

POLICY BRIEF

STRENGTHENING FOOD SECURITY VIA FOOD PRODUCTION ENVIRONMENTS IN AND AROUND CITIES



- **Plan for food environments that are healthy, sustainable, and attractive**
- **Stimulate sustainable food production and consumption**
- **Work with Food Policy Councils (FPCs) to establish multi-level governance and collaboration**

WHY THIS POLICY BRIEF? WHY NOW?

Ensuring a high quality of life for European residents requires having a secure and affordable supply of healthy and sustainable local and regional food. Our food systems are increasingly under pressure - from the impact of climate change to unfair global competition and higher energy costs to changing demographics. Building resilient food systems that can withstand and recover from crises is essential. Local and regional governments are increasingly required to respond to disruptions in the food system such as fluctuations in harvest due to increasing severe weather events, supply chain disruptions (like those experienced as a result of the COVID-19 pandemic) and rising food prices due to geo-political tensions and conflicts (like the war in Ukraine)¹.

This policy brief focuses on the role of local, regional and national level governments to impact the different dimensions of food security (see info box 1) and move towards more sustainable food systems. The recommendations reflect the fact that food security intersects with health, environment, economic, and social issues, and implies food availability, accessibility and adequacy. As European Commission President von der

Leyen outlines in her 'Political Guidelines for the next European Commission, there is a need to continue engaging with farmers, policy makers, civil society, stakeholders and citizens in order to establish a competitive and resilient agriculture and food system with and for people and nature².

Cities and regional governments are supported by international frameworks and initiatives such as the UN Sustainable Development Goals (SDG 2 - Zero Hunger) and EU-level food and environmental policies, including the European Green Deal, Farm to Fork Strategy, Food2030 Policy Framework, Future Foods Partnership, EU Biodiversity Strategy for 2030, the Directive on Soil Monitoring and Resilience, and the Circular Economy Action Plan. The [European Green Deal](#)³ is a cornerstone of these efforts, aiming to transform the EU into a modern, resource-efficient, and competitive economy, achieving zero net emissions of greenhouse gases by mid-century, fostering economic growth decoupled from resource use, and ensuring that no one is left behind in the green transition. The Deal's objectives span various sectors, including construction, biodiversity, energy, transport, and food. Central to this effort is the [Farm to Fork \(F2F\) Strategy](#)⁴ and the postponed Sustainable Food Legislation⁵. The Green Deal helps cities to orchestrate their food-related activities, cities have the tools they need, and the Deal provides the leverage to put them into action.

WHO SHOULD READ THIS?

This brief focuses on how urban/peri-urban agriculture and school gardens can contribute to food security. **Regional and local decision makers will gain concrete ideas and suggestions** for how to address food security while stimulating the economy and safeguarding the health of residents and the planet. After reading this brief, **national leaders** will better understand how regional and local governments are approaching the topic, as well as how they might be able to create permissive political environments for aligning food systems planning at national, regional and local levels to ensure that policies are coherent and implementable.

Food governance encompasses both formal and informal rules, norms and processes that shape policies and decisions that affect food systems⁶. For successful governance, it is therefore crucial to ensure inclusive and participatory decision-making processes that engage diverse stakeholders, from farmers to consumers, to create resilient, equitable and sustainable food systems. Therefore, **this brief is also useful for intergovernmental organisations, civil society, such as NGOs and social enterprises, and the private sector, such as business owners and managers interested in engaging on the topic of food security.**

FOOD SECURITY AND THE LINK TO URBAN AND PERI-URBAN AGRICULTURE

According to the FAO, conflict, climate, and economic slowdowns and downturns are the main causes of food insecurity. A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food. Food insecurity can be experienced at different levels of severity⁷. Severe food insecurity occurs when someone goes a day or more without food and experiences hunger, an estimated 8% of the world's population will experience hunger in 2030⁸. More moderate (yet also worrisome) food insecurity is when people have to sacrifice other basic needs to be able to eat. Food insecurity is correlated with mental, emotional, and physical health problems, as well as with chronic disease. Eating habits (e.g. the availability and affordability of healthy food, the impact of stress on food choice) and social food habits (e.g. support networks, eating together v. alone) can also make food insecurity better or worse⁹. Proactive policies, trade and market interventions, and subsidies to producers and consumers can help improve the availability and affordability of healthy diets.

There are six dimensions of food security (info box 1), and urban/peri-urban agriculture (info box 2) have an impact on all of them. They can improve the availability and accessibility of healthy and sustainable food, and help ensure that there is a stable supply of nutritional food. Depending on how they are governed and managed, urban/peri-urban agriculture and school gardens can also help ensure that people are engaged and able to influence the food options available to them and can make empowered choices (increasing agency). By supporting and promoting urban/peri-urban agriculture and school gardens from various angles - from spatial planning to training to inclusive governance systems - we can help ensure that people and the planet can have a high quality of life.



SIX DIMENSIONS OF FOOD SECURITY

1. **Availability:** having enough high quality and culturally appropriate food to sufficiently satisfy dietary needs of individuals supplied through domestic production or imports.
2. **Access (economic, social, physical):** having personal or household financial means to acquire food that also ensures other basic needs are not threatened or compromised; and that adequate food is accessible to everyone including vulnerable individuals and groups.
3. **Utilisation:** having an adequate diet, clean water, sanitation and healthcare to reach a state of nutritional well-being where all physiological needs are met.
4. **Stability:** having the ability to ensure food security in the event of sudden shocks/ crisis (health, conflict, climate) or cyclical events (seasonal food availability).
5. **Agency:** individuals or groups have the capacity to act individually to make choices about what they eat, foods they produce, how food is produced, processed and distributed and to engage in policy processes that shape food systems. This necessitates socio-political systems that uphold appropriate governance structures.
6. **Sustainability:** food system practices that contribute to long-term regeneration of natural, social, and economic systems, ensuring the food needs of present generations are met without compromising the food needs of future generations.

Source: HLPE, 2020. Food security and nutrition: building a global narrative towards 2030. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

WHAT IS URBAN AND PERI-URBAN AGRICULTURE?

Urban agriculture refers to the practice of growing, processing, and distributing food within urban areas. It involves cultivating crops and raising animals in cities or towns, typically on small plots of land such as rooftops, vacant lots, community or school gardens, or even indoors using hydroponic or aquaponic systems.

Peri-urban agriculture refers to agricultural activities that occur in the transitional zones between urban and rural areas, commonly known as peri-urban areas. These areas are characterised by a mix of urban and rural features, and they often experience rapid urbanisation and land use changes.



PLANNING FOR FOOD SECURITY WITH URBAN AND PERI-URBAN AGRICULTURE

Cities must produce impactful green infrastructure and climate strategies, yet food remains largely absent from these plans. In many cities in Europe and beyond, Food Policy Councils (FPCs) or similar multi-stakeholder groups are developing a framework, a structured approach, for creating sustainable urban food systems. Mainstreaming 'food' as a topic into other plans and/or developing a new food strategy can help a city define its role and identify leverage points for change. It can also integrate food initiatives with broader sustainability and climate goals, addressing shared challenges to realise co-benefits. For example, supporting local food markets can improve production and food access in peri-urban areas. In some places, this is highly needed and desired. In other places, perceptions about the relationship between environmental health and quality (e.g. soil and water quality) and food nutrition need to be addressed - is the soil and water quality healthy enough to produce healthy food? At present, in the EU 60-70% of soils are unhealthy whilst about 70% of farmable agricultural land is degraded^{10, 11}. Healthy soil is an essential and vital natural resource that requires protection in every aspect. Approaches such as organic or agroecological agriculture could harness synergies between food security and, climate and biodiversity protection¹².

Working across topics and departments in an interdisciplinary and multi-stakeholder manner to address challenges and opportunities related to urban/peri-urban agriculture may go one step further and not only impact food security, but move towards food sovereignty. Food sovereignty is defined as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems."¹³ At its core, food sovereignty is focused on re-balancing power in the food system and distributing power to the people who produce, distribute and consume food - away from large corporate and institutional entities.

BARCELONA: FOOD SYSTEM TRANSFORMATION WITH UNDER-UTILISED LAND AND WILLING PARTICIPANTS

The FoodCLIC Barcelona living lab, engages the regional and city governments to highlight the cultural and social importance of food production. They collaborate with city authorities, and are developing strategies to support local producers, especially since Catalonia imports 40% of its food. Specifically, they are amending the Metropolitan Area Master Plan to strengthen agricultural connectivity and improve school gardens, which exist in 90% of schools.

Challenges include strained urban-rural landowner relations and a decline in cultural awareness around food, sustainability, and security—issues critical for understanding the environmental, social, and long-term impacts of food production and consumption.

By working with regional and city governments, they seek to balance urban and rural agricultural investment, raise awareness, and ensure regulations that benefit public health, nature, and the economy.



SAFEGUARDING THE FUTURE WITH SCHOOL GARDENS

In Europe, 25% of children are at risk of poverty or social exclusion and one in three school-aged children faces obesity or overweight issues¹⁴. Schools are one of the few places where all children, regardless of their socio-economic, religious, cultural or geographical background, come together. Therefore, schools are a lever for fostering and encouraging healthy, sustainable food choices not only among students but also within their families and the broader school community. Since not every child is introduced to healthy eating habits at home, accessible, healthy meals and food education at school also contribute to more equal opportunities. Developing a healthy, sustainable food culture in and around schools is crucial to promote health and wellbeing, sustainable development, equality and climate resilience. Creating an environment that supports and enables healthy eating habits will have life-lasting positive effects on children's health, academic performance, and overall development. Incorporating gardens into primary and secondary school education creates greater knowledge of sustainability, food systems and ecosystems¹⁵.

VIENNA: SUPPORTING SCHOOL GARDENS AND URBAN AND PERI-URBAN AGRICULTURE

The City of Vienna supports neighbourhood and community gardens and urban agriculture under the programme "gardening together," which facilitates access to nature and food for residents of the city. Additionally, the City of Vienna owns land inside and around the city, where organic urban and peri-urban agriculture is managed by the city itself. They employ farmers and sell products under the city's owned label, Wiener Gusto. The City also supports school gardens and where an open garden is not possible due to shortage in space, raised beds or communal school garden projects are created.

Challenges they are working to overcome include management during school closures, implementation costs and the lower implementation of garden projects in vulnerable school districts.

Under the SchoolFood4Change project, Vienna has organised several food education activities, such as school-farm visits and school canteen days.



KEY RECOMMENDATIONS FOR LOCAL AND REGIONAL GOVERNMENTS TO UTILISE URBAN/PERI-URBAN AGRICULTURE AND SCHOOL GARDENS FOR FOOD SECURITY

1. Create food environments that are healthy, sustainable, and attractive

- **Integrate gardening and urban agriculture into urban planning** by creating permissive zoning and legislation in urban areas. Encourage the creation of community and school gardens, rooftop farms, and urban green spaces that increase food production in the city-region; enhance water quality, biodiversity and pollinator habit and promote energy efficiency¹⁵.
- **Encourage food markets as an economic development tool.** Integrate the topic of food systems into economic development policies and schemes. Supporting and monitoring city-regional food markets, local or regional healthy and sustainable public food procurement and encouraging participation from small-scale and organic farmers and SMEs retains and adds jobs, and keeps money circulating locally, ultimately adding to the stability and growth of local economies.
- **Prioritise urban renovation over expansion.** Limit the expansion of urban areas into peri-urban and rural zones by prioritising the renovation and repurposing of existing urban infrastructure. Encourage policies that focus on revitalising underused or abandoned spaces for agricultural and food-related activities, rather than expanding into new territories. This approach helps preserve peri-urban lands, rural communities and important ecosystems. It creates accessible, biodiverse, edible, and aesthetically pleasing spaces close to where people live, work, and go to school.

2. Stimulate sustainable food production and consumption

- **Support sustainable gardening and agriculture.** Offer access to land, resources, and technical support, and incorporate food production into planning and zoning policies, giving priority to practices that work with nature and promote biodiversity. Mainstreaming food production at the appropriate scale and place e.g. fruit trees near sports arenas, public gardens in parks, or neighbourhood scale garden infrastructure, provides maximum access to people and maximum benefit to nature by offering food where people are and creating biodiversity corridors.
- **Prioritise short food supply chains, sustainable public food procurement and civic food networks¹⁶** in order to actively support city-regional small-scale, organic or agro-ecological farmers and collaborative agri-food systems. Develop procurement policies for schools that allow them to use products grown on-site and allocate a portion of their budget to sourcing fresh, local products from nearby urban and peri-urban agriculture (UPA) farmers. This can stimulate the regional economy, reduce carbon footprints associated with food transportation and logistics, and provide students with nutritious meals¹⁵.
- **Promote sustainable and healthy eating habits,** combined with local food procurement. Integrate comprehensive food education targeting all demographics into public programmes and public canteens, such as schools, hospitals, and government offices along with mandatory requirements for public procurement based on the planetary health diet¹⁷, diverting to more plant-based diets. Implement communication and education strategies that bring people together (farm visits, workshops and training) and work with arts and culture (cinema, theatre, visual design) and help people understand the relationship between food at the local and global levels and its impact on areas like health and the environment. These efforts will set a positive example and help cultivate healthier eating patterns, raise awareness about sustainable food choices, and contribute to overall public health and environmental sustainability.
- **Develop and enforce comprehensive policies that target the reduction of food loss and waste at the earliest stages of the supply chain** — such as production, post-harvest handling, and processing. For example, creating regional or national platforms for knowledge exchange and joint problem-solving or providing financial incentives, such as grants or tax breaks, to farmers and entities adopting practices that minimise food loss during harvesting, storage, and transport. This could include investment in organic composting systems, better storage facilities, more efficient harvesting equipment, and training.

3. Work with Food Policy Councils (FPCs) to establish multi-level governance and collaboration

- **Encourage and support multi-stakeholder Food Policy Councils (FPCs)** that include diverse stakeholders such as local and regional governments, food growers, NGOs, chefs, local businesses, trade associations, universities, and civil society. These councils can influence food policy, foster vertical and horizontal policy integration as well as the collaboration among various actors, link inhabitants with government and address food poverty.
- **Emphasise inclusive, place-based policies while connecting to broader policy sectors** like climate, health, security and trade. By advocating for policies guided by the principle of the 'right to food', FPCs can champion the needs of food-deprived and vulnerable groups as well as small-scale farmers, fishers, and food workers, ensuring they earn a living wage and are integral to building diverse and sustainable food systems.

- **Align policies** of local, state, and federal entities to support the work of FPCs. This could involve reviewing and amending zoning laws, agricultural policies, education and public health regulations.
- **Provide institutional support** by mandating the inclusion of FPC representatives in key governmental planning processes related to food systems, such as urban planning, public health, education and environmental sustainability.
- **Offer long-term funding** by creating federal and state-level grant programmes specifically designed to support the formation, operation, and expansion of FPCs. These grants could cover activities such as community outreach, research, policy advocacy, and operational costs. Encourage state and local governments to establish permanent funding mechanisms, such as dedicated portions of food-related taxes or fees, to support ongoing FPC activities.

ABOUT THIS POLICY BRIEF

This policy brief is the result of desk research, in-depth interviews, policy analysis¹⁸ and grounded in the experiences of city-regions participating in the EU-funded FoodCLIC and SchoolFood4Change projects. With a view to the valuable work of these two initiatives, this brief highlights the **role of urban/peri-urban agriculture and school gardening as key components for ensuring food security**; and is backed by the strategic CLIC framework to guide effective policy and promote sustainable practices for the benefit of people and the planet. The CLIC supports the just transition to sustainable and resilient food systems by prompting, reminding, and checking that policy and action provide Co-benefits, Linkages (urban/rural), Inclusion, and Connectivities (across topics, departments, geographic)¹⁹.



We foster sustainability
Co-benefits.



We create **Linkages** to strengthen rural-urban food systems.



We prioritise **Inclusion** of all stakeholders and groups in a food system.



We build **Connectivities** between food and other sectors and policy areas.



SOURCES

1. European Commission, EU Actions to Enhance Global Food Security. Online source: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/eu-actions-enhance-global-food-security_en#:~:text=Between%202020%20and%202024%2C%20the,food%20security%20in%20the%20Sahel (Accessed July 2024)
2. Von Der Leyen, Ursula. Europe's Choice. 2024. https://commission.europa.eu/document/download/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en?filename=Political%20Guidelines%202024-2029_EN.pdf (Accessed June 2024)
3. European Commission, (2019) The European Green Deal: Striving to be the first climate-neutral continent. Online resource: https://ec.europa.eu/info/sites/default/files/european-green-deal-communication_en.pdf (Accessed July 2024)
4. European Commission, (2020) Farm to Fork Strategy: For a fair, healthy and environmentally-friendly food system – Action plan. Online resource: https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en (Accessed July 2024)
5. European Commission, Legislative framework of the Farm to Fork Strategy. Online resource: https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/legislative-framework_en (Accessed July 2024)
6. HLPE, 2020. Food security and nutrition: building a global narrative towards 2030. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. online source: <https://openknowledge.fao.org/server/api/core/bitstreams/8357b6eb-8010-4254-814a-1493faaf4a93/content>
7. Food and Agriculture Organization, Hunger. Online resource: www.fao.org/hunger/en/ (Accessed July 2024)
8. FAO, IFAD, UNICEF, WFP and WHO (2022) The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable.
9. Bartelmeß T, Jasiok S, Kühnel E, Yildiz J. A scoping review of the social dimensions in food insecurity and poverty assessments. Front Public Health. 2022 Dec 22;10:994368. doi: 10.3389/fpubh.2022.994368. PMID: 36620279; PMCID: PMC9815179.
10. EEA (2019). The European Environment: State and Outlook 2020.
11. Soil Strategy for 2030. EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate <https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0699>
12. IFOAM Organics Europe, Leaflet on the benefits of organic farming and soil health. [ifoameu_policy_soils_soil-health-leaflet_20230704.pdf](https://ifoameu.org/policy/soils/soil-health-leaflet_20230704.pdf) (organicseurope.bio)
13. The Nyeleni Declaration, Mali 2007, First Global Forum, <https://viacampesina.org/en/declaration-of-nyeleni-mali-2007>
14. WHO. 'Childhood Obesity: Five Facts about the WHO European Region.' WHO.int, World Health Organisation: WHO, 3 Mar. 2023, www.who.int/europe/news/item/03-03-2023-childhood-obesity--five-facts-about-the-who-european-region (Accessed 29 Aug. 2024)
15. Erwin, D., (2022) Urban and peri-urban agriculture case studies – Overview, conclusions and recommendations: An annex to Urban and peri-urban agriculture – From production to food systems. Rome, FAO and Leuven, Rikolto. Online resource: <https://doi.org/10.4060/cb9734en>
16. COACH, Horizon Europe grant no. 101000918 (2023). [Good practice case studies \(beacons\) Beacons](#) | COACH Project
17. Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., ... & Murray, C. J. (2019). Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. The lancet, 393(10170), 447-492.
18. FoodCLIC, Horizon Europe grant no. 101060717 (2023): [Advocacy Plan for Interaction with Higher Level Authorities, Deliverable 4.1](#)
19. Sonnino, R. & Milbourne, P. (2022) Food system transformation: a progressive place-based approach, Local Environment, 27:7, 915-926

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