

# Collaborative governance in urban agriculture: Stakeholder roles, collaborative mechanisms, and power dynamics

Svetla Stoeva \*

Institute of Philosophy and Sociology at the Bulgarian Academy of Sciences

Submitted February 27, 2025 / Revised April 29, August 26, and September 26, 2025 / Accepted September 28, 2025 / Published online December 5, 2025

*Citation:* Stoeva, S. (2025). Collaborative governance in urban agriculture: Stakeholder roles, collaborative mechanisms, and power dynamics. *Journal of Agriculture, Food Systems, and Community Development*, 15(1), 133–154. <https://doi.org/10.5304/jafscd.2025.151.014>

Copyright © 2025 by the Authors. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC-BY license.

## Abstract

Urban agriculture (UA) plays a pivotal role in sustainable urban development, addressing food insecurity, environmental challenges, and social inequality. This study investigates the dynamics of collaborative governance in UA through an analysis of stakeholder roles, collaborative mechanisms, and power dynamics across six types of initiatives: social farms, urban farms, community parks, community gardens, do-it-yourself gardens, and zero-acreage farms. Drawing on 14 case studies in Europe, the research identifies public authorities, civil society organizations (CSOs), nongovernmental organizations (NGOs), private businesses, and practitioners as key stakeholders. Public authorities provide regulatory frameworks and resources, NGOs and CSOs facilitate community engagement and advocacy, private businesses contribute innovation and investment, while practitioners offer

local knowledge and labor. The study argues that effective collaboration depends on inclusivity, shared responsibility, flexibility, and social cohesion. The findings highlight diverse collaborative mechanisms, including participatory decision-making, resource-sharing, and dynamic feedback loops, which enhance the adaptability and sustainability of UA initiatives. However, the study also reveals challenges arising from power imbalances, such as the dominance of public authorities and businesses over marginalized stakeholders, which can undermine inclusivity and equitable outcomes. The challenges underscore the importance of

## Funding Disclosure

The research data used in this paper was conducted within the framework of EFUA, the European Forum for Urban Agriculture project, funded by the European Horizon 2020 research and innovation program under Grant Agreement 101000681.

## Availability of Data

The datasets generated and analyzed during the current study are not publicly available due to anonymization challenges and privacy concerns but are available from the corresponding author on reasonable request.

\* Svetla Stoeva, PhD, Sociology, Institute of Philosophy and Sociology at the Bulgarian Academy of Sciences (IPS-BAS); 13a Moscow Str.; Sofia 1000, Bulgaria; [svetla.stoeva@gmail.com](mailto:svetla.stoeva@gmail.com);

 <https://orcid.org/0009-0008-9319-2975>

fostering balanced stakeholder interactions and participatory governance to mitigate conflicts and support long-term sustainability. Collaborative mechanisms must adapt to local contexts, ensuring that UA initiatives address the complex socio-economic and environmental challenges of urban systems. The study contributes to a deeper understanding of collaborative governance in UA, offering insights into building resilient urban food systems and promoting sustainable urban development. Future research should explore longitudinal case studies and extend the geographical scope to capture UA governance dynamics in diverse urban environments.

### Keywords

collaborative governance, urban agriculture, power dynamics, stakeholder engagement, sustainable development, community participation, inclusivity, resource-sharing

### List of Abbreviations

|              |  |
|--------------|--|
| BE           | Belgium                                      |
| BG           | Bulgaria                                     |
| CSOs         | Civil society organizations                  |
| CSR projects | Corporate Social Responsibility projects     |
| DIY          | Do-it-yourself                               |
| DK           | Denmark                                      |
| EFUA         | European Forum for Urban Agriculture project |
| GR           | Greece                                       |
| IT           | Italy  |
| NGOs         | Nongovernmental organizations                |
| NO           | Norway                                       |
| PT           | Portugal                                     |
| UA           | Urban agriculture                            |
| UK           | United Kingdom                               |

### Introduction

Urban agriculture (UA) has become a key component of sustainable urban development, particularly in rapidly growing cities facing challenges such as food insecurity, environmental degradation, and social inequality (Morgan, 2009; Mougeot, 2000). UA involves cultivation of crops, raising of livestock, and related activities within or on the fringes of urban areas, and includes practices ranging from

small-scale community gardens to commercial farming operations, contributing to food production, environmental management, and social cohesion (Deelstra & Girardet, 2000; Pearson et al., 2010). The success of UA initiatives depends largely on governance, the structures, processes, and institutions guiding decision-making and stakeholder participation (De Zeeuw et al., 2011). Effective governance accommodates the needs of key stakeholders, including public authorities, civil society organizations (CSOs), non-governmental organizations (NGOs), private businesses, and community practitioners (Cohen & Reynolds, 2014; Prové et al., 2016). Their interactions shape the sustainability of UA initiatives. It is important to recognize the heterogeneity within the broad stakeholder categories, as each encompasses diverse actors whose roles and influence vary significantly across contexts. (This heterogeneity is revisited in the conclusion, where its implications for collaborative governance theory are further explored.)

Public authorities play a crucial role in enabling UA through policies, regulations, and incentives (Lovell, 2010). CSOs advocate for UA through mobilizing communities and ensuring that initiatives address local needs (Veenhuizen, 2006). NGOs act as intermediaries between communities and policymakers, helping to bridge governance gaps (Hajer et al., 2015). Private businesses contribute financial resources, innovation, and market access through direct investments and corporate social responsibility programs, although concerns about commercialization and equity persist (McClintock, 2014; Pudup, 2008). Practitioners, including hobbyists and small-scale growers, promote biodiversity, share agricultural knowledge, and foster local food networks (Mok et al., 2014).

Collaborative governance has emerged as an effective framework for managing UA. Unlike top-down approaches dominated by government authorities or purely grassroots efforts, collaborative governance emphasizes multi-actor participation (Ansell & Gash, 2008). It involves participatory decision making, shared problem solving, and resource sharing to coordinate diverse interests and integrate multiple perspectives (Emerson et al., 2012). This approach is particularly suited to UA

complexity, which requires flexibility and cooperation among stakeholders.

Despite growing research on UA governance, several gaps remain. While stakeholder roles in UA have been explored, more research is needed to understand their specific contributions. Studies such as Emerson et al. (2012) and Cohen and Reynolds (2014) highlight the role of joint problem solving, resource sharing, and collective decision-making, emphasizing the importance of continuous feedback loops and stakeholder collaboration. Veenhuizen (2006) and Hajer et al. (2015) further examine multi-stakeholder interactions and the adaptability of UA initiatives to complex challenges, underscoring the need for systematic comparisons of governance mechanisms. Additionally, future research should investigate how governance structures evolve over time and respond to external pressures such as economic shifts, policy changes, climate change, and international trade policies. Understanding these dynamics will help refine governance models and enhance UA resilience in different contexts. UA governance requires balancing diverse interests while ensuring inclusivity, sustainability, and adaptability. Collaborative governance offers a promising model to address governance challenges, yet power imbalances between public authorities, businesses, and civil society persist. Addressing these inequalities through transparent decision-making and participatory structures is crucial for fostering equitable and effective UA initiatives.

Building on findings from previous research (Cohen & Reynolds, 2014; De Zeeuw et al., 2011; Emerson et al., 2012; Hajer et al., 2015; Prové et al., 2016) and drawing on key insights from Ansell and Gash's (2008) collaborative governance framework, this study offers a qualitative analysis aimed at advancing academic understanding of collaborative UA governance dynamics. Drawing on data from 14 case studies conducted across Europe, this study examines how collaborative mechanisms function across six distinct types of UA initiatives: social farms, urban farms, do-it-yourself (DIY) initiatives, community parks, community gardens, and zero-acreage farms (Jansma et al., 2024). The study aims to answer three research questions regarding UA collaborative governance: 1) What roles do key

stakeholders, including public authorities, the civil sector (CSOs/NGOs), private businesses, and practitioners, play in shaping and sustaining different types of UA initiatives? 2) What are the concrete collaborative mechanisms that facilitate effective collaboration among stakeholders, enhancing adaptability and effectiveness of UA initiatives? 3) How do power dynamics and conflicts between stakeholders, often involving imbalances in authority and influence, guide the governance and outcomes of UA initiatives, and what mechanisms help balance these power relations?

This paper develops a conceptual schema of collaborative governance in UA, derived from the existing literature, and employs case studies to illustrate and contextualize how this schema operates in practice. The case studies are therefore not the source of the framework, but serve as empirical examples through which the conceptual approach is refined. Importantly, the intention of this study is not to claim universal validity for the structures or roles identified in the case studies. Rather, the contribution lies in developing and applying a conceptual framework drawn from the literature, then illustrated and nuanced through empirical examples. In line with qualitative research principles, case studies are not used to generate statistical generalizations but to produce in-depth, context-specific insights. These insights may inform hypotheses and sensitizing concepts for further research, but the conclusions presented here apply only to the cases under study.

## Literature Review

The literature review explores the role of collaborative governance in UA, examining theoretical frameworks related to stakeholder involvement and collaborative mechanisms associated with them. The review deliberately focuses on concepts directly relevant to the main results, ensuring a coherent framework for analyzing UA collaborative governance. It highlights the key processes of shared responsibility, flexibility and adaptability, inclusivity, and social cohesion, which are critical to understanding the collaborative dynamics in UA initiatives. This focused approach allows examining the relevance of the main research questions, while avoiding broader, less pertinent discussions that

may not directly contribute to the study's central findings.

### *Collaborative Governance in UA*

Collaborative governance in UA is often discussed within the contexts of three primary governance models: top-down, bottom-up, and hybrid. However, while collaborative governance and the three models may overlap in some respects, especially in hybrid settings, their foundational principles, stakeholder roles, and decision-making processes differ significantly. In the top-down model, public authorities such as local governments take the lead in planning and implementing urban agriculture policies, often with the assistance of CSOs/NGOs. This model can ensure consistency and alignment with broader urban planning goals, but it may lack the flexibility to respond to local needs and preferences. In contrast, bottom-up governance is characterized by grassroots initiatives in which local communities and non-professional practitioners play central roles. This approach fosters community ownership and resilience but may face challenges in scaling up or integrating with broader policy frameworks. Hybrid governance, combining elements of both top-down and bottom-up approaches, is increasingly seen as how to balance the strengths and limitations of each model (Emerson et al., 2012).

Ansell and Gash (2008) offer a foundational framework for understanding collaborative governance, which they define as a “governing arrangement where one or more public agencies directly engage nonstate stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative” (Ansell & Gash, 2008, p. 544). Their model is based on a meta-analysis of 137 cases across policy sectors and identifies four core dimensions shaping collaborative outcomes: starting conditions (including power asymmetries, incentives, and histories of conflict), institutional design, facilitative leadership, and the collaborative process itself. This process revolves around face-to-face dialogue, trust-building, shared understanding, and mutual commitment. Importantly, they emphasize that collaboration unfolds through a nonlinear, iterative virtuous cycle, in which incremental successes help reinforce trust, strengthen

relationships, and deepen collective ownership of the process.

UA collaborative governance also highlights the roles of different stakeholders. As previously discussed, public authorities provide regulatory frameworks and resources, CSOs/NGOs offer organizational support and advocacy, private businesses contribute financial resources and expertise, and non-professional practitioners bring local knowledge and labor (Hajer et al., 2015). This multi-stakeholder engagement is crucial for addressing the complex social, economic, and environmental challenges that urban agriculture initiatives face.

Despite its potential, collaborative governance in UA is not without challenges. One of the most significant is coordinating and integrating diverse stakeholder interests, which can lead to conflicts and inefficiencies (Purcell & Tyman, 2012). Power imbalances, with certain stakeholders (e.g., local governments or private businesses) dominating decision making, can undermine the collaborative nature of governance and lead to inequitable outcomes. Another challenge is the sustainability of collaborative governance models. While they can be effective in the short term, maintaining long-term collaboration requires ongoing commitment, resources, and adaptability. Diverse interests among stakeholders often lead to conflicting values and priorities, while power imbalances can create mistrust and inhibit open information sharing. Actively involving all stakeholders in decision making may foster a sense of ownership and build trust, while regular interactions help sustain a shared vision.

### *Roles of Stakeholders in Collaborative Governance*

In collaborative governance, various stakeholders play distinct yet interconnected roles, contributing to the success and sustainability of urban agriculture initiatives. The involvement of diverse actors such as local governments, CSOs/NGOs, private businesses, and practitioners is crucial for the effective implementation of UA projects.

Public authorities support UA governance by providing regulatory frameworks, land access, and financial aid. Rather than sole decision-makers,

local governments act as facilitators, co-managing projects with CSOs/NGOs to bridge policy gaps and align UA with urban planning. Co-management agreements enable resource sharing, with CSOs/NGOs contributing expertise and community mobilization (Emerson et al., 2012).

In the governance of UA, CSOs/NGOs play distinct yet complementary roles. CSOs, rooted in grassroots needs, focus on advocacy, inclusive participation, and equitable access, particularly for marginalized groups. They create participatory platforms in community-driven initiatives like gardens (Cohen & Reynolds, 2014; Prové et al., 2016). NGOs take a formal approach, offering technical expertise, financial support, and policy advocacy. Acting as intermediaries, they align UA projects with urban planning, particularly in social and urban farms, promoting rehabilitation and inclusion. NGOs also advocate for sustainable UA practices and innovative solutions like zero-acreage farms, ensuring long-term scalability (Cohen & Reynolds, 2014; Prové et al., 2016).

Private businesses support urban agriculture through investments, innovation, and public-private partnerships, providing financial and technical resources. Their involvement enhances sustainability by scaling successful initiatives with market-based solutions (Hajer et al., 2015). However, balancing business interests with community needs is essential for equitable outcomes. Collaboration with local governments and NGOs helps scale projects and integrate market solutions while preventing marginalization (McClintock, 2014).

Professional and non-professional practitioners, including residents, volunteers, and community groups, drive UA initiatives by contributing local knowledge, labor, and ownership. Their engagement ensures projects align with community needs (Emerson et al., 2012). Informal yet vital interactions with stakeholders help maintain community-centered approaches. Practitioners collaborate with CSOs/NGOs through participatory decision making, shaping UA initiatives to reflect local values (White, 2011).

### *UA Collaborative Mechanisms*

Several studies have examined collaborative mechanisms in UA. Emerson et al. (2012) propose an

integrative framework emphasizing joint problem solving, resource sharing, and adaptive management. They view stakeholder meetings, collaborative planning, and shared decision making as key mechanisms. Cohen and Reynolds (2014) identify participatory planning and stakeholder advisory committees as essential for inclusive policy making. Prové et al. (2016) note how power dynamics shape governance through engagement workshops and advisory councils. McClintock (2014) discusses conflict resolution mechanisms balancing commercial and community interests. Veenhuizen (2006) emphasizes participatory governance through community workshops and advisory boards. Although not extensive, the existing literature on UA collaborative mechanisms reveals a range of theoretical frameworks and practical examples that highlight the importance of effective stakeholder interactions. Manganelli (2022) has analyzed how different stakeholders—public institutions, private actors, and grassroots movements—interact through hybrid governance arrangements that blend formal rules with informal practices to navigate urban food system challenges. The author concluded that hybrid governance allows urban food movements to combine formal and informal structures for greater flexibility, but also creates tensions around responsibility, power imbalances, and the risk of co-optation of grassroots initiatives.

The distinction between collaborative and hybrid governance is often ambiguous. While Manganelli (2022) advances a hybrid governance perspective to capture multi-actor arrangements, the collaborative governance approach (Ansell & Gash, 2008; Emerson & Nabatchi, 2015) provides a framework more closely aligned with our data, emphasizing not only the inclusion of diverse actors but also the iterative processes of negotiation, trust building, and joint problem solving. For this reason, the notion of collaborative rather than hybrid governance is used in our work as the guiding lens for analysis.

### **Conceptual Framework**

The conceptual framework of this study draws on Ansell and Gash (2008), Emerson et al. (2012), and Hajer et al. (2015), and understands collaborative governance in UA as a process shaped by four

interrelated dimensions: inclusivity, shared responsibility, flexibility and adaptability, and social cohesion. Inclusivity ensures that all relevant stakeholders have a voice in decision making, contributing their knowledge, perspectives, and resources. Shared responsibility distributes decision-making authority and practical obligations among participants, fostering joint ownership of both processes and outcomes. Flexibility and adaptability allow for adaptive management, enabling decisions to be revised in response to stakeholder input and changing conditions, thereby improving responsiveness and resource efficiency. Finally, social cohesion emphasizes trust-building through transparency, dialogue, and mutual respect, strengthening the collaborative relationships that underpin effective governance. These interrelated processes emphasize cooperation, continuous learning, and adaptation.

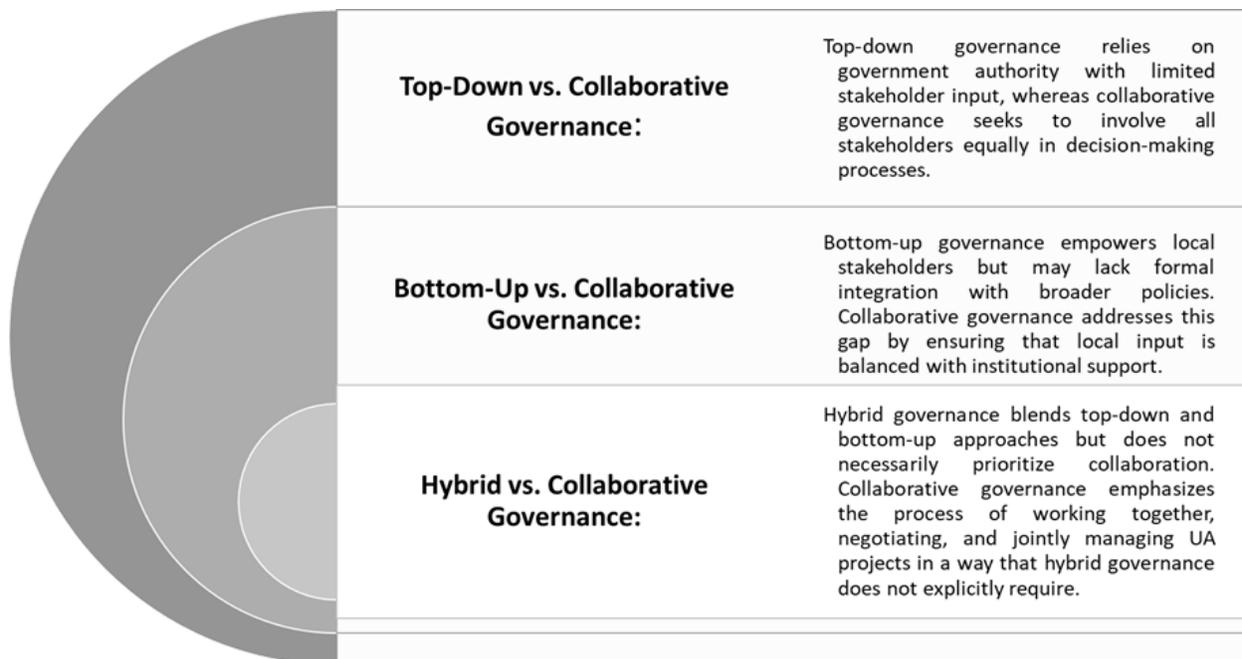
This paper asserts that while collaborative governance can overlap with some elements of the top-down, bottom-up and hybrid types of governance, it is distinct because it explicitly centers active, ongoing collaboration among all stakeholders, rather than simply sharing roles (Figure 1). Collaborative governance requires continuous dia-

logue, negotiation, and a deliberate effort to build partnerships across different sectors, making it more dynamic and responsive compared to the structured nature of top-down governance or the autonomous nature of bottom-up governance.

Drawing from the available research on collaborative mechanisms, this work aims to understand how diverse stakeholders in UA initiatives work together. Collaborative mechanisms are defined as concrete interactions among UA stakeholders that enable them to coordinate their efforts, share resources, make joint decisions, manage conflicts, and adapt to changing initiative conditions. We contend that interplay between diverse stakeholders drives these mechanisms, ensuring that UA initiatives can address complex urban challenges while fostering community engagement and resilience. To further enhance understanding how collaborative governance operates in practice, we will provide examples of collaborative mechanisms in the processes of inclusivity, shared responsibility, flexibility and adaptability, and social cohesion.

This conceptual framework identifies four primary stakeholder groups within UA collaborative governance frameworks: public authorities, CSOs/NGOs, private business, and practitioners

**Figure 1. Differences Between Other UA Governance Models and Collaborative Governance**



(both professional and non-professional). In line with Emerson et al. (2012), Ansell and Gash (2008), and Hajer et al. (2015), public authorities are conceptualized in this study as playing a crucial facilitative role in UA by providing regulatory frameworks, funding, and technical support while actively engaging with other stakeholders to co-design and implement UA initiatives. This perspective marks a shift from traditional top-down management to a more participatory model with local authorities acting as partners rather than sole decision-makers. CSOs /NGOs are framed as playing distinct yet complementary roles; therefore, they are presented as one group of stakeholders (CSOs/NGOs). Their role encompasses advocacy, community mobilization, and facilitating knowledge transfer among diverse stakeholders. Private businesses are viewed through a lens of dual contribution: as providers of financial resources and technical innovation, and as potential catalysts for scaling up UA initiatives. UA practitioners, including local residents and volunteers, are positioned as integral to the success of UA initiatives. Their contributions of local knowledge, labor, and community engagement are fundamental to the resilience and adaptability of UA projects.

Various typologies of UA have been proposed, reflecting the sector’s diversity. *Urban and peri-urban agriculture sourcebook* (Food and Agriculture Organization of the United Nations et al., 2022) categorizes UA based on production systems and value chains. The Urban Agriculture Europe COST Action (Lohrberg et al., 2016) emphasizes spatial, functional, and organizational dimensions. The

diversity of roles that key stakeholders may play in UA and of concrete collaborative mechanisms is explored in six types of UA initiatives across Europe, a typology developed by Jansma et al. (2024) in the context of the EU Horizon 2020 European Forum on Urban Agriculture (EFUA) (Table 1). The six types are built upon four dimensions that describe UA practices: spatial dimension (where in the city and on how big a plot the initiatives take place, indoors or outdoors, etc.), production dimension (what types and varieties of products the initiative produces), operational dimension (is the produce sold, who consumes it), and community dimension (who is responsible for maintaining the initiative, is it open for leisure and other community activities).

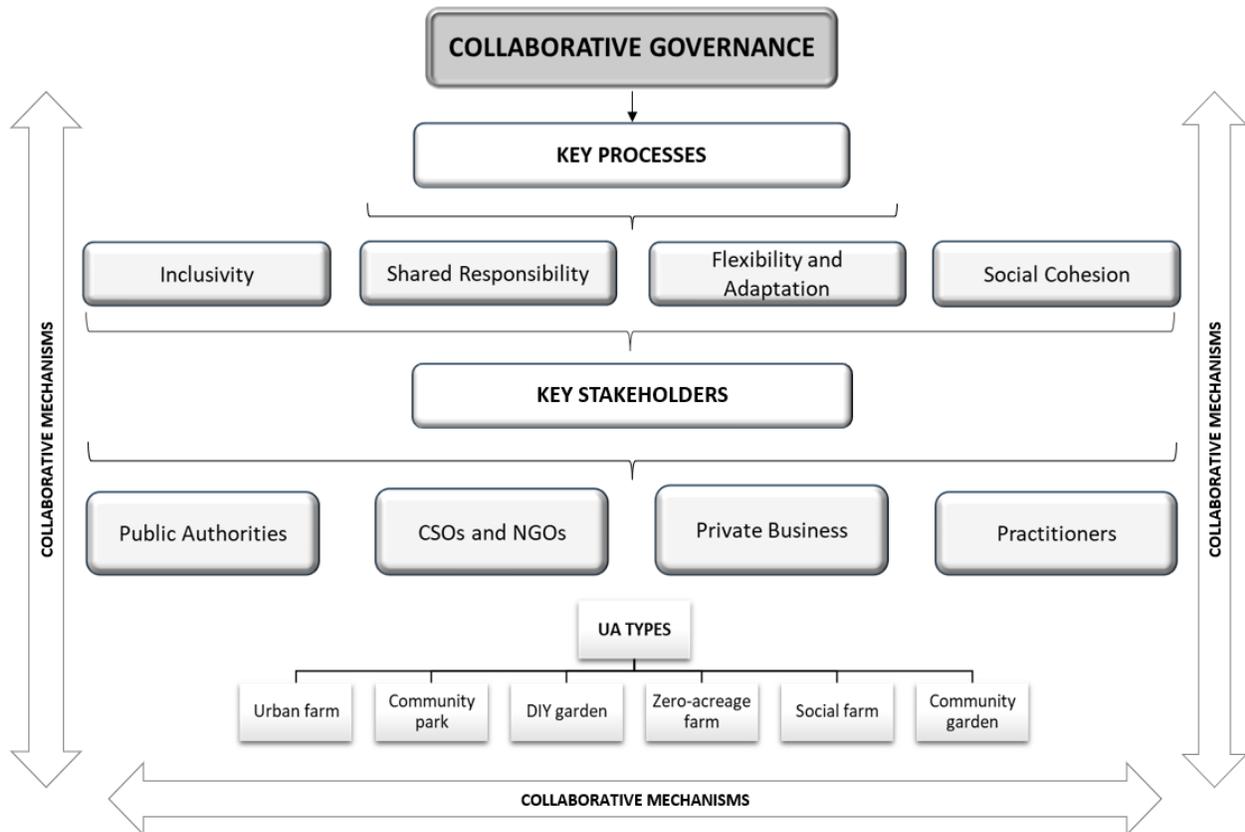
As illustrated in Figure 2, the conceptual framework outlines how four main processes connect key stakeholders—public authorities, CSOs/NGOs, private businesses, and practitioners. It illuminates the collaborative mechanisms that guide their interactions within six types of UA initiatives. The framework emphasizes that successful UA governance depends on multi-stakeholder collaboration, diverse actors contributing to urban food systems through tailored governance mechanisms that respond to the needs and goals of the initiative.

A critical aspect of the conceptual framework is its acknowledgement of power dynamics and potential conflicts among key stakeholders. It recognizes that while public authorities often wield significant formal power through control of resources and regulatory frameworks, other stake-

**Table 1. Jansma et al. (2024) Typology**

|  |   |
|--|---|
| <b>Urban farm</b>                          | Commercial UA initiative, with a wide variety of products, usually on large areas of land   |
| <b>Community park</b>                      | UA initiative that combines food production with a landscaped space, where community involvement and non-food activities are common                                 |
| <b>Do-it-yourself (DIY) garden or park</b> | UA initiative aimed mostly at individual production of food for own consumption, without additional leisure activities  |
| <b>Zero-acreage farm</b>                   | UA initiative where food is produced utilizing small spaces that may not be on the ground, but on raised spaces, afloat or on rooftops, and produce is usually sold |
| <b>Social farm</b>                         | UA initiative where food production is combined with healthcare services or other activities that help the disadvantaged  |
| <b>Community garden</b>                    | UA initiative where community building activities and social aspects are more prominent than food production  |

**Figure 2. Main Elements of the Conceptual Framework**



holders can exert influence through social capital, community mobilization, and expertise. It emphasizes the importance of mechanisms that balance diverse interests and mitigate power asymmetries, such as inclusive participation strategies, knowledge-sharing platforms, and co-creation processes for policies and practices. Power dynamics is explored within the four key processes of inclusivity, shared responsibility, flexibility and adaptability, and social cohesion.

### Methodology

The methodological approach was designed to analyze the role of collaborative governance in UA across 14 case studies across Europe, performed within the EFUA project. EFUA was developed as a natural continuation of the Urban Agriculture Europe COST Action project, building directly on its conceptual and empirical foundations. The typology of European UA initiatives developed by

Jansma et al. (2024) and used below also derives from this project. The methodology, based on case study selection and analysis, allows for a comprehensive understanding of the complex interactions between stakeholders, as well as the processes that underpin collaborative governance in different UA initiatives.

It is important to emphasize that the case study method, as applied in the EFUA project and in this study, does not aim at representativeness or universal generalization. Rather, its strength lies in providing detailed insights into the dynamics of specific UA initiatives, and refining and illustrating the conceptual framework. The study findings therefore are case-specific and case-bound. As they follow established principles of qualitative research (Flyvbjerg, 2006; Yin, 2014), the conclusions are valuable for generating hypotheses that could be examined in future studies of broader populations of UA initiatives.

Case selection aimed to collect comparable data to elucidate the roles and interactions of key stakeholders in collaborative governance identified as critical to achieve shared responsibility, flexibility and adaptability, inclusivity and social cohesion in governance processes. While European cases were selected, one example from Dhaka, Bangladesh, was used to explore the potential relevance of governance tensions beyond the European context. Preliminary indications suggest that similar dynamics—particularly between community-driven objectives and institutional or market pressures—were observed. However, this example has not been integrated into the comparative framework of the study, as no site visits were conducted and the empirical material remains less robust than for the European cases. The Dhaka example is therefore presented in an exploratory capacity only, serving to highlight methodological limitations in the current research design while pointing to avenues for future cross-regional inquiry. Although not included in the formal comparative analysis, certain preliminary insights from this case appear in the conclusion, to suggest governance dynamics that merit further investigation across diverse contexts. The city and country locations of the cases, as well as their types, are presented in Table 2.

Qualitative data collection methods captured the diverse perspectives and dynamics involved in UA collaborative governance. A standardized qualitative data collection protocol was created to ensure consistency and comparability across the selected cases. The protocol involved in-depth case studies aimed at providing detailed analyses of the initiatives using a standardized reporting template. It was designed to portray collaborative arrange-

ments across UA types, highlighting the importance of multi-stakeholder engagement in key aspects of collaborative governance and to illuminate different stakeholders' influence on policy making, including their contributions to the success of UA initiatives.

Primary data were collected through semi-structured interviews. For each case, between one and four interviews were conducted, depending on the availability and accessibility of respondents. Interviewees were selected to represent key governance stakeholders, including UA initiators, project leaders, core organizers, representatives of local authorities, and actors from supporting organizations such as NGOs/CSOs. In cases where only one respondent could be available, priority was given to individuals directly engaged in the leadership, coordination, or management of the initiative, ensuring access to comprehensive governance insights.

Although the limited number of interviews in certain cases reduced opportunities for triangulation, this problem was mitigated through the careful selection of knowledgeable respondents and through the systematic triangulation of interview findings with secondary sources such as local government planning documents, agricultural and environmental policy frameworks, publicly available reports from producer associations, certification guidelines, and material published by the initiatives themselves—websites, annual reports, newsletters, and communication on social media. Furthermore, site visits were conducted at all UA projects, providing additional analytical depth. On-site observations enabled the researchers to assess stakeholder interactions, observe the practical chal-

**Table 2. Case Study UA Initiatives and their Geographical Distribution**

|       | UPA type             |                              |                       |                        |                             |                           |
|-------|----------------------|------------------------------|-----------------------|------------------------|-----------------------------|---------------------------|
|       | Urban farm           | Community park               | DIY                   | Zero acreage           | Social farm                 | Community garden          |
|       | Turin, Italy (IT)    | Glasgow, United Kingdom (UK) | Loures, Portugal (PT) | Brussels, Belgium (BE) | Dobrich, Bulgaria (BG)      | Thessaloniki, Greece (GR) |
| Cases | Sofia, Bulgaria (BG) | Copenhagen, Denmark (DK)     | Bergen, Norway (NO)   | Sofia, Bulgaria (BG)   | Dundee, United Kingdom (UK) | Rome, Italy (IT)          |
|       | Ghent, Belgium (BE)  |                              |                       | Dhaka, Bangladesh (BD) |                             | Sofia, Bulgaria (BG)      |

allenges of implementing collaborative governance, and consider how different initiative governance models influenced everyday functioning. Site visits served as an important complementary data source, helping to compensate for limited interview data where necessary and strengthening the empirical grounding of the study.

The semi-structured interviews followed a standardized guide to ensure comparability across cases while allowing flexibility for context-specific elaboration. The interviews focused on understanding internal governance structures (e.g., decision-making processes, leadership dynamics, conflict resolution strategies), external governance interactions (e.g., relationships with local authorities, support organizations, and other stakeholders); strategies for sustainability (e.g., funding sources, human resource management, volunteer engagement) and innovation processes (e.g., introduction of new agricultural practices, community-building strategies, experimentation).

The aggregated primary and secondary data on each case was entered into a standardized reporting template, organized in thematic sections. To ensure a systematic and rigorous analysis of the case study data, a thematic coding framework was developed,

aligned with the semi-structured interview guide and the standardized reporting template used across the case studies. The coding process followed Braun and Clarke's (2006) thematic analysis method, enabling identification, organization, and synthesis of crucial patterns in stakeholder interactions and collaborative governance mechanisms. The coding framework was structured around five analytical themes, directly reflecting the research objectives and the structure of the results section (Table 3).

The thematic codes were systematically applied to both primary (interview) and secondary (documentary) data, ensuring close alignment with the original research questions. Both internal governance aspects, such as leadership structures and participatory mechanisms, and external governance interactions, such as collaborations with municipalities, NGOs, and businesses, were addressed. The coding and analytical structure enabled a nuanced, cross-case comparison of stakeholder engagement, collaborative governance mechanisms, and contextual adaptation strategies across diverse urban agriculture settings, providing a robust empirical foundation for the study's findings.

**Table 3. Analytical Themes for Analyzing Collaborative Governance Mechanisms in the UA Case Studies**

| Analytical Theme   | Description   |
|--|---|
| Roles and Contributions of Stakeholders                  | Capturing the distinct roles played by public authorities, CSOs/NGOs, private businesses, and practitioners in shaping and sustaining different types of UA initiatives. Special attention was paid to how these roles varied across social farms, urban farms, community parks, community gardens, DIY gardens, and zero-acreage farms.  |
| Collaborative Mechanisms                                 | Identifying and categorizing concrete mechanisms that facilitated collaboration, including role assignment, resource integration, collaborative planning, dynamic feedback loops, regulatory flexibility, inclusive forums, and partnership networks. Mechanisms were analyzed through the four collaborative governance processes specified in the conceptual framework: shared responsibility, flexibility and adaptability, inclusivity, and social cohesion.                    |
| Power Dynamics and Conflicts in Collaborative Governance | Analyzing how governance processes—shared responsibility, flexibility and adaptability, inclusivity, and social cohesion—are shaped, constrained, or distorted by power asymmetries among stakeholders. Coding focused on identifying instances where dominant actors limited substantive participation, where adaptation was reactive rather than proactive, where inclusivity remained symbolic, and where social cohesion efforts reinforced rather than dismantled hierarchies. |
| Barriers and Success Factors                             | Mapping perceived barriers (e.g., regulatory rigidity, unstable funding, administrative burdens, volunteer burnout) and success factors (e.g., strong cross-sector partnerships, flexible governance models, visionary leadership) that impacted the sustainability and inclusivity of UA initiatives.  |

## Results

The findings are organized into three main subsections. The first part focuses on the roles of key stakeholders, including public authorities, CSOs/NGOs, private businesses, and practitioners, across the six types of initiatives. The second part examines the four core processes of collaborative governance: shared responsibility, flexibility and adaptability, inclusivity, and social cohesion. Key collaborative mechanisms are analyzed to show how they enhance the sustainability and inclusivity of UA projects. The third part analyses the power dynamics and potential conflicts among the key stakeholders and how they are manifested within the key processes of collaborative governance. How the conflicts impact the effectiveness of UA initiatives is also discussed, emphasizing the need for balanced collaboration to ensure equity and long-term sustainability.

### *Stakeholders' Roles in the Six Types of UA Initiatives*

Drawing on the theoretical foundations of collaborative governance as outlined by Ansell and Gash (2008), Emerson et al. (2012), and Hajer et al. (2015), this analysis provides an in-depth look at collaborative governance of the six types of UA initiatives, highlighting the crucial roles of key stakeholders in creating sustainable and inclusive urban food systems. To illustrate how collaborative governance unfolds in UA initiatives, Table 4 synthesizes the observed stakeholder roles across the studied cases.

It is important to note that the roles summarized in Table 4 reflect the specific dynamics observed in the examined cases rather than gener-

alizable patterns across all UA initiatives. In particular, while some cases illustrate that public authorities may contribute funding (e.g., social farms in Dobrich and Dundee), this role appears as an exception rather than the norm. More typically, public authorities are involved as regulators, providers of land, or facilitators of innovation. This underscores that the stakeholder roles identified here are context-specific and case-bound, consistent with the qualitative case study approach, which aims to generate situated insights rather than universal claims.

Public authorities play a foundational role in the governance of UA initiatives by providing essential support through regulatory frameworks, funding, and technical assistance. In social farms such as Dobrich, BG, public authorities are crucial partners, often collaborating with NGOs/CSOs to design and fund programs that address social inclusion, mental health, and employment for marginalized populations. These farms serve therapeutic purposes, utilizing agriculture as a means of rehabilitation and social engagement. The involvement of public authorities ensures that these farms are well-integrated into public health and social service systems, demonstrating the shift from a regulatory role to a more engaged, partnership-based approach. The data show that public authorities play (or are expected by practitioners to play) a key supporting role for urban farms—particularly by providing public land, offering subsidies, and developing policies that integrate urban agriculture into sustainable city planning, as reported in the cases of Turin (IT) and Sofia (BG). In contrast, where public authority support is more limited, UA initiatives often emerge through private or commu-

**Table 4. Diversity of Stakeholder Roles with Case Study Examples**

| Stakeholder Group  | Main Roles   | City/Initiative Examples  |
|--------------------|--|---|
| Public Authorities | Regulatory support, land provision, funding, innovation support          | Dobrich (BG), Dundee (UK), Turin (IT), Sofia (BG), Brussels (BE), Thessaloniki (GR), Glasgow (UK) |
| CSOs/NGOs          | Community mobilization, daily management, technical assistance, advocacy | Dobrich (BG), Dundee (UK), Turin (IT), Bergen (NO), Loures (PT), Brussels (BE)                    |
| Private Businesses | Financial support, innovation, commercialization, CSR projects           | Turin (IT), Sofia (BG), Thessaloniki (GR), Copenhagen (DK), Brussels (BE)                         |
| Practitioners      | Grassroots engagement, farming operations, community building            | Dobrich (BG), Dundee (UK), Turin (IT), Sofia (BG), Bergen (NO), Loures (PT), Brussels (BE)        |

nity-led efforts with minimal regulatory facilitation, highlighting the diversity of public sector involvement across different regions. In the case of zero-acreage farms, such as vertical farms or rooftop gardens, public authorities often provide support through innovation grants, tax incentives, and the adaptation of zoning regulations to accommodate novel farming methods, exemplified by practices in Brussels, BE. These farms, which do not rely on traditional land-based agriculture, represent a shift towards high-tech, space-efficient farming solutions within urban environments. The involvement of public authorities is critical in regulating and promoting these innovative practices, demonstrating their role in fostering urban resilience and food security. In community gardens and parks, such as in Thessaloniki, GR and Glasgow, UK, public authorities often provide land, infrastructure, and basic resources, fostering spaces where communities can engage in gardening activities. These gardens serve as social hubs that promote environmental education, social cohesion, and physical activity. Public authorities work closely with community groups, NGOs, and CSOs to co-manage these spaces, ensuring they reflect the needs and aspirations of local residents, thus embodying the principles of shared decision making central to collaborative governance (Ansell & Gash, 2008).

CSOs/NGOs are pivotal in UA initiatives, acting as intermediaries that connect local communities with institutional frameworks. In social farms, such as those in Dobrich, BG and Dundee, UK, CSOs/NGOs often spearhead initiatives that focus on social inclusion and rehabilitation, designing programs that use agriculture as a therapeutic tool. They manage daily operations, provide training, and ensure the involvement of participants who may be socially or economically marginalized. These organizations bring technical expertise and advocacy skills to the table, helping to align the objectives of social farms with broader social policies and ensuring that vulnerable populations are supported. CSOs/NGOs also play a significant role in urban farms, such as those in Turin, IT, by advocating for sustainable practices, organizing community involvement, and facilitating access to resources such as funding and technical assistance. Their efforts help professionalize urban farming,

supporting farmers in navigating complex regulatory environments and connecting them with markets. In DIY gardens and community parks, such as Bergen, NO and Loures, PT, CSOs/NGOs are often the catalysts for transformation, mobilizing volunteers and securing funding to convert underused urban spaces into productive green areas. They provide essential resources, such as seeds, tools, and training, thus empowering residents to take ownership of these spaces. This dynamic fosters community engagement and environmental stewardship, reinforcing the collaborative nature of these initiatives. In zero-acreage farms, such as in Brussels, BE, NGOs/CSOs can play a role in promoting sustainable practices, particularly by ensuring that high-tech farming methods are accessible and environmentally responsible.

Private businesses are critical stakeholders in the collaborative governance of UA initiatives, providing critical resources such as funding, expertise, and market access. In urban farms, like those in Turin, IT and Sofia, BG private businesses often become involved through public-private partnerships that support the commercialization of urban agriculture, driving innovation in farming practices, distribution, and marketing. Their involvement brings much-needed investment into UA initiatives, allowing for the development of more technologically advanced and scalable farming operations. In social farms businesses support therapeutic activities as part of their corporate social responsibility programs by funding initiatives that integrate disadvantaged individuals into the workforce through agriculture. This collaboration not only benefits the community but also enhances the businesses' reputation as socially responsible actors. However, the role of businesses in UA initiatives must be carefully managed to ensure that commercial interests do not overshadow community values and the equitable distribution of benefits. In community gardens, DIY gardens, and community parks, such as in Thessaloniki, GR and Copenhagen, DK, businesses often participate by sponsoring projects, donating materials, or offering employee volunteer programs. These contributions help sustain gardens and parks, fostering a sense of shared responsibility between the private sector and local communities. Zero-acreage farms, as in

Brussels, BE, often require significant capital for infrastructure and technology, and benefit from private investment that enables the development of sustainable urban farming solutions such as hydroponics, aquaponics, and vertical farming. The involvement of private businesses in these initiatives is vital for scaling up production and making innovative UA practices financially viable. However, collaborative governance emphasizes that such involvement should always be balanced with the needs and rights of local communities, ensuring that UA initiatives remain accessible and beneficial to all stakeholders (Hajer et al., 2015).

Practitioners are at the heart of UA initiatives, contributing both specialized knowledge and grassroots engagement. In social farms, professional practitioners such as therapists, social workers, and agricultural experts work alongside non-professional volunteers to create inclusive environments that support social and therapeutic objectives. The practitioners design and implement programs that use farming as a means of rehabilitation, skill building, and community engagement. Urban farms, such as in Turin, IT and Sofia, BG, often involve professional farmers, agronomists, and business managers who bring technical expertise and market knowledge to urban food production. Their role is crucial in ensuring that urban farms are productive, sustainable, and financially viable. Non-professional practitioners, including hobby gardeners, local residents, and community volunteers, as in Bergen, NO and Loures, PT, are integral to the operation and success of DIY gardens, community parks, and community gardens. Their contributions of time, effort, and local knowledge help maintain these spaces and foster a sense of community ownership. In DIY gardens and community parks, non-professional practitioners are often the driving force, leading initiatives that transform vacant or neglected spaces into vibrant, productive green areas. These initiatives empower individuals and communities to engage directly with their environment, enhancing both urban biodiversity and social cohesion. In zero-acreage farms, professional practitioners are essential in managing complex technologies such as vertical farming systems, while non-professionals may engage in educational programs or community outreach activities that pro-

mote urban food security. The collaborative governance of these initiatives relies on the active participation of both professional and non-professional stakeholders, ensuring that UA initiatives remain responsive, adaptable, and deeply rooted in community needs.

The findings show that governance structures and stakeholder roles in UA initiatives vary significantly across countries and types of initiatives. Public authorities, CSOs/NGOs, private businesses, and practitioners assume distinct functions depending on socio-institutional environments and the nature of the initiative, whether it be a social farm, urban farm, DIY initiative, community park, community garden, or zero-acreage farm. While public authorities often act as regulators and enablers, their role can range from active partnership (social farms in Europe) to facilitating innovation (zero-acreage farms in Brussels). CSOs/NGOs demonstrate flexibility in adapting their support functions to context-specific needs, from leading grassroots DIY initiatives to acting as technical advisors in urban farms. Private businesses contribute resources and technological expertise but require careful integration to balance commercial interests with community values. Practitioners, both professional and non-professional, are crucial to anchoring UA initiatives within local communities. The findings also show that collaborative governance in UA is inherently dynamic, shaped by shifts such as regulatory changes, technological advancements, evolving community needs, and transformations in stakeholder alliances, which underscores the importance of place-sensitive, adaptable governance models that can respond to diverse local conditions, while promoting inclusive, sustainable, and resilient urban food systems.

### *Key Processes and Collaborative Mechanisms in UA Initiatives*

While the previous section detailed the roles of stakeholders within the six types of UA initiatives, the analysis below demonstrates the collaborative mechanisms around the four processes—shared responsibility, flexibility and adaptability, inclusivity, and social cohesion—and presents how these processes shape governance in various UA initiatives. See Table 5.

**Table 5. Collaborative Mechanisms Across the Four Processes with Case Study Examples**

| Collaborative Processes      | Key Mechanisms  | City/Initiative Examples  |
|------------------------------|---|---|
| Shared Responsibility        | Role assignment, resource integration, collaborative planning | Thessaloniki (GR), Glasgow (UK), Turin (IT), Sofia (BG), Rome (IT), Dobrich (BG), Dundee (UK) |
| Flexibility and Adaptability | Feedback loops, regulatory flexibility, responsive practices  | Bergen (NO), Turin (IT), Brussels (BE), Thessaloniki (GR)                                     |
| Inclusivity                  | Inclusive forums, community outreach, equity-driven support   | Dobrich (BG), Glasgow (UK), Bergen (NO), Thessaloniki (GR)                                    |
| Social Cohesion              | Joint activities, trust building, partnership networks        | Copenhagen (DK), Brussels (BE), Dobrich (BG), Dundee (UK)                                     |

### *Shared Responsibility*

Shared responsibility in UA initiatives is rooted in the division of tasks and roles among different stakeholders, no single actor assuming full control. This collaborative approach distributes accountability, integrates diverse resources, and ensures that initiatives can be sustained over time. Mechanisms of shared responsibility primarily involve role assignment, resource integration, and collaborative planning. Role assignment is crucial in UA initiatives, as stakeholders assume distinct responsibilities based on their expertise and capacity. Public authorities typically provide the structural backbone for these initiatives, offering land, regulatory frameworks, and in some cases financial support. NGOs and CSOs often take on the role of mobilizing community involvement and coordinating the initiative. For example, in the community garden in Thessaloniki, GR and the community park in Glasgow, UK, public authorities are responsible for providing land, while NGOs manage community engagement and volunteer coordination. This division of responsibilities ensures that the burden of managing the initiative is distributed across various actors, each contributing according to their strengths. Such assignments are particularly visible in urban farms in Turin, IT and Sofia, BG, where private businesses handle the commercial production aspect while CSOs ensure community participation.

Another critical mechanism is resource integration, which involves pooling resources from different stakeholders to support the initiative. This may include financial investments from private businesses, land allocation from public authorities, and

volunteer labor from the community, coordinated by NGOs or CSOs. For instance, the urban farm in Rome, IT often relies on businesses to provide technological innovations such as vertical farming, while NGOs contribute by engaging local communities. This integration not only ensures the smooth functioning of the initiative but also promotes a sense of ownership among all participants. In social farms, resource integration is critical, as these initiatives often involve therapeutic activities. Public authorities may provide funding for healthcare services, and NGOs and local communities offer the necessary social support.

Collaborative planning is another mechanism that strengthens shared responsibility in UA initiatives. Joint decision-making meetings among stakeholders allow for a coordinated approach to management. The meetings ensure that all voices are heard, and that stakeholders work together to define initiative objectives and activities of the. In social farms, this collaborative model is particularly effective, as it allows healthcare providers, local authorities, and CSOs to work together in designing a therapeutic program that integrates farming with social and healthcare services. This coordinated approach helps initiatives adapt to the needs of their participants, enhancing initiative resilience and sustainability initiative.

### *Flexibility and Adaptability*

Flexibility and adaptability are essential components of successful UA initiatives because of the dynamic nature of urban environments and evolving regulatory frameworks. Collaborative mechanisms related to flexibility and adaptability include

dynamic feedback loops, regulatory flexibility, and responsive practices, which collectively ensure that initiatives can adjust to changing circumstances and remain relevant. In dynamic feedback loops, stakeholders regularly provide input through formal and informal channels, such as surveys, community meetings, and real-time observations by practitioners. This feedback is critical in allowing the initiative to modify its strategies or practices in response to community needs or environmental challenges. For example, in DIY initiatives, such as in Bergen, NO, residents may initiate projects based on immediate community needs, such as transforming derelict urban spaces into gardens. As the initiative progresses, feedback from participants allows the initiative to evolve, adjusting planting schedules or community activities based on seasonal changes or local preferences. This responsiveness is particularly visible in urban farms as in Turin, IT, where technological innovations such as hydroponics are introduced based on ongoing assessment of their effectiveness in urban environments.

Regulatory flexibility by public authorities plays a crucial role in the adaptive capacity of the initiatives. They often face constraints related to zoning laws, land use regulations, and food safety standards, which may not be designed with urban farming in mind. Public authorities can facilitate initiative success by adapting regulations or offering exemptions that allow the initiatives to thrive. In zero-acreage farms, as in Brussels, BE, public authorities have provided regulatory support by adjusting zoning laws to accommodate vertical farming, enabling the farms to overcome the limitations of space in urban areas. This flexibility is critical to ensuring that UA initiatives can continue to operate despite urban environment constraints. Responsive practices are also central to the adaptability of initiatives. These practices involve modifying farming techniques or operational strategies based on environmental conditions, community feedback, or technological advancements. In community gardens, as in Thessaloniki, GR, the introduction of new farming methods, such as permaculture or organic farming, is often driven by feedback from participants and changing environmental conditions. Similarly, zero-acreage farm in Brussels, BE has adopted innovative practices,

such as vertical farming and hydroponics, to address the challenges of space and sustainability in urban areas. These responsive practices ensure that UA initiatives remain flexible and can quickly adapt to new challenges, thus enhancing their resilience.

### *Inclusivity*

Inclusivity is a fundamental process in the collaborative governance of UA initiatives, ensuring that all stakeholders, particularly marginalized groups, have a voice in decision making and access to the benefits of the initiative. The collaborative mechanisms that promote inclusivity in this study include the creation of inclusive forums, active community involvement, and equity-driven support. Inclusive forums provide a space for diverse stakeholders to participate in decision-making processes. The forums are designed to ensure that the voices of marginalized groups, such as immigrants, low-income families, and individuals with disabilities, are heard and reflected in initiative governance. In social farms, for instance, vulnerable populations with physical or mental disabilities are actively involved in farm operations and decision-making. The inclusive approach ensures that the farm serves both its social and agricultural purposes, providing therapeutic benefits while promoting community integration. In community gardens, like in Glasgow, UK, inclusive forums allow residents from diverse backgrounds to influence the planning and development of the garden, ensuring that the initiative reflects the needs of the entire community.

Community involvement is another key mechanism that promotes inclusivity. Outreach events, workshops, and participatory activities are organized to actively involve community members in the initiative. In DIY initiatives, like Bergen, NO, local residents are encouraged to participate in gardening activities, regardless of their prior farming experience. NGOs often play a crucial role in organizing these events, encouraging even those with limited farming knowledge to contribute meaningfully to the initiative. Such broad engagement fosters a sense of ownership among participants and ensures that the UA initiatives serve as a platform for community building. Equity-driven support mechanisms are also essential in ensuring broad participation. They involve providing tar-

geted resources, such as educational materials, mentoring programs, and accessibility accommodations, thus enabling marginalized groups to participate fully in the initiative. In social farms, like in the case of Dobrich, BG, therapeutic gardening programs are designed to accommodate individuals with disabilities, providing them with the necessary support to engage in farming activities. Similarly, in community gardens, as in Thessaloniki, GR, NGOs offer training sessions that empower non-professional gardeners to take active roles. These support mechanisms ensure that UA initiatives are not only inclusive but also provide opportunities for skill development and social integration for all participants.

### *Social Cohesion*

Social cohesion is a critical process, as it fosters trust, transparency, and long-term community engagement. The collaborative mechanisms that promote social cohesion in the case studies include joint activities, trust-building initiatives, and partnership networks. Joint activities, such as community workshops, shared gardening events, and social gatherings, create opportunities for stakeholders to collaborate and build relationships. The activities are designed to bring together participants from diverse backgrounds, fostering social ties and a sense of belonging. In community parks, as seen in the case in Copenhagen, DK, shared gardening activities are organized to involve residents of different ages and backgrounds, helping to build trust and strengthen community bonds. These joint activities also provide opportunities for participants to learn from one another, further enhancing social cohesion. Trust-building initiatives involve implementing transparent governance processes, such as regular updates, open meetings, and clear communication channels, to ensure that all stakeholders feel confident in the decision-making process. In urban farms, as in Turin, IT, trust between stakeholders is built through informal agreements and transparent communication, ensuring that all participants are aware of the goals and progress of the initiative. This transparency is crucial for fostering long-term engagement and collaboration. Partnership networks are also crucial in promoting social cohesion. Building strong partnerships with local

authorities, NGOs, businesses, and other community organizations provide a platform for collaboration and mutual support. In social farms, partnerships with healthcare institutions, employment bureaus, and CSOs enable integrating disabled participants into farm activities, fostering a culture of care and social support. These networks not only strengthen the social fabric of the UA initiatives but also ensure their long-term sustainability by providing access to resources and expertise.

To conclude this section, analysis of collaborative mechanisms across the UA initiatives demonstrates that while shared responsibility, flexibility and adaptability, inclusivity, and social cohesion are consistently important, their expression and operationalization vary significantly between countries and types of initiatives. In social farms, shared responsibility is strongly formalized through partnerships between public authorities, healthcare providers, and CSOs, while in DIY initiatives (e.g., NO, PT), it emerges organically through grassroots action and evolving informal roles. Flexibility and adaptability are most visible in zero-acreage farms, where technological innovation and regulatory adaptation are essential for survival, whereas community gardens prioritize flexible organizational practices based on seasonal community feedback. Social farms and community gardens heavily emphasize inclusivity mechanisms, targeting marginalized groups through structured support. In UA farms in IT, however, inclusivity tends to evolve more through open community participation and market-driven outreach. Social cohesion is cultivated differently across cases: through structured therapeutic programs in social farms, participatory workshops in community parks, and informal networks in DIY gardens.

These patterns highlight that collaborative governance in UA is highly place-sensitive: it must be adapted to local institutional capacities, social needs, and political cultures. A universal model does not exist; rather, governance solutions are hybrid, evolving from a dynamic interplay between stakeholder constellations and contextual challenges. Understanding this diversity and fluidity is crucial for designing resilient, inclusive, and adaptable UA initiatives that respond meaningfully to local conditions. Future governance models must

therefore embrace both structure and improvisation, recognizing collaboration as a continuously unfolding practice rather than a one-time institutional design.

### *Power Dynamics and Conflicts in Collaborative Governance*

The case studies reveal complex power dynamics and potential conflicts among the key stakeholders. Examining the dynamics through the lens of collaborative governance provides insights into both challenges and opportunities for fostering successful initiatives. This section discusses how power dynamics and conflicts may emerge through the four processes of collaborative governance and how they impact the effectiveness of UA initiatives. Building on case-study findings, the discussion outlines potential scenarios and directions for future research. It seeks to deepen the understanding of governance by identifying major themes and emerging patterns, but also to indicate directions where investigation is needed. Table 6 synthesizes the main findings discussed below by mapping each collaborative governance process to specific examples from the case studies. The examples illustrate how dynamics such as power asymmetries, regulatory rigidity, symbolic inclusivity, and externally driven social cohesion manifested across the UA initiatives studied.

### *Shared Responsibility*

The results show that for shared responsibility to be achieved, the distribution of initiative tasks must

be balanced, with stakeholders contributing according to their strengths. Otherwise, power asymmetries may arise, creating tensions over control and decision-making authority. For example, in community gardens, such as in Thessaloniki, GR and Glasgow, UK, public authorities provide land and regulatory support but assume central decision-making roles, while NGOs coordinate community engagement and manage daily operations. In these cases, tensions emerge when municipal authorities prioritize competing land uses, marginalizing NGOs and residents advocating for community-centered projects. In urban farms, as in Turin, IT and Sofia, BG, private businesses dominate governance structures due to their control over financial resources and advanced farming technologies, often advancing commercialization objectives over food security or community empowerment, which are prioritized by NGOs. This creates hierarchical governance settings where social objectives are subordinated to business interests, and NGOs have limited influence over strategic decisions. DIY cases, such as Bergen, NO, illustrate another governance trajectory. Although these initiatives are initiated by residents based on immediate community needs, as they scale up, public authorities and NGOs intervene by providing zoning approvals or financial support. This institutional involvement, while beneficial, frequently introduces formal governance structures that clash with grassroots self-organization, shifting control away from original community leaders to more formal actors. As seen in Loures, PT, this governance

**Table 6. Power Dynamics and Challenges in Collaborative Governance Processes: Findings from the Case Studies**

| Collaborative Governance Process | Main Empirical Findings  | City/Country Examples                                     |
|----------------------------------|--|---|
| Shared Responsibility            | Often formal rather than substantive; dominant stakeholders (public authorities or businesses) limit genuine power sharing.                    | Thessaloniki (GR), Sofia (BG), Turin (IT)                 |
| Flexibility and Adaptability     | Adaptability often reactive rather than organic; constrained by rigid regulations and limited institutional flexibility.                       | Brussels (BE), Bergen (NO), Turin (IT)                    |
| Inclusivity                      | Marginalized groups frequently tokenized rather than meaningfully included in decision making; symbolic rather than substantive participation. | Dobrich (BG), Glasgow (UK), Thessaloniki (GR)             |
| Social Cohesion                  | Externally driven activities promote cohesion but risk reinforcing existing power hierarchies rather than empowering grassroots actors.        | Copenhagen (DK), Brussels (BE), Dobrich (BG), Dundee (UK) |

shift often leads to the disillusionment and disengagement of local practitioners, highlighting that shared responsibility may exist formally but not substantively.

### *Flexibility and Adaptability*

Flexibility and adaptability are essential for UA initiatives operating in dynamic urban environments. However, the cases show that adaptive governance can be constrained when key regulatory decisions lie entirely with public authorities. This is not to suggest that regulations such as food safety standards are negative—these safeguards are essential and must be upheld by qualified public bodies. Rather, the challenge arises when UA initiatives have limited channels for dialogue or co-interpretation of these rules. For example, in zero-acreage farms in Brussels, BE, practitioners reported that the lack of mechanisms for discussing zoning or food safety requirements with authorities can slow adaptation, create uncertainty, and limit their ability to innovate within the regulatory framework. The asymmetry therefore concerns participation in interpretation and adjustment—not the legitimacy or necessity of the regulations themselves. Slow or restrictive regulatory adaptation creates conflict with private businesses and practitioners attempting to introduce hydroponic or aquaponic technologies. In urban farms, such as in Rome, IT, businesses drive technological innovation but often prioritize scalability and profitability over ecological and community-centered practices. For instance, vertical farming technologies are introduced primarily to maximize yield, creating tension with NGOs advocating for environmentally sustainable and culturally sensitive farming methods. DIY initiatives, such as Bergen, NO, face specific challenges when organic, adaptive practices—like seasonal planting adjustments—are restricted by newly imposed regulations. The formalization of grassroots practices by public authorities often limits flexibility, creating governance conflicts that suppress community-driven innovation.

The data suggest that dynamic feedback loops, theoretically designed to enhance responsiveness, can become arenas of conflict when dominated by more powerful stakeholders. For example, in community parks, such as in Copenhagen, DK, envi-

ronmental regulatory requirements prioritized by public authorities at times override community preferences for socially oriented activities like educational events or cultural festivals. This imbalance limits stakeholders' ability to adapt practices or decision-making processes in real-life situations, and can lead marginalized actors—such as NGOs or volunteer practitioners—to withdraw from active participation in governance.

### *Inclusivity*

The case studies indicate that inclusivity, aimed at ensuring the meaningful involvement of all stakeholders, especially marginalized groups, often remains aspirational rather than fully realized in UA governance. For example, in social farms, such as the one in Dobrich, BG, public authorities and healthcare institutions control funding streams and program design. Although these initiatives nominally include vulnerable groups, such as the disabled, they often restrict these groups to passive participant roles, excluding them from substantive decision-making processes. In urban farms, as evident in the case of Turin, IT, private businesses promote inclusivity primarily through corporate social responsibility initiatives, sponsoring training workshops and community engagement activities. However, these efforts often prioritize brand visibility over genuine empowerment, leading to tensions with NGOs and CSOs that are striving for deeper participatory governance models. Grassroots DIY gardens and community parks initially foster authentic inclusivity, but as has been observed in Loures, PT, the entry of public authorities and private sponsors tends to institutionalize governance processes. This often marginalizes original community voices and redirects project objectives toward regulatory compliance or commercialization, disconnecting projects from their founding inclusive visions. Equity-driven support mechanisms, such as mentorship programs and accessibility infrastructure, are inconsistently applied. In social farms, therapeutic gardening projects are designed to be inclusive, but decision-making authority often remains concentrated among healthcare providers and funders. As seen in Dundee, UK, this symbolic inclusivity can generate frustration among participants who perceive a

lack of real influence, undermining long-term commitment to the initiative.

### *Social Cohesion*

This study found that social cohesion emerges through shared activities and trust-building processes but is also profoundly shaped by underlying power relations. In community parks, as in Copenhagen, DK, public authorities organize community gardening workshops and cultural events intended to foster cohesion. However, these top-down initiatives often fail to align with local needs, which creates tensions with NGOs and practitioners who advocate for more participatory forms of engagement. In zero-acreage farms, as in Brussels, BE, businesses sponsor community events while maintaining profit-driven farming operations. This leads to conspicuous divisions between commercial actors and NGOs that push for stronger community-oriented objectives, including food security and environmental sustainability. In the case studies, NGOs/CSOs often attempt to bridge competing interests, acting as intermediaries between institutional actors and grassroots stakeholders. For example, in social farms NGOs navigate complex relationships with healthcare providers, local authorities, and marginalized community members, striving to balance therapeutic outcomes with community autonomy. However, this balancing act exposes NGOs to risks of co-optation or internal conflict. Practitioners from marginalized groups—such as low-income residents or the disabled—may experience social cohesion initiatives as externally imposed rather than organically developed.

Taken together, the findings demonstrate that while shared responsibility, flexibility, inclusivity, and social cohesion are foundational elements of collaborative governance in UA initiatives, their realization is deeply shaped by context-specific power dynamics. Public authorities, private businesses, NGOs/CSOs and practitioners engage in governance processes that often reflect asymmetries in resources, decision-making authority, and regulatory influence. Collaborative governance in UA emerges as a dynamic and negotiated practice that must continually balance diverse interests, adapt its structures, and creatively respond to evolving challenges.

While this study primarily draws on European cases, the inclusion of an initiative in Dhaka, BD, offers preliminary insights suggesting that many of the core governance tensions—between community-driven goals and institutional or market pressures—may exist in non-European contexts as well. However, given the limited scope outside Europe, these observations should be seen as hypotheses for future research rather than definitive conclusions. In some settings, such as therapeutic social farms, collaboration is institutionally anchored and policy-driven; in others, such as DIY initiatives and rooftop farms, it remains more experimental, emergent, and adaptive. Ultimately, successful collaborative governance depends not only on formal participation structures but also on fostering trust, ensuring meaningful involvement, supporting flexibility, and embracing continuous learning and realignment among stakeholders.

### **Conclusion**

This study has critically examined how applying the collaborative governance framework to UA initiatives reveals both the strengths and limitations of existing theoretical models, while generating new insights into the dynamics of multi-stakeholder collaboration in complex urban environments. It must be emphasized that the conclusions drawn are specific to the cases analyzed and are not intended as universal claims about UA initiatives. The primary contribution of this article is conceptual: to illustrate how a collaborative governance framework derived from the literature can be applied and critically refined through empirical examples. Consistent with qualitative research traditions, the findings are illustrative rather than generalizable; they provide case-specific insights from which hypotheses may be developed for further comparative and longitudinal research.

The case studies provide a critical reflection on collaborative governance theory, particularly the model proposed by Ansell and Gash (2008). While their model remains a valuable framework, the findings from this study challenge several of its key assumptions. First, the expectation that shared responsibility emerges organically through iterative interaction was only partially confirmed. In many initiatives, shared responsibility was either formal-

ized without genuine power redistribution or undermined by dominant stakeholders, problematizing Ansell and Gash's emphasis on process equity and mutuality. Second, flexibility and adaptability were found not to result naturally from stakeholder interaction but often emerged as reactive strategies to regulatory rigidity and resource constraints, highlighting a major gap in the original model's attention to structural barriers. Third, while the model emphasizes inclusivity through stakeholder engagement, the case studies reveal that marginalized groups were often included symbolically rather than substantively, echoing critiques raised by Hajer et al. (2015) and Prové et al. (2016). Fourth, the process of building social cohesion was less about iterative trust-building and more about externally driven activities that sometimes reinforced existing power hierarchies rather than dismantling them.

The differentiated roles of stakeholders further nuance collaborative governance theory and engage directly with prior scholarship. Public authorities, while crucial providers of regulatory frameworks and land, often constrained collaboration through rigid zoning regulations and bureaucratic priorities, confirming concerns about institutional inertia raised by Emerson et al. (2012). Private businesses brought technological innovation and funding, particularly in urban farms and zero-acreage farms (e.g., Brussels, Dhaka), but their focus on profitability often conflicted with community empowerment goals, corroborating tensions noted by Cohen and Reynolds (2014). NGOs and CSOs acted as vital intermediaries between institutional actors and grassroots practitioners, consistent with findings by De Zeeuw et al. (2011), yet limited resources and the risk of co-optation weakened their transformative capacity, as also observed by Hajer et al. (2015). While practitioners, including non-professional gardeners and volunteers, were essential for sustaining daily operations and community ties, nevertheless their agency was frequently marginalized within formal decision-making processes, aligning with the critique of participatory tokenism raised by Prové et al. (2016).

Applying the collaborative governance framework to UA initiatives also generated important new theoretical insights. The results highlight the

critical importance of adaptive capacity and trust building beyond the existence of formal collaborative structures. Effective collaboration in UA requires continuous flexibility to navigate rapidly changing regulatory, environmental, and community dynamics, and demands intentional strategies to facilitate trust under conditions of asymmetrical power and resource distribution. These elements should be more centrally integrated into future refinements of collaborative governance theory, particularly when applied to sectors characterized by spatial scarcity, innovation pressures, and contested public goods.

Regarding geographic differences, while the study primarily draws from European cities, the illustrative case study from Dhaka suggests that many governance challenges—including commercialization pressures, regulatory rigidity, and community marginalization—are not exclusive to European contexts. Despite institutional and socio-economic differences, similar tensions between community-driven goals and institutional or market-driven constraints were observed. However, due to the inclusion of only one non-European case these observations remain exploratory and point to the need for further comparative research to determine whether the collaborative governance challenges identified are indeed global in character or context-specific.

At the same time, this study faces other limitations. Although it draws on a rich cross-section of cases, the empirical base is predominantly European. As such, the comparative insights regarding non-European governance dynamics are preliminary and hypothesis-generating rather than conclusive. Additionally, variations in the depth of available interview data across cases, despite mitigation through site visits and secondary source triangulation, introduce limitations regarding the consistency and granularity of governance observations. A limitation of this study is also the broad categorization of stakeholders into four main groups: public authorities, CSOs/NGOs, private businesses, and practitioners. Each category includes diverse actors whose roles and influence can vary significantly; for example, public authorities range from local officials to national agencies, each shaping collaboration differently. Future

research could explore these internal differences more systematically, examining how stakeholder diversity affects governance dynamics across different contexts and types of urban agriculture initiatives. Additionally, future research may pursue deeper, more longitudinal engagement within selected case studies to track the evolution of collaborative governance processes over time. Expanding empirical coverage to include a broader range of Global South cities is also essential to better understand how socio-political, cultural, and regulatory factors influence collaboration.

Ultimately, this study contributes to the refinement of collaborative governance theory by exposing its limitations in addressing structural inequalities and power dynamics and by demonstrating the critical roles of adaptive capacity, critical trust, and power-sensitive design. It also offers valuable les-

sons for UA practitioners and policymakers, emphasizing the need to build flexible, inclusive, and critically reflective governance models that are responsive to the dynamic and contested realities of urban environments. 

### Acknowledgments

This research would not have been possible without the contributions of our project partners, who played a crucial role in collecting data on urban agriculture (UA) initiatives. Their efforts in gathering and sharing valuable insights have significantly enriched this study.

A special thanks to Dr. Dona Pickard, a dear friend, like-minded collaborator, and esteemed colleague, for her thoughtful review of this article and her invaluable suggestions that helped refine and strengthen the arguments presented.

### References

- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Cohen, N., & Reynolds, K. (2014). Urban agriculture policy making in New York’s “new political spaces”: Strategizing for a participatory and representative system. *Journal of Planning Education and Research*, 34(2), 221–234. <https://doi.org/10.1177/0739456X14526453>
- De Zeeuw, H., Van Veenhuizen, R., & Dubbeling, M. (2011). The role of urban agriculture in building resilient cities in developing countries. *The Journal of Agricultural Science*, 149(S1), 153–163. <https://doi.org/10.1017/S0021859610001279>
- Deelstra, T., & Girardet, H. (2000). Urban agriculture and sustainable cities. In N. Bakker, M. Dubbeling, S. Guendel, U. Sabel-Koschella, & H. de Zeeuw (Eds.), *Growing cities, growing food: Urban agriculture on the policy agenda* (pp. 43–65). Deutsche Stiftung für Internationale Entwicklung (DSE). [https://www.researchgate.net/publication/284992045\\_Urban\\_agriculture\\_and\\_sustainable\\_cities](https://www.researchgate.net/publication/284992045_Urban_agriculture_and_sustainable_cities)
- Emerson, K., & Nabatchi, T. (2015). Evaluating the productivity of collaborative governance regimes: A performance matrix. *Public Performance & Management Review*, 38(4), 717–747. <https://doi.org/10.1080/15309576.2015.1031016>
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, 22(1), 1–29. <https://doi.org/10.1093/jopart/mur011>
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245. <https://doi.org/10.1177/1077800405284363>
- Food and Agriculture Organization of the United Nations (FAO), Rikolto, The RUAF Global Partnership on Sustainable Urban Agriculture and Food. (2022). *Urban and peri-urban agriculture sourcebook: From production to food systems*. <https://doi.org/10.4060/cb9722en>
- Hajer, M., Nilsson, M., Raworth, K., Bakker, P., Berkhout, F., de Boer, Y., Röckstrom, J., Ludwig, K., & Kok, M. (2015). Beyond cockpit-ism: Four insights to enhance the transformative potential of the sustainable development goals. *Sustainability*, 7(2), 1651–1660. <https://doi.org/10.3390/su7021651>

- Jansma, J. E., Veen, E. J., & Müller, D. (2024). Beyond urban farm and community garden, a new typology of urban and peri-urban agriculture in Europe. *Urban Agriculture & Regional Food Systems*, 9(1), Article e20056. <https://doi.org/10.1002/uar2.20056>
- Lohrberg, F., Licka, L., Scazzosi, L., & Timpe, A. (Eds.). (2016). *Urban agriculture Europe*. Jovis Verlag. <https://www.cost.eu/publication/urban-agriculture-europe/>
- Lovell, S. T. (2010). Multifunctional urban agriculture for sustainable land use planning in the United States. *Sustainability*, 2(8), 2499–2522. <https://doi.org/10.3390/su2082499>
- Manganelli, A. (2022). Hybrid governance of urban food movements: Learning from Toronto and Brussels. Springer. <https://doi.org/10.1007/978-3-031-05828-8>
- McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. *Local Environment*, 19(2), 147–171. <https://doi.org/10.1080/13549839.2012.752797>
- Mok, H.-F., Williamson, V. G., Grove, J. R., Burry, K., Barker, S. F., & Hamilton, A. J. (2014). Strawberry fields forever? Urban agriculture in developed countries: A review. *Agronomy for Sustainable Development*, 34(1), 21–43. <https://doi.org/10.1007/s13593-013-0156-7>
- Morgan, K. (2009). Feeding the city: The challenge of urban food planning. *International Planning Studies*, 14(4), 341–348. <https://doi.org/10.1080/13563471003642852>
- Mougeot, L. J. A. (2000). Urban agriculture: Definition, presence, potentials and risks. In N. Bakker, M. Dubbeling, S. Guendel, U. Sabel-Koschella, & H. de Zeeuw (Eds.), *Growing cities, growing food: Urban agriculture on the policy agenda* (pp. 1–42). Deutsche Stiftung für Internationale Entwicklung (DSE). [https://www.researchgate.net/publication/242091146\\_Urban\\_agriculture\\_Definition\\_presence\\_potentials\\_and\\_risks](https://www.researchgate.net/publication/242091146_Urban_agriculture_Definition_presence_potentials_and_risks)
- Pearson, L. J., Pearson, L., & Pearson, C. J. (2010). Sustainable urban agriculture: Stocktake and opportunities. *International Journal of Agricultural Sustainability*, 8(1–2), 7–19. <https://doi.org/10.3763/ijas.2009.0468>
- Prové, C., Desein, J., & De Krom, M. (2016). Taking context into account in urban agriculture governance: Case studies of Warsaw (Poland) and Ghent (Belgium). *Land Use Policy*, 56, 16–26. <https://doi.org/10.1016/j.landusepol.2016.04.025>
- Pudup, M. B. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum*, 39(3), 1228–1240. <https://doi.org/10.1016/j.geoforum.2007.06.012>
- Purcell, M., & Tyman, S. K. (2012). Cultivating food as a right to the city. *Local Environment*, 20(10), 1132–1147. <https://doi.org/10.1080/13549839.2014.903236>
- Veenhuizen, R. V. (Ed.) (2006). *Cities farming for the future: Urban agriculture for green and productive cities*. RUAF Foundation, International Development Research Centre, International Institute of Rural Reconstruction. [https://ruaf.org/assets/2019/11/Cities-Farming-for-the-Future\\_compressed.pdf](https://ruaf.org/assets/2019/11/Cities-Farming-for-the-Future_compressed.pdf)
- White, M. M. (2011). Sisters of the soil: Urban gardening as resistance in Detroit. *Race, Ethnicity, and Multidisciplinary Global Contexts*, 5(1), 13–28. <https://doi.org/10.2979/racethmulglocon.5.1.13>
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE.