FOODCITY BOOST

URBAN FOOD SYSTEMS 2040
A STRATEGIC GUIDE TO NAVIGATING UNCERTAIN FUTURES

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1 INTRO

Anyone concerned with the future of our cities quickly encounters a key question: how can urban spaces be designed to remain sustainable, liveable and resilient in the face of uncertainty and rapid change? In this context, urban agriculture is increasingly coming into focus. It can be much more than an alternative form of food production – as part of urban infrastructure, it can contribute to local supply, strengthen ecological functions and create new spaces for social participation. But how could cities, food systems and forms of urban production develop in the future? And what role can urban agriculture play in this? To make questions like these more tangible, it is worth taking a look at possible futures.

This is where scenario thinking comes into play. While trends (see the brochure 100+ Trends: Cultivating the Future of Urban Agriculture) provide indications of relevant developments, scenarios enable a structured view of how these developments could unfold in different combinations. They do not describe predictions, but rather plausible, alternative images of the future that help to visualise uncertainties and think through the effects of different framework conditions. Scenarios offer a valuable framework for orientation, particularly in the context of urban transformation, where ecological, social, economic and political factors are closely intertwined.

Working with scenarios can help stakeholders to better understand complex interrelationships and identify potential opportunities and risks at an early stage. In the field of urban agriculture, this means systematically considering different directions of development – for example, with regard to land use, technological innovations, political framework conditions or social food practices. By considering different scenarios for possible futures, robust strategies can be developed that remain viable even under changing conditions. In this way, scenario thinking not only strengthens the adaptability of individual projects and initiatives but also contributes to the resilience of urban food systems as a whole.

At the same time, scenarios encourage dialogue between different perspectives – for example, from urban planning, agriculture, science, civil society and administration. By jointly discussing and reflecting on possible futures, a shared understanding of challenges, opportunities and scope for action arises. Scenarios help to question existing ways of thinking, develop new approaches to solutions and address key questions: Under what conditions can urban agriculture unfold its full potential? And what political, spatial, economic and social frameworks are needed to successfully integrate it into urban structures over the long term?

The following pages invite you to explore four future scenarios and reflect on how urban agriculture can shape the cities of tomorrow – and what conditions are needed for it to thrive as an integral part of resilient and sustainable urban food systems.

2 PROJECT DESCRIPTION

Europe's rural and urban areas are facing increasing negative impacts from climate change, biodiversity loss, unsustainable resource use, and an increasing disconnect between citizens from urban and rural areas. These megatrends threaten the sustainability of urban development and associated food systems. Throughout Europe's cities, different types of urban farming, such as gardens, rooftop or vertical farming, have emerged, which could provide effective responses to these megatrends. Policy-makers and practitioners urgently need knowledge on the benefits, impacts and risks of urban farming, in order to design policy and legal frameworks that can foster benefits and mitigate risks of urban farming development.

FoodCityBoost develops a knowledge-based decision support tool, consisting of evidence-based indicators of environmental, social and economic performance and impacts of urban farming at farm, regional and EU scale and providing guidance on policy instruments that foster the development of urban farming.

FoodCityBoost collects data on the socio-economic and environmental impacts of different types of urban agricultural systems in various locations. This will contribute to assessing the sustainability of urban agriculture and its role in society by using tools that measure the synergies and trade-offs between different services provided by urban agriculture. By combining foresight analysis and workshops, we aim to design innovative urban agricultural systems that will be well-suited for future cities. This will help evaluate the potential of urban agriculture in addressing future challenges and evolving urban contexts.

FoodCityBoost brings together 20 partners from across Europe and operates within six case studies, using a living lab approach where urban agriculture is leveraged to meet societal objectives and tackle key challenges. These locations include Almere (The Netherlands), Wroclaw (Poland), Flanders and Brussels (Belgium), Sofia (Bulgaria), Riga (Latvia), and Valladolid (Spain), where we collaborate closely with over 100 stakeholders engaged in urban and food systems.

By taking stock of ongoing developments in urban agriculture, we gain insights from regions across Europe where urban farming thrives and benefits from regional policies.

FoodCityBoost brings together expertise on social science and humanities, land use systems, urban farming and life cycle assessment, to expand the knowledge base on urban farming from an integrated perspective. We connect to multiple projects (European Forum on Urban Agriculture EFUA, New European Bauhaus [NEB]) to best take stock of recent insights, which allows us to stimulate the development of a varied landscape of urban farming that optimally meets the needs of communities and minimizes negative impacts and risks.

3 METHODOLOGY

Strategic foresight is a science-based and systematic approach that explores possible future developments to support better decisions today. By identifying emerging opportunities and risks at an early stage, foresight helps organisations, policy-makers and innovation systems strengthen their long-term resilience and ability to act under uncertainty. Strategic decisions are inevitably based on assumptions about the future, yet the actual course of events remains open. Exploring alternative futures therefore helps to reveal different possibilities and enables forward-looking and robust strategies. Foresight processes generate insights that support strategic orientation. These include a deeper understanding of change dynamics within a specific domain, such as emerging trends, disruptions and transformation patterns. They can also provide an overview of possible development pathways and support the assessment of strategic options under different future conditions. Furthermore, foresight exercises help capture the expectations and perspectives of relevant stakeholder groups, thereby contributing to a more comprehensive understanding of future challenges and opportunities.

Within the FoodCityBoost project, the scenario method was applied as the central foresight tool to explore possible futures of urban agriculture and urban food systems. Future Scenarios enable a structured examination of complex systems and highlight that future developments cannot be reduced to simple “best-case” or “worst-case” outcomes. Instead, they describe several plausible and internally consistent images of the future that illustrate how different drivers of change might interact. By considering multiple potential futures in parallel, stakeholders can better understand uncertainties and reflect on the implications of different developments.

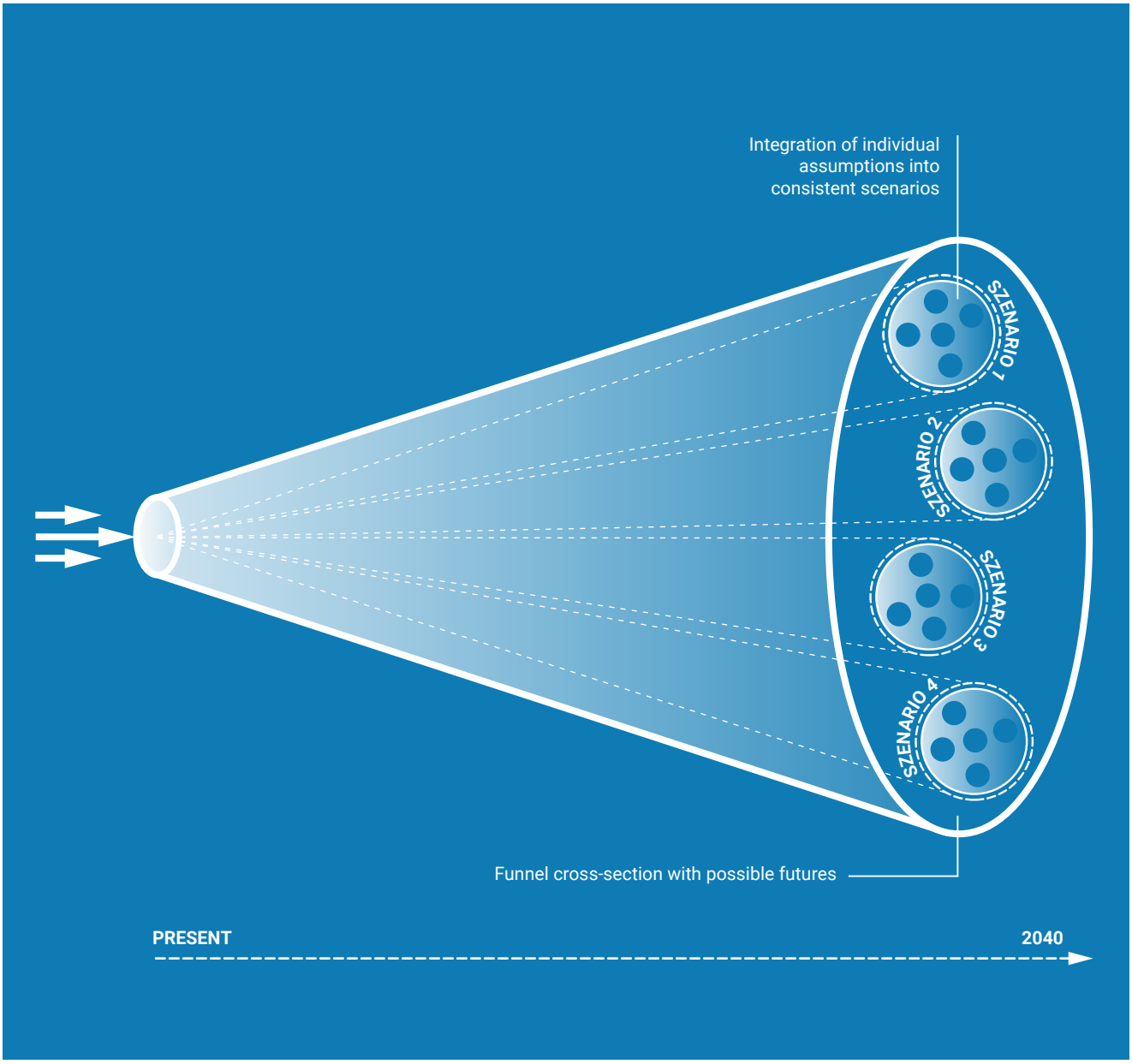
The Scenario Funnel: Exploring Uncertainty

A useful way to illustrate the logic of scenario thinking is the scenario funnel (Figure 1 [next page]). The funnel visualises how uncertainty about future developments increases over time. While developments in the near future can often be estimated with some degree of confidence, the range of possible outcomes expands the further we look ahead. Instead of following a single predictable path, the future unfolds within a widening field of possibilities.

Scenarios therefore do not attempt to predict what will happen. Rather, they explore different plausible trajectories within this space of possibilities. By systematically analysing alternative developments, the scenario funnel helps decision-makers anticipate uncertainty and test strategies against different future conditions. This approach is particularly relevant for urban food systems, which are shaped by multiple interacting drivers such as technological innovation, environmental pressures, policy frameworks and social practices.

From Signals to Scenarios: Identifying Key Influencing Factors

The development of the scenarios followed a structured methodological approach designed to generate plausible visions of urban agriculture within a 15-year time horizon. The first step consisted of a horizon scanning exercise. Using the STEEP framework (Social, Technological, Economic, Environmental and Political dimensions), signals of change and emerging trends relevant to urban agriculture were systematically identified and analysed. The results of this analysis were published in spring 2025 in the brochure 100+ Trends: Cultivating the Future of Urban Agriculture.


Integration of individual assumptions into consistent scenarios
SZENARIO 1
SZENARIO 2
SZENARIO 3
SZENARIO 4
Funnel cross-section with possible futures
PRESENT
2040

Building on these findings, **20 key influencing factors** were identified that are expected to significantly shape the future development of urban agriculture and urban food systems. These factors were derived from scientific literature, expert interviews and trend databases and cover technological, ecological, social, political and economic dimensions. Each influencing factor was conceptualised as a variable capable of driving future change. To reflect uncertainty, three to four alternative future projections were developed for each factor. These projections represent different plausible ways in which the factor might evolve over the coming 15 years. Importantly, they do not represent predictions but structured representations of uncertainty. Together, the projections form the analytical foundation for scenario development.

Identifying Key Drivers through Cross-Impact Analysis

To determine which factors play the most influential role within the system, a cross-impact analysis was conducted using an influence matrix. Each of the 20 factors was evaluated regarding the extent to which it influences other factors and the degree to which it is itself influenced by them. This analysis allows for a distinction between different types of factors within the system. Some factors exert a strong influence on many others while remaining relatively independent themselves and can therefore be interpreted as key drivers of future development. Other factors are more reactive and mainly respond to changes elsewhere in the system.

Based on their high systemic impact and comparatively low dependency, **five key drivers** were derived as the central dimensions for scenario construction. These drivers form the structural backbone of the scenario framework and ensure that the scenarios capture the most relevant transformation dynamics.

Ensuring Plausibility through Consistency Analysis

Following the cross-impact analysis, a **consistency analysis** was conducted to identify logically coherent combinations of future assumptions. For this purpose, the projections of the five key drivers were systematically compared pairwise and evaluated with regard to their logical compatibility.

Not all theoretically possible combinations of assumptions are plausible. Certain developments may reinforce each other, while others may contradict one another. The consistency analysis therefore helps to identify combinations of projections that form internally coherent patterns of development.

The result of this process was a set of consistent **assumption bundles**, each representing a distinct development logic. These bundles form the analytical basis for the subsequent scenario narratives and ensure that the scenarios remain internally coherent.

The consistent bundles of assumptions were translated into initial **scenario seeds**, which describe characteristic development logics for urban agriculture systems. These scenario cores outline central dynamics and tensions without yet constituting fully developed narratives. These seeds are visualised in the **scenario path diagram**, which shows how alternative trajectories diverge from the present situation and lead to different future states by 2040.

To further elaborate on these scenario seeds, a participatory workshop was organised during the FoodCityBoost consortium meeting in Gembloux in May 2025. Researchers, consortium partners and representatives of Living Labs jointly discussed and refined the emerging scenarios. In small working groups, participants validated the underlying assumptions and expanded them by integrating the remaining influencing factors.

Scenario Pathways and Narrative Development

In the final step, the analytical scenario seeds were transformed into comprehensive scenario narratives. The assumptions underlying each scenario were further elaborated and connected into coherent storylines describing how urban agriculture and urban food systems might evolve under different framework conditions. The resulting scenarios represent distinct development pathways that illustrate how different combinations of drivers may shape the future.

The four scenarios presented in this report therefore describe distinct but equally plausible futures for urban agriculture. None of them represents a simple continuation of current trends. Instead, each scenario illustrates how different combinations of social, technological, environmental, economic and political developments could shape the evolution of urban food systems over the coming decades.

Taken together, this foresight process provides a structured framework for navigating uncertainty and exploring how urban food systems may evolve over the coming decades. By combining horizon scanning, systemic driver analysis, consistency assessment and participatory scenario development, it enables the construction of plausible and internally coherent future pathways. The four scenarios presented in the following chapter therefore do not represent predictions, but alternative perspectives on how urban agriculture could develop by 2040. They serve as a strategic guide for reflecting on possible developments, identifying emerging opportunities and risks, and supporting more resilient decisions for the future of urban food systems.

Key Factors and Future Projections

Figure 2: Visualization of the identified key factors and their projected developments based on cross-impact analysis and consistency assessment.

No	Key Factor	Future Projection A	Future Projection B	Future Projection C	Future Projection D
1	**Personal Sufficiency & Every-day Autonomy**	Self-Sufficiency as Niche	Home-grown Autonomy	Teaching Sufficiency	
2	**Diverse Urban Spaces & New Usage Cultures**	Separated by Design	Competing Claims on Urban Space	Mixed-use Urban Landscapes	Third Places for Urban Food Culture
3	**Technology Adoption in Food Systems**	Complementing Community Agriculture	Improving Food Access through Mobility	Data-enabled Efficiency	Too Expensive to Scale
4	**Glocalisation & Neighbourhood Alliances**	Glocal Food Logistic	Barriers to bottom-up Food Systems	Cooperative Local Networks	Place-based, but Fragmented
5	**Urban Agriculture Policies**	Tech-enabled Innovation Funding	Uncertain Frameworks	Niche Innovation under Uncertain Conditions	Integrating Urban Agriculture
6	**Awareness of Food Waste**	Rising Awareness, Limited Action	Efficiency Illusion	Tools exist, Use varies	Reducing Food Waste through Education

No	Key Factor	Future Projection A	Future Projection B	Future Projection C	Future Projection D
7	**Low-Tech Strategies in Food Systems**	Low-Tech left behind	Curated, not Community-driven	Closing Loops, managing Water	Hybrid Food Practices
8	**Smart Urban Agriculture**	Data Concerns in Digitised Food Systems	Automation at the Core	Integrating High-Tech Solutions	Smart, but not scaled
9	**Alternative Food Production Methods**	A Multi-benefit Strategy	Progressive, but pricey	Urban Agriculture as Showcase, not Supply	Mainstreaming Alternative Proteins
10	**(De-)centralised Food Distribution**	Centralised Distribution remains Core	Neighbourhood Hubs	Centralised Control behind Decentralised Logistics	Local Markets vs. Global Retail
11	**New Funding Models for Collective Action**	Investment favors the Established	Financing Transformation	Innovation meets Market Power	Change driven from below
12	**DIY & Prosumer Food Cultures**	Restricted Access to Urban Growing Space	From Growing to Grabbing	Home-grown Food on the Rise	Prosumer Resilience
13	**Climate Adaptation**	Cooling by Technology	Unused Potential	Missing Strategies in Urban Planning	Natural Urban Cooling Strategies

No	Key Factor	Future Projection A	Future Projection B	Future Projection C	Future Projection D
14	**Living Radius & Everyday Mobility**	The Post-Car City	Livable Cities, rising Costs	Urban Work, Suburban Life	Neighbourhood Proximity varies across the City
15	**Urban Ecosys-tems & Carbon Neutrality**	Slow Transition away from Fossil Infrastructure	Offset Economy	Circular Urban Ecosystems	Individual Efforts without Systemic Impact
16	**Participatory Urbanism**	Participation by Policy	Fragmented Participation Dynamics	Digital Participation	Controlled from Above
17	**Transparency of Food Chains**	Traceability Challenges for small Producers	Rising Opportu-nities through Shifting Priorities	Transparency blocked	Partial Supply Chain Transparency
18	**Geopolitical Uncertainty & Food Sovereignty**	Shifting Priorities	Local Self-Auto-nomy in Urban Food Provision	Resilience for Big Players	Rising Concerns over Food Supply Dependencies
19	**Availability of Urban Land for Food**	No Room to grow	Planned Space, limited Access	Urban Test Bed	Spatial Competition
20	**Energy Availability**	Land-use Competition	Energising Urban Food Systems	Energy wins the Rooftops	Energy Systems vulnerable to Disruption

4

SCENARIO OVERVIEW

Scenario A

Sustainable Scenography: Eco-Scenery Cities

Urban food supply remains dominated by centralised systems and conventional agriculture, which reliably meet large-scale demand. New entrants face barriers due to unclear regulations, high costs, and low margins, while increasing interest in self-sufficiency is limited by a lack of accessible urban space. As a result, urban gardening largely takes place in curated community settings and contributes little to food security.

Urban planning reacts only slowly. Designated areas for urban agriculture are insufficient, and many potential sites cannot be used due to legal uncertainty. Competing uses of rooftops highlight spatial conflicts: green roofs and photovoltaic systems both require space, yet access and distribution rules remain unclear.

Digital tools could increase transparency, but data protection concerns, bureaucratic pressure, and cybersecurity risks limit uptake, especially among small initiatives.

Meanwhile, high rents and hybrid living and working patterns push more people out of cities, while urban structures are slow to adapt to these changing lifestyles.

Scenario B

Green Autonomy: Empowered Urban Living at a Cost

Urban agriculture is increasingly shaping the cityscape: people grow food on balconies and in community gardens, while individual vertical farms complement the skyline. Roofs, garages, and traffic areas are repurposed for cultivation and designed for multiple uses. Local authorities combine community-based low-tech approaches with targeted high-tech solutions to secure regional supply, even in winter. Neighbourhood networks exchange food both online and offline, and green and water spaces contribute to climate resilience through improved heat and water management.

Political frameworks now support urban agriculture through flexible temporary use regulations, public funding, and easier market access for small producers. Neighbourhood centres and digital platforms organise local distribution. Growing interest in self-sufficiency has made DIY food production and balcony energy systems symbols of a prosumer – a person who is both producer and consumer – lifestyle.

However, these developments also bring challenges: although greening increases liveability, it raises costs. Affordable housing remains scarce, encouraging young families to move to rural areas, leading to renewed urban sprawl.

Scenario C

Patchwork Production: Fragmented Local Food Practices

Small-scale, fragmented self-sufficiency is becoming more common, with people growing food on balconies and in community gardens, while mobile food units supply areas lacking fresh produce. Urban agriculture is widespread but remains led by individual neighbourhood initiatives rather than coordinated systems.

Unclear regulations and limited planning security restrict scaling and innovation. Dedicated local actors use political and spatial niches, combining low-tech cultivation with selective high-tech solutions supported by digital tools. However, smart urban agriculture mainly appears in affluent, tech-oriented districts, where nutrient-optimised products are available but expensive and exclusive. Socio-economic gaps widen between high-end neighbourhood markets and global discount retailers serving lower-income households. In less affluent areas, prosumer practices aim to increase resilience to price fluctuations rather than improve quality of life. Meanwhile, rising heat stress and water scarcity reduce cultivation potential, with little political response.

As cities densify, competition for land intensifies. Divided governance and unclear legal frameworks hinder cohesive local food systems and weaken broader urban resilience.

Scenario D

High-Tech Circular City: Adapting Systems not Habits

In the technology-optimised city, high-tech solutions dominate urban food production. AI and digital platforms manage supply chains efficiently, while locally produced food is flexibly supplemented through global networks. Automated urban farms using sensors and Internet of Things (IoT), along with new production methods such as alternative proteins, microorganisms, and insect or algae farming, become commonplace. Convenient, optimised foods increasingly replace DIY approaches.

Politically, sufficiency-based guidelines and innovation-focused funding programmes strengthen high-tech solutions while pushing low-tech methods to the margins. At the same time, market power becomes concentrated in the hands of a few major technology companies, as urban agriculture remains difficult to scale and start-ups struggle to secure investment.

High land prices and gentrification intensify competition for space, resulting in traditional and community-based cultivation being displaced. Despite increased efficiency, low awareness and waste continue to cause significant losses. Furthermore, extensive technologisation exacerbates urban heat islands, while the rising energy demand for production and cooling becomes a growing supply challenge.

5 KEY FACTORS

With the four scenarios in view, a key question arises: What assumptions and dynamics shape these alternative futures? The scenarios draw on a systematic analysis of key influencing factors shaping the evolution of urban agriculture and urban food systems.

Building on the horizon scanning results, twenty influencing factors were identified. Rather than representing isolated trends, these factors capture broader thematic fields that synthesise developments across domains such as governance, technology, urban form, value chains and consumption patterns.

To identify the most critical drivers, the factors were systematically interrelated using an influence matrix, assessing both their impact on and dependence upon one another. This cross-impact analysis distinguishes influential, relatively independent drivers from more reactive elements.

A subsequent consistency analysis tested the compatibility of alternative assumptions, identifying coherent and plausible combinations. Together, these factors provide the analytical backbone of the scenarios presented below.

01^

Personal Sufficiency & Everyday Autonomy

Personal sufficiency and everyday autonomy refer to practices in which individuals organise or produce parts of their daily necessities themselves. This includes, for example, growing food in the immediate residential environment, the shared use and cultivation of garden spaces, as well as craft-based and domestic activities that contribute to the self-production or repair of everyday goods. Such practices may be permanent in nature or temporary, seasonal, or project-based. They occur to very different extents – as individual activities within private households, as initiatives organised among neighbours, or embedded within community structures at the neighbourhood level.

02^

Diverse Urban Spaces and New Usage Cultures

Under diverse urban spaces and new usage cultures we understand spatial practices in which urban areas are used in multiple and varying functions. This includes both the repurposing of existing built structures and the flexible use of open spaces in residential surroundings or in the public realm. Such spaces may serve different purposes either simultaneously or consecutively – for example as places for living, working, producing, or socialising. These forms of multiple use occur at different scales – from parts of buildings or rooftop spaces to whole neighbourhood sections. Variations arise, among other things, from planning frameworks, ownership structures, economic interests, and social negotiation processes. Their realisation also depends on accessibility, usage rights, and the capacity for coordination between different groups of actors.

03^

Technology Adoption in Food Systems

Technology adoption in food systems describes processes in which technological solutions are integrated or expanded along urban food production, processing, and distribution. This includes automated cultivation systems, digital control and planning tools, data-driven optimisation methods, as well as new forms of production in vertical or enclosed environments. Such technologies may occur at different scales from small-scale applications in household or neighbourhood settings to large, technically equipped production facilities. Their introduction and use depend on infrastructural prerequisites, financial and regulatory conditions, and available skills. Differences also emerge in the speed of implementation and in the degree to which these technologies are organisationally embedded within existing supply structures.

04^

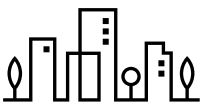
Glocalisation and Neighbourhood Alliances

Glocalisation and neighbourhood alliances describe modes of collaboration that weave together locally embedded networks with wider, even global, reference systems. Within urban food contexts, this may involve neighbourhood-based community initiatives as well as links to regional or international supply chains. Local actors might take on roles in organising the production, distribution, or sharing of food, while additional goods or resources are drawn in from external partners. These arrangements range from informal, everyday exchanges among neighbours to more formalised cooperation between civic organisations, businesses, and municipal authorities. The ways in which such alliances are configured vary according to their level of organisation, the accessibility of resources and spaces, the governing legal conditions, and the intensity of social ties within the neighbourhood.

05^

Urban Agriculture Policies

Urban agriculture policies are political and administrative frameworks that relate to the planning, implementation, and organisation of agricultural activities in urban areas. These include strategies for the designation and use of land, regulations governing project approval, as well as funding programmes and support measures for different organisational forms. The design of such frameworks may encompass permanent or temporary land use, experimental approaches, or formalised structures. Differences arise depending on urban planning objectives, administrative responsibilities, and available resources. The resulting expressions range from clearly defined policy guidelines to situation-specific decisions at the local level that influence access to land and infrastructural resources.



06^

Awareness of Food Waste

In many urban contexts, the relationship between knowledge, attitudes, and everyday routines surrounding food waste plays a central role. Awareness of ecological interconnections, resource conservation, and sustainable eating is present to varying degrees across different population groups, yet it is expressed in everyday life through a wide range of practices. Some individuals or groups deliberately seek to orient their consumption, mobility, or diet towards such considerations, while for many others practical requirements guide daily decisions. Within food systems, these differences are reflected, for example, in how leftovers are handled, in purchasing choices, or in the organisation of shared use arrangements. Variations arise, among other factors, from social norms and the spatial conditions of one's immediate living environment.

07^

Low-Tech Strategies in Food Systems

In urban food systems, low-tech strategies encompass practices and infrastructures that operate with comparatively simple technological means and rely on locally available resources. These include, among others, compost-based nutrient cycles, basic irrigation and rainwater collection systems, community-managed growing areas, and small-scale or craft-based processing methods. Such approaches may be found in private households, in shared gardens, or within public institutions, and are characterised by a high degree of adaptability to differing spatial and social contexts.

08^

Smart Urban Agriculture

Smart urban agriculture refers to technologically supported forms of cultivation in which digital control, monitoring, and automation systems are employed within urban environments. This includes, for example, vertical production facilities, enclosed growing environments, or sensor-based irrigation and nutrient delivery systems. Such setups can enable continuous, weather-independent production and are often located inside buildings, on rooftops, or in repurposed interior spaces. A defining feature is the integration of information and communication technologies, such as algorithmic control processes, data analytics, or networked devices. Applications can be found at a range of scales – from small pilot initiatives or neighbourhood-based projects to large, industrially organised production sites.

09^

Alternative Food Production Methods

Alternative food production methods encompass approaches to producing food that take place outside conventional arable farming or livestock systems. Examples include microalgae bioreactors, insect farms for protein production, mushroom cultivation on coffee grounds, fermentation-based processes for creating alternative proteins, as well as small-scale systems such as hydroponics or container farming in indoor environments. These approaches can range from small, locally embedded household setups to technically equipped facilities operating on large commercial sites.

10^

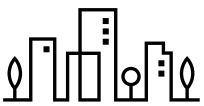
(De-)centralised Food Distribution

In decentralised food systems, production, storage and marketing of food are spread across smaller businesses rooted in their regions. In contrast, centralised food distribution concentrates these processes within a few large companies and distribution centres, resulting in long transport routes and a strong dependence on global supply chains. The closer proximity between producers and consumers generally allows for fresher products and reduced CO_2 emissions due to shorter transport distances. At the same time, they strengthen regional economic cycles and support small farms and local processing enterprises. While centralised systems may appear efficient, they can quickly reach their limits in situations of crisis, transport disruption or market volatility. Decentralised arrangements, by contrast, enhance food security and enable greater transparency.

11^

New Funding Models for Collective Action

New funding models for urban food producers refer to forms of finance and support that go beyond conventional grant schemes or bank loans and are specifically tailored to urban food production. These include, for example, micro-financing arrangements, community-based investment models, cooperative ownership structures, impact funds, and crowdfunding or membership schemes in which users contribute on a regular basis. Such funding approaches can support both small-scale projects, such as community gardens or neighbourhood-based growing initiatives, and professionally operated urban farming facilities. Their scalability ranges from locally rooted, community-focused activities to commercially viable production models with potential for growth.



12^

DIY and Prosumer Food Cultures

The lifestyle of the prosumer – that is, a producer and consumer in one person – is gaining increasing relevance in urban contexts. DIY and prosumer food cultures refer to practices in which people not only consume food, but also produce, process, or organise it collectively. This includes activities such as growing vegetables in one's immediate living environment, fermenting and preserving foods, baking bread, cooking together, or exchanging homemade products within neighbourhoods. These activities may take place individually, within households, through informal networks, or in shared community spaces. They often rely on the acquisition and transmission of practical knowledge, the shared use of tools and resources, and the social relationships embedded within the local environment.

13^

Climate Adaptation

Measures aiming to adapt societies, infrastructures and ecosystems to the already noticeable or anticipated impacts of climate change seek not to prevent climate change itself, but to mitigate its effects and strengthen resilience to changing environmental conditions. Examples include urban greening strategies to reduce heat stress, improved rainwater management to prevent flooding, or structural adaptations to withstand more extreme weather events. Agriculture is also developing new cultivation methods, such as heat-tolerant crop varieties or modified irrigation systems. Climate adaptation can be implemented at individual, municipal or national levels, with the greatest impact achieved when these levels work together.

14^

Living Radius and Everyday Mobility

Living radius and everyday mobility refer to the spatial area in which daily routines and activities typically take place, as well as the ways in which people move within this area. It encompasses locations such as the immediate residential environment, shops, educational institutions, workplaces, and leisure or community spaces that are regularly visited in everyday life. In this context, the concept of the "15-minute city" is often referenced, which aims to ensure that key daily functions are accessible within a short walking or cycling distance. Everyday mobility describes the movement patterns within this radius – including the choice of transport modes, the distances travelled and the frequency of journeys. How this takes shape is influenced by factors such as urban form, public infrastructure, the availability of local services, and individual mobility habits. Depending on spatial density, land-use mix and neighbourhood organisation, the living radius may vary and can either enable or restrict certain forms of mobility.

15^^

Urban Ecosystems and Carbon Neutrality

Urban ecosystems and carbon neutrality as a factor describes how urban environments and nature-based elements interact with efforts to reduce CO_2 emissions. Urban ecosystems include green spaces, parks, bodies of water, tree-lined streets, community gardens and small biodiversity habitats that shape the urban climate and provide living spaces for plants and animals. Carbon neutrality refers to reducing or offsetting emissions in cities to achieve an almost climate-neutral state. These two areas can reinforce one another: nature-based structures contribute to cooling, improved air quality and, to some extent, carbon sequestration.

16^

Participatory Urbanism

Participatory urbanism refers to approaches in urban development in which residents are actively involved in decision-making, planning processes and the shaping of urban space. The emphasis lies on forms of co-creation that go beyond simple consultation, enabling local experiences, needs and perspectives to be meaningfully integrated into planning processes. This can take a variety of forms – from neighbourhood assemblies, open planning workshops and digital participation platforms to self-organised initiatives. Participatory urbanism therefore encompasses both formal procedures organised by municipalities and informal or activities initiated by civil society. The aim is to create opportunities for agency in everyday urban life and to shape spaces in ways that reflect the local – without assuming that all groups are equally able or likely to participate.

17^

Transparency of Food Chains

The traceability of the origin, processing and distribution of food along the entire value chain is the core aim of transparent supply chains. This refers to making visible where a food product was produced, under what conditions it was grown, processed, transported and sold, and which actors were involved in these steps. Transparency may include information on production standards, working conditions, environmental impacts, transport routes or certification schemes. A range of instruments can be used to achieve this, such as labelling, digital traceability systems, certification processes, or direct distribution models (e.g. direct marketing or community-supported agriculture). The degree of transparency can vary considerably – from open and clearly documented supply chains to complex, globally interconnected systems in which only certain segments are traceable.

18^

Geopolitical Uncertainty and Food Sovereignty

Global political uncertainties such as trade conflicts, resource shortages, war, sanctions and unstable international supply chains have an impact on food supplies. Such events can influence food prices, availability and transport routes, thereby putting pressure on local supply systems. Food sovereignty is a concept designed to counter these global developments. It aims to enable cities, regions or countries to determine for themselves how their food is produced, distributed and consumed – based on local needs, ecological conditions and cultural practices. This is not just about the quantity of food, but also about control over production methods, seeds, soil and infrastructure. The instruments for this include the promotion of regional agriculture, shorter supply chains, strategic stockpiling, support for community initiatives and the promotion of innovation in agriculture.

19^

Availability of Urban Land for Food

The availability of space for growing food in cities depends not only on how much land exists, but also on how easily it can be accessed and used. Gardens, courtyards, rooftops, open areas within residential neighbourhoods and temporarily unused plots can all be suitable sites for urban agriculture. Whether such spaces can be cultivated largely depends on ownership structures, land prices, and competing development interests, while policy measures can facilitate access by creating enabling conditions and promoting their productive use. Through urban and spatial planning instruments, both community-based and commercially oriented urban agriculture can be prioritised and better integrated into cities. Where suitable land is available, neighbourhood initiatives, community gardens, start-ups and businesses can make productive use of it and strengthen local food production.

20^

Energy Availability

The reliability and extent of energy supply in cities influence how everyday services, infrastructure and production can be sustained. This concerns not only how much energy is available, but also where it comes from, how costly it is, how stable the supply networks are, and who has access to them. Renewable energy systems such as solar or geothermal installations can contribute to a more resilient supply, yet they also require physical space. Rooftops, open plots or redevelopment areas used for sustainable energy production often compete with land that could otherwise support urban agriculture or community-based food initiatives. Decisions about how limited urban space is allocated therefore directly shape which forms of provision and production become possible.

AgriNova Farm
Freshly grown Vegetables
COMMUNITY GARDEN
For temporary use

SCENARIO A: SUSTAINABLE SCENOGRAPHY: ECO-SCENERY CITIES

Food supply in cities continues to be dominated by centralised food systems and traditional agriculture. Due to its scalability and regulatory advantages, conventional agriculture reliably meets large-scale demand, while centrally organised wholesale markets remain indispensable. New players find it difficult to enter this market, as uncertain legal frameworks, high costs, and low profitability put them at a disadvantage. Investors continue to focus on established companies that promise stable profits. Nevertheless, many people are increasingly seeking partial self-sufficiency. However, this remains unrealistic for large parts of the urban population due to a lack of space. Urban areas lack available land, and publicly managed areas are often subject to strict access regulations such as opening hours or membership requirements.

Urban planning is responding to these developments only hesitantly. Functionally separate and outdated patterns of use continue to shape the cityscape. Decision-makers predominantly rely on top-down approaches by designating certain areas for urban agriculture. However, these areas cannot meet the growing demand for decentralised food production. Urban brownfield sites often cannot be put to use due to unclear legal frameworks and municipal responsibilities. Urban agriculture is therefore primarily implemented in curated spaces such as schools, hospitals, or public institutions. It usually serves educational, sustainable, or symbolic purposes and is tested in the form of low-tech solutions without working towards broad scaling. Urban gardening thus remains predominantly a leisure activity that does not make a significant contribution to food security.

Another obstacle is the competing use of urban space, especially rooftops. Green roofs are mandatory for new buildings, but the distribution of food harvested there is not clearly regulated by law. Responsibilities remain unclear, access is limited, and many areas remain unused. At the same time, urban agriculture competes with the production of sustainable energy through photovoltaic systems. Due to rising energy prices, more and more people are using roof space for small-scale energy production, further exacerbating the conflict over space.

The use of digital technologies also has its limits. Although digital tools can create transparency in supply chains, their use is not mandatory. Data protection concerns are slowing down the introduction of smart agricultural solutions, especially when consumer patterns, location, or order data are collected. Small initiatives are also facing increased bureaucratic pressure due to the legal requirement for complete traceability. Concerns about cyber-attacks on critical food infrastructure further exacerbate scepticism towards digitised systems.

At the same time, social dynamics are changing. High rents and hybrid living and working models are increasingly driving people out of cities. Everyday urban life is heavily influenced by commuting, while urban structures are not sufficiently adapted to new realities of life.

AgriNova Farm
Freshly grown Vegetables
Edamame
Soup
Spring Rolls
Salad
Sandwich
Noodles Menu 1
Noodles Menu 2
Noodles Menu 3
Noodles Menu 4
Noodles Menu 5
Cake
Ice Cream
Coffee
Juice
CO MUNITY GARDEN
For temporary use

SCENARIO B: GREEN AUTONOMY: EMPOWERED URBAN LIVING AT A COST

Urban agriculture has become a defining feature of the cityscape. Citizens are increasingly growing their own food on balconies and in community gardens, while isolated vertical farms complement the picture and are also part of the city skyline. Mixed-use zones have become the norm – roofs, garages, and traffic islands are being repurposed for urban agricultural purposes, and urban spaces are being designed for multiple uses.

Local authorities are relying on a combination of low-tech, community-based approaches and smart urban agriculture. While traditional, small-scale cultivation methods form the foundation, high-tech solutions such as vertical farms complement the portfolio and ensure a year-round regional supply, especially in the winter months. Local alliances create resilient food networks in which food is exchanged and traded on a small scale – both online and offline. In addition, the changed cityscape with its green spaces and water areas effectively contributes to making the city more resilient and liveable. Heat protection and water management are taken into account in planning in order to adapt to the consequences of climate change.

Political frameworks have been adapted to geopolitical uncertainties: municipalities are implementing binding strategies for urban agriculture and breaking new ground to contribute to the security of supply for the population.

Flexible temporary use regulations promote urban agriculture, and public funding supports alternative business models, including temporary initiatives. Neighbourhood centres organise local food distribution efficiently via on-site structures and digital platforms. New certification labels are designed to help small producers market their products at fair prices. Policy is increasingly focused on security of supply rather than certification, which makes it easier for smaller producers to access the market. Digital tools are used to promote inclusive urban engagement at the regional level and effectively manage low-tech cultivation approaches through digital decision-making tools.

Growing awareness of self-sufficiency and the desire for independence and self-reliance have made DIY food production a new status symbol. In addition to food self-sufficiency, independent energy supply is also becoming increasingly popular – for example, through balcony power plants. More people are interested in a prosumer lifestyle.

However, these developments also bring challenges: although urban agriculture and greening concepts make cities more liveable, they also lead to higher costs. Affordable housing remains a problem, which is why young families in particular often move to rural areas and use hybrid work concepts – a trend towards renewed urban sprawl.

FRESHFOOD
E-RENT
3

SCENARIO C: PATCHWORK PRODUCTION: FRAGMENTED LOCAL FOOD PRACTICES

This scenario is driven by patchwork production and fragmented self-reliance. Citizens increasingly grow their own food on balconies and in urban cultivation areas. Community gardens and similar spaces combine consumption, work, and food culture and function as small "third places" for affluent residents. Mobile food units supply urban areas without direct access to fresh food. Urban agriculture is widespread but is primarily based on individual initiatives and activities at the neigh-bourhood level.

Legal grey areas prevent the scaling up of urban agriculture and the further development of smart solutions and innovations. A lack of planning security does not create an innovation-friendly environment. Nevertheless, individual pioneers are exploiting existing niches in the political framework and successfully implementing their ideas. Bottom-up approaches are thus largely driven by committed individuals who find niches for their projects. Self-organised dynamics develop and reinforce themselves in the local context. The concept of the 15-minute city aims to make all daily needs accessible within walking distance. In practice, however, this is usually only possible in well-organised and largely self-sufficient communities.

Hybrid systems that combine low-tech and high-tech approaches are establishing themselves in these niches. At the neighbourhood level, digital tools support the management of resources and food waste, but their distribution is uneven. Smart urban agriculture remains a niche phenomenon, especially in tech-savvy neighbourhoods, driven by start-ups that see potential for increasing food security. New production methods, such as nutrient-optimised foods, are costly and target a wealthy, progressive customer segment. Although there is interest in innovative food production, access remains exclusive.

At the same time, a growing gap is opening up between upscale neighbourhood markets and globally active discounters, which primarily supply lower-income segments of the population. Global food corporations continue to exist and distribute highly processed products. They are also strategically attempting to control alternative and local distribution channels – with varying degrees of success depending on the region. A growing prosumer culture can also be observed in less affluent neighbourhoods. Here, the goal is to strengthen resilience to price increases, supply shortages, and unforeseen events. Aspects such as quality of life or recreational value are not the focus here. At the same time, increasing heat stress significantly reduces the potential for food production in cities. This issue is not being addressed politically; urban agriculture at the individual level cannot effectively counteract the consequences of heat islands and water shortages resulting from climate change.

Digital tools facilitate supply chain transparency for consumers, but their use remains voluntary. Multinational companies continue to operate in a semitransparent manner. Political instability makes long-term planning in the food sector difficult and further price increases are to be expected. There is no clearly defined political framework, and political autonomy prevails in many places. Local authorities are dependent on self-organised initiatives and often tolerate activities in legal grey areas.

With increasing urban densification, competition for land use is intensifying. Fragmented governance without clearly defined goals characterises the situation. Resilience strategies are not being developed systematically – which is particularly critical in view of increasing energy shortages. Unclear legal frameworks hinder the integration of locally based food practices and weaken locally sustainable food systems.

The best artisan food
FOOD TRUCK
FOOD TRUCK

SCENARIO D: HIGH-TECH CIRCULAR CITY: ADAPTING SYSTEMS NOT HABITS

In the technology-optimised city, technology-driven solutions dominate urban food production. AI optimises urban food systems along the entire supply chain, while digital platforms enable "glocal" coordination. Local production is organised with maximum efficiency – mostly technology – supported and resource-efficient and supplemented by targeted sourcing from global networks to flexibly close supply gaps.

Smart infrastructures and AI-based systems optimise local food production. Sensors and IoT efficiently automate urban farms, while new forms of production such as microorganisms, alternative protein sources, and tissue engineering gain acceptance. Insect farms and algae production become mainstream. Optimised and bio-hacked foods are available everywhere, convenience foods are replacing DIY approaches, and "snackification" is contributing to increased consumption of ready-made products. Politically, government guidelines promote sufficiency and embed it in urban education systems. Support programmes create incentives for urban agriculture, but focus on innovation-driven, technology-savvy approaches. High-tech solutions dominate food systems and push low-tech approaches to the margins.

However, this development brings with it structural problems: platform-based economies of large tech companies dominate decentralised logistics while lacking transparency. Food production is cost-efficient and sustainable, but it is in the hands of a few major players. The limited scalability of most urban agriculture initiatives makes it difficult to find financing and makes it difficult for innovative technologies and start-ups to compete with dominant market players.

Gentrification hinders the development of inclusive mixed-use spaces. Cities are objects of land speculation, with housing, work, and food production competing for limited urban space. Exorbitant land prices mean that buildings remain the primary choice for land use. Remaining areas for traditional agriculture and small-scale food production are being replaced by efficient high-tech production. Despite technological advances, low awareness continues to cause significant losses along the supply chain. Technological developments in food production overshadow awareness of food waste and promote the illusion that efficiency equals safety. The technologisation of densely populated cities intensifies urban heat islands, the effects of which are mitigated by technology. Air conditioning remains the dominant cooling method. Micromobility is becoming the standard for daily transportation, while the continuously increasing demand for renewable energy for sustainable food production is becoming an urgent problem, as the steadily rising energy demand must be satisfied.

7 URBAN FOOD FUTURES NAVIGATOR

This short self-assessment helps you explore which future urban food system your current environment most closely resembles. Instead of predicting the future, the tool helps you reflect on how today's urban food practices, infrastructures and policies relate to different possible development paths. By answering the following questions, you will gradually move across a future map of urban food systems.

Urban food systems can evolve along two major dimensions.

Horizontal Axis

Community-driven ← → Technology- and market-driven

This dimension describes who shapes urban food systems. On the left side, food production and distribution are mainly organised through local initiatives, neighbourhood networks and citizen participation. On the right side, systems are dominated by large companies, technological infrastructures and centralised platforms.

Vertical Axis

Fragmented/niche ↓ ↑ Integrated/systemic

This dimension describes how deeply urban food systems are embedded in the city. At the bottom, food initiatives exist mainly as isolated projects or niche practices. At the top, food production, distribution and resource cycles are fully integrated into urban infrastructure and planning.

How the Navigator Works

For each question, choose the answer that best describes your current urban environment. Next to each answer you will see small arrows:

← Move one step left
→ Move one step right
↑ Move one step up
↓ Move one step down

Some answers move you in two directions. While answering the questions, keep track of your movements in the Scenario Map.

Questions

1. What does your balcony, terrace or window space look like?

- ☐ a) Occasionally used for plants, but not consistently: ← left, ↓ down
- ☐ b) Equipped with smart devices or even a small automated growing system: → right, ↑ up
- ☐ c) Mainly decorative or not used for growing food at all: → right, ↓ down
- ☐ d) Used to grow herbs, vegetables or small plants regularly: ← left, ↑ up

2. When you run out of fresh food, what do you usually do?

- ☐ a) Visit a local shop, market or neighbour nearby: ← left, ↑ up
- ☐ b) Go to a supermarket or rely on standard supply chains: → right, ↓ down
- ☐ c) Order online via an app or delivery service: → right, ↑ up
- ☐ d) Check what's available nearby and improvise: ← left, ↓ down

3. How do people around you deal with food waste?

- ☐ a) Behaviour varies significantly between households: ← left, ↓ down
- ☐ b) Trust that systems and technologies will handle it efficiently: → right, ↑ up
- ☐ c) Waste is recognised as an issue but not systematically addressed: → right, ↓ down
- ☐ d) Actively try to reduce, reuse or share food locally: ← left, ↑ up

4. How do you usually discover new food options or places?

- ☐ a) Through friends, neighbours or local networks: ← left, ↑ up
- ☐ b) By chance or depending on location and time: ← left, ↓ down
- ☐ c) Through apps, algorithms or digital recommendations: → right, ↑ up
- ☐ d) Through large retailers, advertising or known chains: → right, ↓ down

5. How transparent do food supply chains feel to you?

- ☐ a) Largely opaque and dominated by large actors: → right, ↓ down
- ☐ b) Partly visible, depending on the context: ← left, ↓ down
- ☐ c) Transparent and traceable at a local level: ← left, ↑ up
- ☐ d) Highly optimised and data-driven, but not always visible: → right, ↑ up

6. In case of a supply disruption, what would likely happen?

- ☐ a) Some areas would cope better than others: ← left, ↓ down
- ☐ b) Systems would adapt quickly through automation and logistics: → right, ↑ up
- ☐ c) Strong dependence on external supply would become visible: → right, ↓ down
- ☐ d) Communities would organise locally to compensate: ← left, ↑ up

7. Who seems to have the most influence over food systems in your city?

- ☐ a) Local communities and networks: ← left, ↑ up
- ☐ b) Many small actors without clear co-ordination: ← left, ↓ down
- ☐ c) Large established companies and retailers: → right, ↓ down
- ☐ d) Technology companies and digital platforms: → right, ↑ up

8. What best describes your neighbourhood today?

- ☐ a) Local initiatives exist but differ strongly between neighbourhoods: ← left, ↓ down
- ☐ b) High-tech food production or vertical farming is visible: → right, ↑ up
- ☐ c) Food is mainly supplied by supermarkets and centralised systems: → right, ↓ down
- ☐ d) Community gardens and local food initiatives are common: ← left, ↑ up

9. Where do you usually buy fresh food?

- ☐ a) Mostly local markets or direct from producers: ← left, ↑ up
- ☐ b) Through highly organised digital delivery platforms: → right, ↑ up
- ☐ c) Mainly large supermarkets or global chains: → right, ↓ down
- ☐ d) A mix of supermarkets and local initiatives depending on availability: ← left, ↓ down

10. How are unused spaces in your city typically used?

- ☐ a) Often remain unused or difficult to access: → right, ↓ down
- ☐ b) Developed for efficient production or commercial uses: → right, ↑ up
- ☐ c) Sometimes used temporarily by local initiatives: ← left, ↓ down
- ☐ d) Often transformed into community gardens or shared spaces : ← left, ↑ up

11. How important are digital technologies in local food systems?

- ☐ a) Used mainly in large retail or logistics systems: → right, ↓ down
- ☐ b) Used mainly to coordinate community initiatives: ← left, ↑ up
- ☐ c) Used inconsistently across neighbourhoods: ← left, ↓ down
- ☐ d) Used mainly by companies to optimise supply chains: → right, ↑ up

12. What role do neighbourhood networks play in food distribution?

- ☐ a) Strong local exchange and sharing networks: ← left, ↑ up
- ☐ b) Food distribution mainly happens through large retailers: → right, ↓ down
- ☐ c) Some neighbourhood initiatives exist: ← left, ↓ down
- ☐ d) Digital platforms coordinate supply across the city's supply chain: → right, ↑ up

13. How does urban policy address food systems?

- ☐ a) Cities actively support local food initiatives: ← left, ↑ up
- ☐ b) Urban food systems are rarely prioritised: → right, ↓ down
- ☐ c) Policies are fragmented and unclear: ← left, ↓ down
- ☐ d) Governments promote technological food innovation: → right, ↑ up

14. How are urban spaces designed?

- ☐ a) Multifunctional spaces combining food, leisure and ecology: ← left, ↑ up
- ☐ b) Highly optimised infrastructure systems dominate: → right, ↑ up
- ☐ c) Urban planning remains functionally separated: → right, ↓ down
- ☐ d) Mixed development with some experimental uses: ← left, ↓ down

15. Who mainly shapes the food system?

- ☐ a) Local initiatives and small entrepreneurs: ← left, ↓ down
- ☐ b) Technology companies and digital platforms: → right, ↑ up
- ☐ c) Citizens and local communities: ← left, ↑ up
- ☐ d) Large retailers and established supply chains: → right, ↓ down

Green Autonomy (top left quadrant)

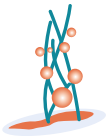
Cities are characterised by strong community engagement and local food networks. Urban agriculture is widely distributed and supported by policies that encourage neighbourhood initiatives, shared production spaces and local distribution systems. Technology supports these systems but does not dominate them.

What you can do today:

Citizens: Strengthen local food networks. Join or start neighbourhood initiatives, participate in community-supported agriculture and help build local food sharing or exchange systems.

Industry: Develop business models that support local food ecosystems. Work with regional producers, provide services for community initiatives or invest in infrastructure for local processing and distribution.

Policy: Scale what already works. Expand support for community gardens, local markets and urban agriculture programmes while ensuring that access to land and resources remains inclusive.



High-Tech Circular City (top right quadrant)

Urban food systems are highly integrated and strongly shaped by technology-driven infrastructures. Automated farms, digital logistics and data-driven platforms optimise production and distribution. Food systems become efficient and resilient but increasingly concentrated among large companies and technology providers.

What you can do today:

Citizens: Stay informed about how technology shapes food systems. Support transparency, sustainable innovation and responsible use of data in food supply chains.

Industry: Use technology to improve sustainability, not only efficiency. Invest in circular production systems, energy efficiency and transparent supply chains.

Policy: Ensure that technological transformation remains inclusive. Establish rules for data governance, market transparency and fair access to urban food infrastructure.

Patchwork Production (bottom left quadrant)

Urban agriculture is widespread but fragmented. Many initiatives are driven by local actors but lack coordination and long-term support. Neighbourhoods develop their own solutions, resulting in a patchwork of food systems across the city.

What you can do today:

Citizens: Connect existing initiatives. Share knowledge, resources and infrastructure between neighbourhood projects to strengthen collaboration and reduce fragmentation.

Industry: Look for opportunities to connect local initiatives with broader supply chains. Platforms, logistics services or cooperative models can help bridge the gap between grassroots production and wider markets.

Policy: Focus on coordination. Support networks between local initiatives, create platforms for knowledge exchange and develop clearer governance frameworks for urban food systems.

Eco-Scenery Cities (bottom right quadrant)

Urban agriculture exists mainly as a symbolic or educational feature, while food supply continues to rely on centralised and conventional food systems. Urban farming appears in curated spaces such as schools, public institutions or demonstration projects but does not play a major role in food supply. Urban planning remains functionally separated and new initiatives face regulatory and economic barriers.

What you can do today:

Citizens: Look for ways to reconnect with food production, even if opportunities are limited. Support local food initiatives, participate in community gardens or advocate for more accessible urban growing spaces in your neighbourhood.

Industry: Explore how urban agriculture can move beyond demonstration projects. Pilot partnerships with local producers, experiment with shorter supply chains or develop services that support small-scale urban farming initiatives.

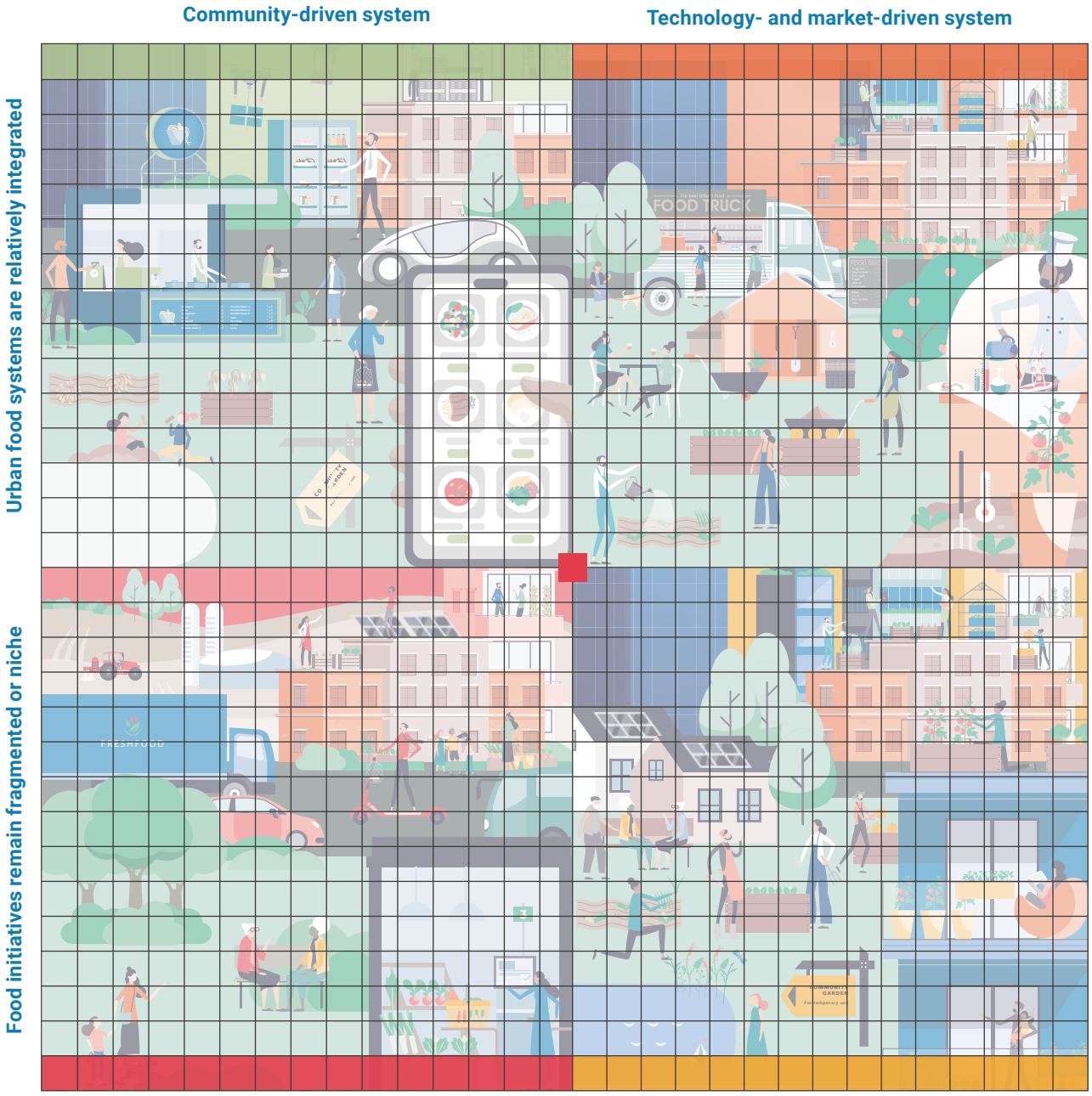
Policy: Create clearer frameworks for urban agriculture. Simplifying land-use regulations, enabling temporary land use and integrating food systems into urban planning can help urban agriculture move beyond symbolic projects.

Where does your City stand today?

After counting your movements, determine your position on the scenario map. If:

← left	> → right:	Community-driven systems dominate
→ right	> ← left:	Technology- and market-driven systems dominate
↑ up	> ↓ down:	Urban food systems are relatively integrated
↓ down	> ↑ up:	Food initiatives remain fragmented or niche

Your position places your city closest to one of the four scenarios.



COMMUNITY
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8
CONLUSION

Urban food systems are embedded in a broader context of profound and accelerating urban transformation. Cities today are confronted with interrelated challenges ranging from climate change and resource scarcity to social inequality and geopolitical uncertainty. While overarching ambitions for sustainable urban development are well established in international and European policy frameworks, the translation of these goals into locally grounded, implementable strategies remains a persistent challenge. This gap between vision and practice highlights the need for approaches capable of navigating complexity, uncertainty and context specificity in a more structured and forward-looking way.

The scenarios presented in this brochure illustrate that urban agriculture is not a singular or uniform concept, but rather a spectrum of possible roles and configurations within urban food systems. It can remain symbolic and marginal, evolve into fragmented grassroots practices, become a cornerstone of community-based systems, or be embedded within highly integrated, technology-driven infrastructures. These pathways underline that the transformation of urban food systems is inherently multi-dimensional. Technological innovation, governance structures, spatial development, economic dynamics and societal practices are closely intertwined, and change in one dimension inevitably affects others.

Current urban realities rarely correspond to a single, clearly defined pathway. Instead, many cities already exhibit hybrid characteristics that combine elements from different scenarios. These overlaps are not a sign of inconsistency, but rather reflect ongoing transformation processes. At the same time, they highlight the importance of path dependencies: Decisions made today – in planning, investment or regulation – shape the spectrum of future options and can either enable or constrain long-term development trajectories.

Against this backdrop, the key question is not which individual scenario will materialise, but where cities currently stand within this spectrum – and in which direction they might evolve. The Urban Food Futures Navigator included in this brochure supports this assessment by encouraging reflection on one's own urban environment along key development dimensions – such as the degree of integration of urban food systems or the interplay between community-driven and technology- or market-based structures.

Transformation does not begin in the future but is shaped by today's decisions, practices and framework conditions. This highlights where structural barriers can hinder change and where there is leeway for action.

Integrating urban agriculture early into planning and decision-making processes can therefore offer tangible benefits. This requires consciously navigating trade-offs – for example between efficiency and participation, or between technological optimisation and resilience. Positioned at the intersection of space, society and infrastructure, urban agriculture can act as a strategic leverage point. Realising this potential depends on coordinated action across key stakeholder groups, including civil society, industry and policy. In this context, scenarios provide a foundation for developing strategies and testing implementation pathways.

In this sense, the approach presented here is an invitation to move beyond analysis and actively engage in shaping the future of urban food systems – recognising that resilient and sustainable development emerges through the interplay of diverse actors and coordinated action.

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