet. This is done by facilitating the connection between local producers and local not-for-profit organizations with kitchen facilities cooking school meals. The program provides 720,000 meals a year

---

<sup>2</sup> Source: <http://www.cm-tvedras.pt/economia/> (Accessed: January 2021)

(2018) to 37 local kinder gardens and 41 elementary schools (4,170 students): 1,300 meals are cooked per day by the municipal central kitchen, while 2,700 come from not-for-profit kitchens (Rodrigues & Morais, 2020). In 2018 the municipality launched an organic school meals pilot program with the explicit aim to be locally supplied.

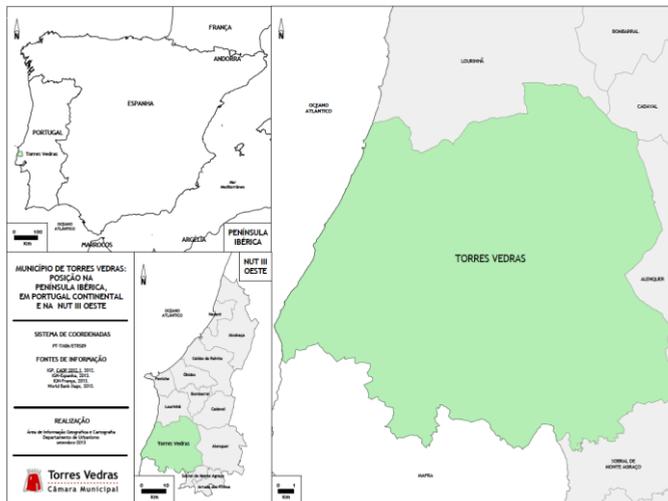


Figure 1: Torres Vedras location in Iberian Peninsula, Portugal national and regional context.  
Source: Torres Vedras Municipality (2020).

In 2020 the number of students within the city jurisdiction increased to 6,000 students (Rodrigues & Morais, 2020) and therefore the supply challenge increased as well. The municipality is facing two options, either buying organic food outside the municipal boundaries or increasing local land availability for organic production, taking Mouans-Sartoux as reference (Rodrigues & Morais, 2020).

In order to find an adequate solution, Torres Vedras joined international and national initiatives and exchanges on policies and practices, including the ones listed below: (a) The city is a partner of the BioCanteens Transfer Network as previously described; (b) The city signed the Milan Urban Food Policy Pact (MUFPP, 2015), an international protocol that brings together over 200 cities committed to implementing coherent municipal food-related policies and programmes; (c) The city is a member of the international CITYFOOD network coordinated by RUAF, a global partnership on sustainable agriculture and food systems and ICLEI<sup>3</sup>, a global network of over 1,750 governments committed to sustainable development. The mentioned network aims to accelerate local and regional government actions related to sustainable and resilient city-region food systems.

<sup>3</sup> <https://ruaf.org/news/cityfood/>; [https://iclei.org/en/CITYFOOD\\_Network.html](https://iclei.org/en/CITYFOOD_Network.html) (Accessed: January 2021).

#### 4. POLICY RESEARCH METHODOLOGY

In order to understand which would be the best land policy approach, we used an actor mapping methodology, i.e., a collaborative process of research, analysis, debate, and discussion that draws from multiple perspectives such as determining a list of key actors across the entire spectrum, based on their relevance, values and engagement (Taylor, 2019; UNEP, 2019).

Actors / First round	Number	Potential contributions
<b>Urban planning city department</b>	1	Land mapping; Identification of land able to farm; Lead the process of swapping fees for land, in order to increase organic local food production.
<b>Education city department</b>	2	Set up schools' canteens food demand according to local organic supply; Identify children's food preferences and needs; Work on food awareness with the school community; Agreement with farmers' school food needs and preferences.
<b>Environment and sustainability city department</b>	1	Identify forest land to convert them in orchards to supply local canteens; Map local land that would be appropriate for organic farming.
<b>Social Development city department</b>	2	Facilitate contact with relevant stakeholders, including civil parishes council leaders.
<b>Second Round</b>		<b>Potential contributions</b>
<b>Public Real Estate and Patrimony city department</b>	3	Provide updated information on the municipality's real estate land
<b>Torres Vedras entrepreneurship office</b>	1	Can collaborate with new local organic farmers by means of searching funds, networking and marketing
<b>Geographic Information System city department</b>	1	Mapping existing land either public or private
<b>Fairs and close markets city department</b>	1	Selling local organic products; Improve awareness regarding local fresh product; Putting consumers in contact with local farmers
<b>Civil parishes<sup>4</sup></b>	3	Making public land available; Facilitating contact with landowners, etc.

Table 1: City departments and local authorities that could play a relevant role on land access, Torres Vedras. Source: Author elaboration (2020).

<sup>4</sup> Civil parish council is used as a proxy translation for “*Juntas de Freguesias*”, the smallest administrative and political division of the Portuguese vertical governance system. Torres Vedras municipality count 13 such civil parishes.

The first mapping of “potential local actors” was brainstormed with the department in charge of the Sustainable Schools Meals Programme. At this point four city departments were identified: 1) urban planning; 2) education and sport; 3) environment and sustainability; and lastly 4) social development.

From February 2020 up to March 2020 we launched a round of meetings with these four city departments. The conversation was based on a semi-structured interview. Its aim was to identify potential department contributions to facilitate local land access, then discuss and rank potential policy approaches and lastly to identify other potential actors that could be involved. Table 1 illustrates the actors mapped during the first and second rounds and their potential contributions.

<b>Actors</b>	<b>Profile</b>	<b>Potential contributions</b>
<b>Urban waste management and nurseries city department</b>	Local authorities	Provide fruit trees and seed for local organic farmers; Facilitate linkages between municipality and farmers for compost production; Coordinate compost training
<b>Legal city Department</b>	Local authorities	Legal advice on land access and food procurement
<b>Agricultural school</b>	Private sector or/and public administration	Technical support; training skills; Students mobilisation
<b>Private landowners</b>	Various	Making idle land available to farmers
<b>Private food and agriculture enterprises</b>	Private sector	Technical support; Donations of trees and other agricultural inputs
<b>National employment centre</b>	Public Administration	Mapping available people looking for jobs; Funding new farmers
<b>Farmers candidates</b>	Various	Labour; Ensuring transition from conventional to organic farming
<b>Students/Children</b>	Civil Society	Assuring local organic food demand
<b>School Teachers</b>	Public administration	Working with students on food awareness
<b>Local canteens</b>	Third Sector/ Public administration	Securing local organic food demand
<b>Local restaurants</b>	Private Sector	Securing local organic food demand for local farmers
<b>Local residents / consumers</b>	Civil Society	Securing local organic food demand for local farmers

Table 2: Other local actors that could play a relevant role on land access, Torres Vedras framework. Source: Author elaboration (2020).

Beyond city departments and civil parishes, a set of additional local actors were suggested as being relevant to include in a collaborative process (Table 2

list the mentioned stakeholders). So far, they have not been interviewed. Table 2, column 3 gives some insights of potential contributions they could give in order to develop an integrated land access policy in Torres Vedras.

## **5. FOUR POTENTIAL POLICY APPROACHES TO TURN LAND AVAILABLE FOR FARMING**

Multiple perspectives concerning actors spectrum (Taylor, 2019) and governance tensions related with land (Manganelli & Moulaert, 2019) need to be addressed at this point. However, routed in paradigmatic examples as the ones from Paris, Brussels or Mouans-Sartoux, cities can envision increasing land access as a priority for local production. The four potential policy approaches were discussed with concerned local actors listed in Table 1, in order to assess their suitability, and relevance to the local context. A brief critical presentation of each one of them is developed below.

### **5.1. Local authorities as the facilitators for organic farming land access**

In this case local authorities act as facilitators or brokers between landowners and potential farmers looking for land. In cities where public land still exists the process will be managed between local authorities, the civil parishes or the local community members. A significant part of the land should be allocated for schools' canteens supply. If additional land remains available, start-up enterprises can be created either to encourage new farmers to settle or to increase the conversion from conventional to organic farming.

In order to develop this policy approach, the City departments, the Civil parishes, the private landowners, the candidate farmers, and a lawyer would define how the use of land can be regulated and a staff representative from schools' canteens should be involved.

In summary, the following actions should be considered: 1) Identify and map available land for organic farming: this should be done based on a stakeholders' approach involving civil parishes. At city level the urban planning department and the Patrimony division should be involved as well; 2) Identified land should be split at least in two parts: public land on the one hand, and private land on the other; 3) Local authorities should lead the process by matching farmers demand for land with available land; 4) Local authorities need to define and set-up a scheme to facilitate schools food supply.

Potential constraints: 1) It requires someone who knows very well the territory in order to map land; 2) It might be difficult to commit private landowners to collaborate on projects with social purposes.

Main opportunity: This policy doesn't need a significant budget to kick-off such a unique opportunity.

## **5.2. Fiscal disincentives to turn idle urban land more attractive for farming use**

This policy approach implies that urban landowners should pay additional fiscal taxes in case their land remains idle. The strategy is to reduce the attractiveness of keeping idle land, so that owners would be urged to lease their land for agricultural purposes. This policy can be extremely persuasive in highly urbanized areas. In Portuguese context, such a measure could not be as effective as in countries where land is scarce and even if available land is expensive. In addition, political willingness is required to increase taxation once this solution is settled at fiscal and technical levels.

In order to develop this policy, the City departments, Central Finances, and the Central Government should be primarily involved.

In summary, the following actions should be considered: 1) Mapping all the idle urban available land fit for organic farming; 2) Cross checking data though verifying land labelled as rural in fiscal departments although labelled as urban in master plan (as these discrepancies were observed during the field work and seem common in Portugal); 3) Ensuring that all urban land in the master plan will pay fiscal taxes as urban land<sup>5</sup> and not as rural; 4) Increasing fiscal taxation for all urban labelled idle land not temporarily used for food production in order to turn idle urban land more attractive for farming use.

Potential constraints: 1) The whole process can be time consuming; 2) From a political point of view it can be unpopular; 3) It involves the central government.

Main opportunity: In highly urbanized cities this can be the only way to facilitate land access for farming.

## **5.3. Local authorities support conversion from conventional to organic farming**

The strategy for conversion of conventional farming into organic farming is currently hardly the role of local authorities. Moreover, they usually do not have the technical capacities to carry out such a task. This policy would need mostly external agencies contribution. In addition, this conversion needs to be attractive to conventional farmers. Even if the market is demanding more organic food, a market for both conventional and organic do exist. Conversion to organic farming relies on farmers' mindset as well. Conversion implies a regenerative time of the land up to three years to secure a process of land becoming suitable for organic farming certification. Within this period the land can be cropped but production cannot be sold as organic certified.

---

<sup>5</sup> When land is labelled as rural the amount of fiscal fees paid by landowners is remarkably low.

In order to develop this policy, at least, conventional farmers, national Agriculture Minister (central government) and external agencies should be involved.

The following actions should be considered: 1) Farmers awareness raising campaigns; 2) Public events with consumers in order to increase local organic food demand; 3) Farmers training; 4) Financing support (central or local governments).

Potential constraints: 1) The whole process can be time consuming; 2) Some cities, as Torres Vedras, are economically too dependent on conventional agriculture which represents a significative income to local population: they might therefore offer resistance for this switch.

Main opportunity: From an environmental point of view the conversion to organic farming is extremely positive, and economically attractive in the long run.

#### **5.4. Exchange urbanization taxes into land for organic farming**

This policy approach can only be done under the umbrella of a clear municipal food vision and strategy. This implies a multi-stakeholder and multisector approach to develop a municipal food vision and strategy, that takes access to land as a key entry subject. Such a process might take time and generate conflicts that will need to be polished. In particular, it requires a trained facilitator able to in mediate the process. Once the strategy is approved by all stakeholders, the local authorities will need to channel the collected taxes to buy local land for organic farming.

In order to develop this policy, local authorities, City departments, local stakeholders, and landowners, should be involved.

The following actions should be considered: 1) Develop a municipal food strategy involving all the city departments and local stakeholders, having land access as a priority; 2) Define how much land is needed for organic farming; 3) Define and put into place, at city level, the appropriated tax mechanism; 4) Identify available land for organic farming; 5) Channel urbanization taxes to acquire that land.

Potential constraints: 1) The whole process might be time consuming; 2) Could be difficult to reach consensus among local stakeholders; 3) Appropriate land might not be obtained; 4) Need to be sure that local authorities' potential urbanization taxes loss will be compensated with additional taxes coming from other city domains.

Main opportunity: it could be the most appropriate policy where idle land is scarce and there is a strong building development activity.

## 6. COMPARING DIFFERENT POLICY OPTIONS FOR LAND ACCESS

Table 3 presents a multi-five variables analysis for comparing the four policy options previously presented and supported in the literature (Young & Quinn, 2012) and the debate among Torres Vedras local actors.

		Evaluation Criteria	Current program – PSAE (Torres Vedras)	Fiscal disincentives to turn idle urban land more attractive	Fiscal disincentives to turn idle urban land more attractive	Local authorities support conversion from conventional	Exchange urbanization taxes into land for organic farming
Number of Hectares	1.1	Hectares that could be reached immediately	None	A significant amount of land. Land mapping should be done in order to access how much land is available	No data available	Subject to farmers willingness	No data available
	1.2	Fruits and vegetables (60 tonnes to cover 100% schools demand)	None	100 %	Depends on the number of hectares of land	Subject to land availability	Subject to land availability
Time	2.1	To reach land needed	Very long, as it is up to farmers to find the needed land.	Short-term. Local authorities have a facilitating role	Long-term. Overpass local authorities' jurisdiction.	Medium-term. Overpass local authorities' jurisdiction.	Medium-term, if supported by political will.
	2.2	Required for growing food	Do not apply-NA	Short-term	Long-term	Medium-term	Medium-term
	2.3	Political time ruled by four years cycle	NA	Short-term. Can be achieved during political cycle	Long-term. No possible to achieve in the political cycle	Short-term. Can be eventually achieved during political cycle	Medium-term. Can be eventually achieved during political cycle
Feasibility	2.4	Time regarding institutional acts approval	NA	Short-term. Just need political will to kick off the process	Long-term. Many different stakeholders. Overpass local authorities' jurisdiction	Medium-term. Overpass local authorities' jurisdiction	Medium-term, if supported by political will.

	3.1	Institutional Feasibility – eventual political constraints	NA	Medium-term. Requires some inter-departmental coordination, and stakeholders' collaboration	Do not apply	Do not apply	Medium/ Long-term. Requires inter-departmental coordination, stakeholders' collaboration and a holistic food vision and strategy.
	3.2	Institutional Feasibility – operational constraints (inside and outside municipally)	NA	Short-term, if idle public land for farming is available	Medium/ Long-term. Several institutions are involved and could have different times and values	Medium/Long-term. Requires external agencies contribution and farmers willingness	Medium-term. Can generate conflicts among stakeholders that need to be smoothen
	3.3	Institutional Feasibility – human resources (municipality)	NA	Requires someone with facilitation skills	In the first stage only, the Urban Planning department is involved	Does not involve municipal human resources	Requires someone with facilitation skills
Cost	4.1	Implementation costs	NA	Costs can be internalized	No cost involved at municipal level. In addition, there is a slight possibility of	Doesn't require municipal budget as this task overpass municipal jurisdiction	There are no costs. Still could be better to have a facilitator outside the municipal staff
Acceptance	5.1	Public acceptance	No data	Very strong according to our survey results. Could be seen as first option	Can be unpopular, according to our survey results	A strong second option according to our survey results	Very strong, according to our survey results. However, this could be trick as involving local actors can generate conflicts that need to be smoothen

Table 3: Policy option matrix comparing the various policies approaches. Legend: long term (above 3 years); medium term (between a year and 3 years); short term (under 1 year).

Source: Author elaboration (2020).

As detailed below, it is interesting to discuss some of the reasons why variables are relevant:

1. Number of hectares of land, fruits and vegetables<sup>6</sup> that could be made available (2 criterion): the main goal of the policy is to supply local canteens. This should be a crucial criterion. Considering the target of 100 % local organic vegetables supply for schools' canteens, we estimate 20 hectares of land<sup>7</sup> (the area needed to produce 60 tonnes of fruit and vegetables per year and meet the supply need for 6000 meals each day).
2. Time involved (4 criterions): here several time frames need to be unfolded: time to access the needed land; time required for growing food (from seed to table); political time ruled by a 4-year electoral cycle; time regarding institutional acts approval.
3. Institutional feasibility either regarding human resources or political framework (3 criterions): includes political constraints; operational constraints and lack of human resources as an additional impediment.
4. Implementation cost (1 criteria): refers to the budget needed to implement the policy.
5. Public acceptance (1 criteria): meaning how the community is going to react to the policy, either in a positive or negative way.

In summary, different policies can be applied to achieve the same goal, i.e., increase local organic food production (fruits and vegetables) to supply local canteens. We consider that each policy, as being mutually exclusive, should be considered according to the context. For instance, having "local authorities as the facilitators for organic farming land access" might be the best option if public land is available or if the level of private landowners' awareness concerning local food systems is high. The option for "fiscal disincentives to turn idle urban land more attractive for farming use" requires a high political investment and stakeholders' concertation and therefore might be more appropriate as a policy at central government level.

Having "local authorities support conversion from conventional to organic farming" could be the best option where land is scarce and when a strong political commitment of improving local organic production exists. Finally, we consider "Exchange urbanization taxes into land for organic farming" the policy that could better fit a circular and systemic food vision for the city future. However, it might be difficult to reach if local authorities silo culture is mainstream.

---

<sup>6</sup> Here we are not considering animal protein supply as this would add an additional layer of complexity that goes beyond the scope of this paper.

<sup>7</sup> The number of hectares needed was estimated taking Mount-Sartoux as reference: see Section II, Theoretical Framework.

The four policy options here discussed are not fully considering the lens of social justice (Perrin & Nougarèdes, 2020; Tornaghi, 2017) or land affordability (Petrescu-Mag et al., 2019). On the other hand, all the options do consider localness as a driver to achieve self-sufficiency (De Cunto et al., 2017).

## **7. ADVOCACY FOR POLICY OPTION 1: HAVING LOCAL AUTHORITIES AS KEY FACILITATORS FOR LAND ACCESS**

In conclusion, we argue that public idle land in a first stage, and then private land, should be identified and mapped out by local authorities. Those pieces of land should be made available to organizations and farmers willing to supply local schools' canteens primarily and local consumers in a second stage. Local authorities are the key players in such process as they have the resources and the power to facilitate the cooperation across city departments and local stakeholders to spearhead an integrated food policy that would turn idle land into the decisive element of a blooming local food system. Governance tension could be prevented, and cooperation could be encouraged if all local actors sit together in the negotiation table (Manganelli & Moulaert, 2019). From the local authorities' political point of view, there are at least four arguments to substantiate such a proposal.

### **7.1. Land not being used is a lost resource and a missed opportunity**

Public idle land not being used means that a potential resource is lost and in addition maintenance cost being supported by taxpayers. Public land must be re-appropriated though uses bringing community benefits; Public land is in danger of being lost if privatized. There is an urgent need of reclaiming the meaning of public good. Food should be seen as part of it, particularly food for children and vulnerable people.

### **7.2. Lessons learned from the pandemic crisis highlight that local food systems need to be resilient to external shocks**

Local authorities should have a more pro-active role regarding land needs for local organic farmers in order to fulfil the needs of local communities in times of uncertainty. The political motto "let's use our land to feed our children" can raise community support and could be a powerful and consensual starting point to advance food local sovereignty.

### **7.3. No significant additional budget to kick off the process**

Implementation costs are quite limited. What is needed is political will and a person with negotiation skills from local authority staff. For instance, trees for planting orchards or seedlings could be supply by municipal nurseries; available

labour force could be identified through the unemployment national centre or from new leaseholder farmers or, even, by agricultural schools as part of practical training.

#### **7.4. It can be implemented straight away and results can be obtained during the next harvest**

If land is made available, results can be obtained during the next harvest. Political benefits can be gained immediately, i.e., during the existing political mandate. Given the food shock caused by the pandemic crisis, “reclaim our land today” could not be more on the right time.

### **8. CITIES SUPPORTING ACCESS TO LAND FOR FARMERS: A CALL FOR ACTION**

How local authorities can turn idle land into the decisive element of a blooming local food system? We advocate that local authorities should open a Call for Action based on the following five recommendations:

1. Engage a multi-stakeholder debate: This discussion should focus primarily on how the transition to a local and resilient food system could sustain a healthy soil regeneration, biodiversity and cycles adapted to local conditions, ecosystems, and people, having land access as a priority. In order to do so, local authorities should develop a sustainable food vision, strategy and policies for their territory regarding food from “production to consumption”, in coherence with other existing municipal activities and programs.
2. Make land available for farmers by mobilizing agricultural land under public domain: There is a huge potential of public land to be used for farming<sup>8</sup>. However, as not all cities have the chance to hold public land, additional options should be considered based on the following: 1) Public land availability and assessment of its potential for organic farming; 2) Public land not being used with farming potential at city and civil parishes levels; 3) Private idle land with farming potential. In order to do this, local authorities should start a process of land mapping for local organic farming, involving all the landowners from public to private sectors. Local food production development should be seen as a collective investment for a better future, in line with the city food vision mentioned previously.
3. Provide a facilitating environment to agroecological farmers and green economy: Given land prices rise, access to land has become a

---

<sup>8</sup> In a forthcoming paper, we will discuss the access to common land. Yet this approach can only be applied in very specific and limited circumstances.

challenge for new farmers who do not have family land. For an inter-generational transition, local authorities should provide land for a specific time and offer learning opportunities to young farmers committed to develop agroecological farming. By supporting local farmers, local authorities can ensure that the activity will be long-lasting. In addition, this is a way of insuring resilience in times of uncertainty. In order to do this, an open call for farmers willing to participate in such transition process, accessing land for free and mentorship for a period of time in exchange of donating of food to schools may fit both parties' needs. These are the conditions for a win-win solution.

4. Prioritize organic food supply to schools' canteens: There is an increasing demand for local organic food in schools and restaurants that needs to be prioritized. Besides facilitating land access for new farmers to supply schools' canteens, local authorities can have a proactive role to safeguard local demand. In order to do this, local authorities can foster short supply chains, developing access to local markets and fairs, prioritizing local farmers in public tenders and educating local consumers to the benefits of local food.
5. Create awareness on seasonal food, taste and nutrition: Young children from local schools could visit local farms to learn about nature and agriculture. Public education campaigns centered upon the benefits of local food and the traditional and modern knowledge and know-how of local farmers could generate a community support and increase local food demand.

## **9. CLOSING REMARKS: THE TIME FOR ACTION IS NOW**

The five recommendations included in our "Call for Action" could become a contribution to address innovative land planning patterns and cooperation among local stakeholders to access local land for organic production to supply local school canteens, that was our main question to be addressed. It could ultimately lead to an integrated food strategy that would consider local organic farming as a social, economic and ecological imperative. However, local food policies require a bundle of instruments which are context dependent, therefore flexibility and timing are key ingredients.

Cities become conscious of the urgent need to increase local production as a way to be more self-resilient (De Cunto et al., 2017; FAO, 2019). This cannot be done without land (Gunilla & Olsson, 2019; Manganelli & Moulaert, 2019). Results from our stakeholders' interview are showing that local authorities have a crucial role in facilitating land access to new farmers as facilitators for public or private land access for farming.

Grounded in Torres Vedras pilot study, we acknowledge that local authorities, local organizations, farmers, consumers, and academia, have unique skills that need to be considered and combined in order to develop a more effective and sustainable local food systems by means of a new governance model (UNEP, 2019). We acknowledge, as well, that changes required political will and commitment (MUFPP, 2015). At the same time changes are easier to happen at local level, where decision making structures are lighter and stakeholder connections are easier to build.

In conclusion, a higher level of governmental commitment and an adequate policy substantiated with hard facts might be the decisive step to mobilize the participation of different stakeholder on land access for local production in Portugal. This could be the case, as well, in countries where the rural-urban divide is still the rule for land planning and governance.

## BIBLIOGRAPHY

- Bruxelles Environment (2015), *Stratégie Good Food - Mieux Produire, Bien Manger*. Retrieved from: [https://document.environnement.brussels/opac\\_css/elecfile/Strat\\_GoodFood\\_FR](https://document.environnement.brussels/opac_css/elecfile/Strat_GoodFood_FR) (Accessed: January 2021).
- Cabannes, Yves & Marocchino, Cecilia (2018), *Integrating Food into Urban Planning*, London and Rome, UCL Press and FAO. Retrieved from: <https://discovery.ucl.ac.uk/id/eprint/10061454/1/Integrating-Food-into-Urban-Planning.pdf> (Accessed: January 2021).
- De Cunto, Anja; Tegoni, C.; Sonnino, R.; Michel, C. & Lajili-Djalai, F. (2017), *Food in cities: study on innovation for a sustainable and healthy production, delivery, and consumption of food in cities*, European Commission.
- Delgado, Cecilia (2017), "Mapping urban agriculture in Portugal: Lessons from practice and their relevance for European post-crisis contexts", *Moravian Geographical Reports*, vol. 25, n°3, pp. 139-153. DOI: <https://doi.org/10.1515/mgr-2017-0013>
- Delgado, Cecilia (2018), "Contrasting practices and perceptions of urban agriculture in Portugal", *International Journal of Urban Sustainable Development*, vol. 10, n°2, pp. 170-185. DOI: <https://doi.org/10.1080/19463138.2018.1481069>
- FAO (2019), *FAO framework for the Urban Food Agenda*, Rome, FAO. DOI: <https://doi.org/10.4060/ca3151en>
- Gonçalves, Rita (2014), *Hortas Urbanas: Estudo do Caso de Lisboa*. Master thesis, Universidade de Lisboa. Handle: <http://hdl.handle.net/10400.5/6809>

- Gunilla, E. & Olsson, A. (2019), “Peri-urban food production as means towards urban food security and increased urban resilience”, in Zeunert, Joshua & Waterman, Tim -ed.- *Routledge Handbook of Landscape and Food*, pp. 197-212. DOI: <https://doi.org/10.4324/9781315647692-15>
- Lohrberg F. (2016), *Urban Agriculture and the European Agenda*, COST-Action Urban Agriculture Europe (UAE).
- Mairie de Paris (2018), *Paris strategy for sustainable food*, Paris, Mairie de Paris. Retrieved from: <https://api-site.paris.fr/images/76336> (Accessed: January 2021)
- Manganelli, Alessandra & Moulaert, Frank (2019), “Scaling out access to land for urban agriculture. Governance hybridities in the Brussels-Capital Region”, *Land Use Policy*, vol. 82, pp. 391-400. DOI: <https://doi.org/10.1016/j.landusepol.2018.12.015>
- Mendes de Sousa, Diana Crsitina (2015), *Hortas Urbanas no concelho do Porto: Tipologias e Padrões Territoriais*. Master thesis, Universidade do Porto. Handle: <https://hdl.handle.net/10216/82018>
- Morgan, Kelvin (2015), “Nourishing the city: The rise of the urban food question in the Global North”, *Urban Studies*, vol. 52, n°8, pp. 1.379-1.394. DOI: <https://doi.org/10.1177/0042098014534902>
- MUFPP (2015), *Milan Urban Food Policy Pact - Selected Good Practices from Cities*, Milano, MUFPP. Retrieved from: <https://ruaf.org/document/milan-urban-food-policy-pact-selected-good-practices-from-cities/> (Accessed: January 2021).
- Palacios-Argüello, Laura; Gonzalez-Feliu, Jesús; Gondran, Natacha & Badeig, Fabien (2018), “Assessing the economic and environmental impacts of urban food systems for public school canteens: case study of Great Lyon region”, *European Transport Research Review*, vol. 10, pp. 1-20. DOI: <https://doi.org/10.1186/s12544-018-0306-8>
- Pereira Fernandes, Ana Letícia (2014), *Agricultura Urbana e Sustentabilidade das cidades - Projeto “horta à porta” no Grande Porto*. Master thesis, Universidade do Porto. Handle: <https://hdl.handle.net/10216/77583>
- Perrin, Coline & Nougaredes, Brigitte (2020), “An analytical framework to consider social justice issues in farmland preservation on the urban fringe. Insights from three French cases”, *Journal of Rural Studies*, in press. DOI: <https://doi.org/10.1016/j.jrurstud.2020.07.007>
- Petrescu-Mag, Ruxandra Mălina; Petrescu, Dacina Crina & Reti, Kinga-Olga (2019), “My land is my food: Exploring social function of large land deals using food security–land deals relation in five Eastern European countries”, *Land Use Policy*, vol. 82, pp. 729-741. DOI: <https://doi.org/10.1016/j.landusepol.2019.01.003>

- Pothukuchi, Kameshwari & Kaufman, Jerome L. (1999), "Placing the food system on the urban agenda: The role of municipal institutions in food systems planning", *Agriculture and Human Values*, vol. 16, pp. 213-224. DOI: <https://doi.org/10.1023/A:1007558805953>
- Rodrigo, Jofre & Rioufol, Veronique (2017), *Supporting access to land for farmers in Europe*, European Access to Land network. Retrieved from: [https://www.accesstoland.eu/IMG/pdf/a2l\\_handbook\\_local\\_authorities.pdf](https://www.accesstoland.eu/IMG/pdf/a2l_handbook_local_authorities.pdf) (Accessed: January 2021).
- Rodrigues, Paula & Morais, Inês (2020), *Sustainable Food Schools Program*. Retrieved from: <https://ec.europa.eu/environment/gpp/pdf/Rodrigues-2020-04-23.pdf> (Accessed: January 2021).
- Rodrigues, Susana (2012), *Um modelo para a implementação de redes de hortas urbanas*. Master thesis, Instituto Politécnico de Viana do Castelo. Handle: <http://hdl.handle.net/20.500.11960/1124>
- Sonnino, Roberta (2009), "Quality food, public procurement, and sustainable development: The school meal revolution in Rome", *Environment and Planning A*, vol. 41, n°2, pp. 425-440. DOI: <https://doi.org/10.1068/a40112>
- Taylor, Alison (2019), "Five-Step Approach to Stakeholder Engagement", en *Business for Social Responsibility (BSR)*. Retrieved from: <https://www.bsr.org/en/our-insights/report-view/stakeholder-engagement-five-step-approach-toolkit> (Accessed: January 2021).
- Tornaghi, Chiara (2014), "Critical geography of urban agriculture", *Progress in Human Geography*, vol. 38, n°4, pp. 551-567. DOI: <https://doi.org/10.1177/0309132513512542>
- Tornaghi, Chiara (2017), "Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment", *Antipode*, vol. 49, n°3, pp. 781-801. DOI: <https://doi.org/10.1111/anti.12291>
- UNEP (2019), *Collaborative Framework for Food Systems Transformation: A multi-stakeholder pathway for sustainable food systems*. Retrieved from: <https://www.oneplanetnetwork.org/resource/collaborative-framework-food-systems-transformation-multi-stakeholder-pathway-sustainable> (Accessed: January 2021).
- Wahlen, Stefan; Heiskanen, Eva & Aalto, Kristiina (2012), "Endorsing Sustainable Food Consumption: Prospects from Public Catering", *Journal of Consumer Policy*, vol. 35, pp. 7-21. DOI: <https://doi.org/10.1007/s10603-011-9183-4>
- Wubben, Emiel F. M. & Isakhanyan, Gohar (2011), "Stakeholder Analysis of Agroparks", *International Journal on Food System Dynamics*, vol. 2, n°2, pp. 145-154. DOI: <https://doi.org/10.18461/ijfsd.v2i2.224>

Young, Eóin & Quinn, Lisa (2012), *Making research evidence matter: A guide to Policy Advocacy in Transition Countries*, Budapest, Open Society Foundations.