

ARTICLE

Open Access Journal

A Switch to Commons: The Evolution of the Regulation of Urban Agriculture in Rome, Italy

Micol Sonnino 10 and Simona Zollet 20

Correspondence: Simona Zollet (simona.zollet@gmail.com)

Submitted: 30 October 2024 Accepted: 16 May 2025 Published: 12 August 2025

Issue: This article is part of the issue "Perspectives on Food in the Sustainable City" edited by Birgit Hoinle (University of Hohenheim), Alena Birnbaum (University of Kassel), and Petra Lütke (University of Münster), fully open access at https://doi.org/10.17645/up.i395

Abstract

This article investigates how framing urban agriculture as a "common good" shapes governance structures and fosters participatory processes for sustainable urban development. In October 2024, the City of Rome approved a new regulation on urban agriculture within the broader Regulation for the Shared Administration of Common Goods. This marked a significant evolution in framing urban agriculture as a "commons" compared to the City's earlier legislation. Drawing on field research, including semi-structured interviews with key stakeholders and analysis of archival data, the study examines how urban agriculture practices in Rome exemplify collaborative governance in action. We argue that the resulting state-society co-creation processes enable cooperation between citizens and the local government, challenging traditional urban planning practices and promoting responsibility-sharing. We also emphasize the importance of co-creation and structured roundtables in fostering mutual awareness of roles and responsibilities. By situating urban agriculture within the broader context of urban commons governance scholarship and connecting it to collaborative governance frameworks, the article contributes to understanding how these theoretical concepts manifest as real-world policy changes. It also calls for further research into the long-term effectiveness of co-creative urban governance and the broader applicability of commons-based legal frameworks to other collective initiatives.

Keywords

collaborative governance; sustainability; urban agriculture; urban commons

¹ Department of Geography and Regional Research, University of Vienna, Austria

² Graduate School of Humanities and Social Sciences, Hiroshima University, Japan



1. Introduction

Urban agriculture (UA) plays a crucial role in food production, environmental sustainability, and community well-being in urban spaces (Wadumestrige Dona et al., 2021). The interactions among stakeholders involved in UA, including citizens, policymakers, and experts, have contributed to the emergence of novel governance patterns (Feinberg et al., 2021).

This article examines the governance of UA by tracing the evolution of its regulatory framework in Rome, Italy, from the original Resolution n.38, 2015 (City of Rome, 2015) through its most recent transformation in the *Deliberazione dell'Assemblea Capitolina* n.117 of 25th October 2024 (City of Rome, 2024a).

Resolution n.38 of 2015 gained recognition as a "best practice" by European Union (EU)-funded projects (URBACT, n.d.-a). Subsequently, through a comprehensive revision process that engaged multiple stakeholders, a new regulation draft was collectively developed. This revision integrated the UA regulation within a broader legislative framework: The Regolamento per l'amministrazione condivisa dei beni comuni di Roma Capitale (Deliberazione dell'Assemblea Capitolina n. 102/23)—the Regulation for the Shared Administration of Common Goods of Rome (Capitol Assembly Deliberation n.102/23).

This revision culminated with the unanimous approval of a new regulation by the Capitol Assembly of Rome on October 25th, 2024 (City of Rome, 2024a), effectively linking the UA regulation to the Regulation for the Shared Administration of Common Goods. This represents a significant redefinition of the conceptualization of UA in Rome as urban commons, reflecting a shift in governance patterns.

This article explores the implications of this shift by situating UA within the broader urban commons governance scholarship, an emerging field of study. The study seeks to address the following research question:

- What are the implications of repositioning UA within commons-oriented legislative framework for its governance structures?
- How does this shift impact stakeholder relationships, particularly between citizens and local authorities?
- How does this case study deepen our understanding of collaborative governance in urban commons?

Answering these questions will shed light on the complexities and opportunities of governing UA as commons, contributing to broader debates on participatory urban governance, UA management, and social-ecological transitions toward more sustainable urban food systems.

The article is structured as follows. The first section situates UA within the theoretical framework of urban commons and urban commons governance. The second section outlines the research methodology used in the study, while the third section presents and analyzes the case study, with a focus on the dynamics of the shift towards a commons-oriented thinking. Finally, the discussion and conclusion sections offer insights drawn from the case study and make recommendations for applying the commons framework to other collective-oriented projects.



2. Theoretical Background

2.1. Understanding Urban Agriculture as Urban Commons

UA can take different forms according to the geographical and political context where it takes place. Contemporary UA initiatives encompass a wide range of typologies, including allotment gardens, home gardening, community and collective gardens, guerrilla gardening, roof gardens, vertical gardens, and aquaponics (Certomà et al., 2020; Dubová et al., 2020), a diversity that mirrors how urban residents adapt UA to their specific needs (Gómez-Villarino et al., 2021).

Recent empirical work by the European Forum on Urban Agriculture supports this understanding through a classification derived from a 2021 survey of 112 UA initiatives across Europe, complemented by expert interviews and literature analysis (Jansma et al., 2024). This classification resolves longstanding ambiguities between urban *farming* (commercial production-oriented systems) and urban *gardening* (non-commercial, leisure-focused activities), offering six distinct categories: Urban Farms, Community Parks, DIY Gardens/Farms, Zero Acreage Farms, Social Farms, and Community Gardens. Operational parameters such as spatial organization, production scale, and social objectives provide systematic criteria for distinguishing initiatives (Jansma et al., 2024).

Within this classification, community gardens represent a specific category defined as open spaces managed by local communities for food/flower cultivation (Guitart et al., 2012) or as collectively managed plots fostering social interaction (Jansma et al., 2024). This article specifically focuses on community gardens that include a social function and that can be classified as community-based initiatives (CBIs). CBIs are defined as "a form of self-organization where citizens mobilize resources to collectively define and carry out projects aimed at providing public goods or services for their community" (Igalla et al., 2021, p. 805). CBIs usually operate within institutionalized regulatory frameworks and are often conceptualized as being "co-produced" or "co-created" by various participants, including citizens and other societal actors such as municipal administrators (Igalla et al., 2021).

The community-based aspect within an institutionalized framework mirrors the inherently hybrid private-public dimension of UA. This aspect is a defining feature of "urban commons." Rooted in Ostrom's work on common pool resources, the term "commons" refers to goods and services that are accessible and divisible (Ostrom, 1990). *Urban* commons more specifically refer to shared material and resources that contribute to individual and collective well-being in cities and are built around themes of participation, collective action, and self-organization (Feinberg et al., 2021). While Elinor Ostrom's design principles for managing common-pool resources provide foundational insights into collective action and institutional arrangements, urban environments introduce complexities—such as fluid communities, fragmented ownership, and dense regulatory frameworks that require significant adaptations of her framework (Meerkerk, 2024). More specifically, while Ostrom's work had already engaged with urban contexts (Nagendra & Ostrom, 2014), urban commons scholars have since expanded her theories to address the distinct challenges of cities, such as the privatization of urban resources, the role of digital tools in fostering participation, and experimentation with legal and property structures (Foster & laione, 2019). They also emphasize co-production and co-creation as essential elements of inclusive governance, highlighting the need for flexible and participatory systems to manage urban commons effectively (Ela, 2016; Foster & laione, 2019).



A distinctive shift in the urban commons literature is the tendency to replace Ostrom's "polycentric governance" (1990) with the broader term "collaborative governance": while both concepts recognize the importance of collaboration and the involvement of multiple actors, they differ in their scope and emphasis. Polycentric governance specifically addresses the management of common-pool resources, highlighting the autonomy and self-governance of local units. On the other hand, collaborative governance is a broader concept applicable across multiple domains of public administration and emphasizes inclusive, deliberative decision-making processes that involve diverse stakeholders in addressing public challenges and pursuing shared goals (Foster & laione, 2015). In essence, while polycentric governance seeks to facilitate dialogue among different autonomous units, collaborative governance seeks to establish a hybrid decision-making system that integrates diverse voices, also contributing to blurring the boundaries between citizens and state interests (Mansfield & Mendes, 2013).

UA can be understood as an "urban commons" because many UA initiatives are driven by the aspiration to collectively reclaim and manage urban spaces for the common good, a core principle of urban commons thinking. Community gardens, in particular, often emerge in response to the lack of democratic access to and use of public spaces, or a lack of opportunities for social interaction (Rogge & Theesfeld, 2018). To foster a sense of ownership and accountability, responsibilities within community gardens are usually distributed and shared, much like the stewardship practices found in commons governance models. As such, UA projects, and especially community gardens, can be seen as lived experiments of urban commons (Eizenberg, 2012; Follmann & Viehoff, 2015); they entail the use of shared resources that connect various stakeholders, promote social cohesion and community well-being within a collectively maintained space, and are mediated through collective stewardship (Eizenberg, 2012).

This article argues that UA initiatives, particularly community gardens operating as CBIs, exemplify the need for urban commons scholarship to reinterpret Ostrom's theories through the lens of collaborative governance. Despite the resonance between UA practices and the urban commons literature, the governance dimension of community gardens has rarely been explored from this theoretical perspective (Follmann & Viehoff, 2015). Therefore, understanding how the urban commons governance framework applies to UA may provide valuable insights into the governance of UA initiatives.

2.2. Urban Commons Scholarship: A Focus on Collaborative Governance

Governance is a key topic in the broader literature on commons. Ostrom's work gives central importance to governance patterns to understand how resources are commonly accessed, focusing in particular on polycentric governance patterns, which emphasize decentralized decision-making and community self-organization (Ostrom, 2010). Polycentric governance acknowledges the importance of multiple, overlapping centers of authority, allowing for diverse local conditions to be addressed through adaptive management and collective action (Ostrom, 1990, 2009, 2010).

Urban commons scholars like Foster and Iaione (2019) have reconceptualized governance through collaborative models that integrate Ostrom's institutional analysis with public administration theory. Ansell and Gash (2008) describe collaborative governance as "a governing arrangement where public agencies directly engage non-state stakeholders in a formal, consensus-oriented, and deliberative decision-making process to make or implement public policy or manage public programs or assets" (p. 544). Expanding on this



definition, Emerson et al. (2012, p. 2) define collaborative governance as the processes and structures of public policy decision-making and management that engage people across public agencies, levels of government, and different sectors to accomplish a public purpose that could not be achieved otherwise. They emphasize the broad nature of collaborative governance, allowing for various applications and scales. Both Ansell and Gash (2008) and Emerson et al. (2012) provide overarching definitions that encompass different forms of collaboration, such as co-participation, co-creation, and co-management of services.

A central concept driving the argument for collaborative governance is the notion of a "democratic deficit," which suggests that citizens' preferences are better expressed through participatory approaches rather than top-down mechanisms (Gustafson & Hertting, 2017). Furthermore, collaborative governance is also presented as a way to address the need for collaboration in contexts characterized by specialized and distributed knowledge and complex institutional infrastructures. This form of governance is therefore seen as an innovative democratic mechanism that promises greater inclusion and responsiveness (Gustafson & Hertting, 2017).

Gustafson and Hertting (2017) further identify three perspectives on the motivations driving collaborative governance approaches: interest-based, deliberative-integrative, and administrative-functional. In the interest-based view, participatory arrangements are seen as political arenas for self-expression, allowing marginalized groups to have a voice and influence policy. The deliberative and integrative view, on the other hand, frames collaborative governance as an arena for collective reasoning, where participants engage not only to express marginalized interests but also to shape a shared understanding. This perspective emphasizes the possibility for participants to change their beliefs through dialogue (Gutmann & Thompson, 1996). Finally, the administrative or functional view focuses on enhancing the capacity to take action by mobilizing knowledge, with participants engaging in collaborative governance to strengthen their ability to effectively influence outcomes (Gustafson & Hertting, 2017). In short, collaborative governance is seen as an alternative governance approach that addresses the democratic deficit, expands inclusion, and enhances responsiveness (Bäckstrand, 2004).

Additionally, collaborative governance can manifest in the forms of co-production or co-creation. Although the terms are frequently used interchangeably (Brandsen & Honingh, 2016; Leino & Puumala, 2021; Voorberg et al., 2015), Bentzen (2022) distinguishes between these concepts by noting that co-production generally involves intensive user involvement mainly in the later stages of a process, whereas co-creation emphasizes a participatory, capacity-enhancing approach from the outset. Co-creation also emphasizes innovation and creativity more strongly, highlighting its potential to drive significant change in the roles and relationships between stakeholders (Leino & Puumala, 2021).

2.3. The Roles of State and Society in Urban Commons Governance

The relationship and respective roles of state and society are an important aspect of urban commons governance, one that is particularly relevant to this study. Urban commons governance scholarship emphasizes societal transformation through the way public space is utilized, often highlighting the blurring of roles among the state, market, and civil society (Mansfield & Mendes, 2013, p. 40). Hardt and Negri (2009) argue that the commons exist beyond the traditional public-private dichotomy, offering an alternative political and organizational framework that challenges conventional governance structures (as cited in Follmann & Viehoff, 2015).



In the context of UA, this hybridity introduces specific tensions, particularly between maintaining the goals of grassroots activism driving community engagement, and the institutionalization that often follows. Another key issue is advancing community-driven agendas without succumbing to neoliberal co-optation. A recurring theme when discussing the relationship between the city and its citizens in the context of UA is how municipalities often leverage UA for its potential to produce exchange-value, aligning with neoliberal agendas that promote public-private partnerships in the management of urban spaces (Ernwein, 2017). In this process, local governments may reduce their direct involvement, outsourcing responsibilities to private entities or volunteers (Certomà et al., 2020). This blending of top-down and bottom-up approaches also creates a governance model where citizen engagement is both encouraged and constrained through regulations, reflecting a complex power interplay between the state and civil society (Halloran & Magid, 2013). Certomà and Giaccaria (2024) further argue that the boundaries between state and society become increasingly blurred, with UA offering a space where collaborative action can limit neoliberal co-optation while promoting inclusivity and alternative forms of urban management.

Moreover, collaborative governance in the sense of people's engagement across public agencies and levels of government (Emerson et al., 2012) is particularly relevant to UA, as authorities hold the authority to approve the development of built infrastructure. Partnerships with institutions are crucial for urban commons, especially when commons need to assemble material infrastructure (Bianchi et al., 2024). This creates a dynamic where municipalities enable, regulate, and support UA by engaging in complex partnerships through different indirect policy instruments and governance arrangements (Halvey et al., 2021). Bianchi et al. (2024) claim that these interactions between citizens and local governments not only help urban commons secure their material infrastructure, which needs formal approval by the state, but also enhance the political action and agency of commons.

Feinberg et al. (2021) describe this dynamic as a source of tension: although commoning is seen as a demand for certain civic rights and an expression of collective identity, various studies show that the intervention of a central authority for the legitimization of—or assistance to—the common is often necessary. In Western societies, where state and market are essential entities, commoning may function more effectively through the coordination of a governmental authority (Feinberg et al., 2021).

While this review has explored the alignment of UA with urban commons principles and collaborative governance frameworks, there remains a gap in understanding how these theoretical concepts take shape as concrete policy shifts. Specifically, there is limited research on how the reclassification of UA as a commons within legislative frameworks can signify a shift in governance and stakeholder dynamics. This study addresses this gap by examining the case of Rome's UA regulation and its proposed integration into the broader Regulation for the Shared Administration of Common Goods. By analyzing UA's regulatory evolution, the research offers insights into the practical application of urban commons and collaborative governance theories to UA management.

3. Methods

This article uses a case study approach, which facilitates the exploration of the complexities and dynamics surrounding UA regulatory developments and allows for the detailed examination of contextual factors, interactions, and processes that provide deeper insights into UA governance. The methodology includes



archival analysis and semi-structured interviews with key stakeholders involved in the development of the regulation of UA in Rome.

Relevant information on the case study was first gathered through an extensive review of both scientific and gray literature, such as the texts of Resolution 38/2015 and of the new 2024 October "Delibera," reports from EU-funded projects, and other relevant sources available online, such as the Facebook groups of UA practitioners.

Subsequently, fourteen semi-structured interviews were conducted in 2023 to gather primary data on the practices and challenges faced in the governance-building process. The target group of interviewees consisted of people involved in the institutionalization of UA between 2009 (the date of the first community garden in Rome as reported by Celata & Coletti, 2018; Certomà, 2016) and May 2023. The sample included EU-project officers, local administrators, gardeners, and "mediators"—namely actors belonging to UA associations involved in mediating between administrations and gardeners.

Although the interviews and data collection focused on individuals and initiatives who may not represent the full range of experiences of the stakeholders involved in the development of the regulation of UA in Rome, the intention was to select participants who had significant expertise and experience in the field, to provide valuable insights and in-depth perspectives. Similarly, all the gardens selected have been in operation for at least five years, allowing for the analysis of established experiences, and all belong to the "community garden" classification. Community gardens are widespread across Rome, but this study specifically focuses on gardens in the South/Southwest area of the city (see Figure 1), where the first EU-funded garden was created, and the first community garden was officially established in 2009.



Figure 1. Gardens visited in Rome, Italy (pins added by authors in Districts viii, ix, xi). Source: OpenStreetMap.



Four of the interviews were conducted during on-site visits to five UA gardens, while the other ten were conducted online. All interviews lasted between one and two hours and were recorded with the participants' consent. The interviews began with a warm-up question to gather participants' profiles and roles in the institutionalization of UA and continued with specific questions addressing the new legislative developments of urban commons in Rome. The interviews were then transcribed, translated into English and thematically analysed with the support of MAXQDA. A supplementary analysis was conducted with MAXQDA's MAXDictio's features, particularly word frequency, to identify which words were novel in the proposal of the 2024 regulation, and the "keyword in context" function, to analyze different framings of specific keywords.

4. Case Study: Urban Agriculture Regulation in Rome, Italy

The case of UA in Rome is an entry point to examine the emergence of novel governance patterns from a commoning perspective. First, the history of UA in Rome reflects the strong connection between the city and its surrounding countryside (Cavallo et al., 2016). Rome is currently the largest European municipality in terms of rural land, which covers 40% of the municipal territory (Cavallo et al., 2016). Moreover, a significant portion of the city's landscape consists of agricultural areas interspersed within the urban fabric, with green spaces accounting for 68% of the total urban surface. Many of these green spaces, however, are neglected and have become sites of illegal trafficking and dumping (Certomà, 2016).

Rome's urban structure is highly informal, providing different narratives about the development of urban gardens and the increasing institutionalization of this movement. Although UA has long been present in Rome, its informal nature complicates efforts to quantify the phenomenon. Individual allotments have existed in the city at least since World War II to fight food insecurity in the city (Certomà, 2016). Community gardens, on the other hand, are more recent, dating back to the second half of the 2000s (Celata & Coletti, 2018). The first community garden is reported to be Orti Urbani Garbatella, officially established in 2009 (Celata & Coletti, 2018; Certomà, 2016).

Since the early 2000s, there has also been a progressive institutionalization of UA, which culminated in the 2015 Shared Regulation for the Management of Urban Gardens. The 2015 regulation was recognized as a best practice by the EU (URBACT, n.d.-a) and has been transferred to other countries through the project "RU:RBAN" (URBACT, 2019), establishing Rome as a pioneering city in UA governance. EU projects were particularly relevant for UA in Rome, with at least 15 projects on this theme (Orti in Comune, 2021, retrieved in May 2023). A new regulation proposal, released in November 2022 and approved on October 25th, 2024, chose to position UA within the legislative framework of urban commons, reflecting new developments in governance approaches. The following sections provide a more detailed analysis of the phases leading to the 2024 commons-oriented regulatory framework for UA in Rome.

4.1. The Path to Institutionalization: From the 1990s to 2010

The evolution of UA in Rome, particularly the transition from informal practices to formal recognition, illustrates the complexity and challenges of its governance. Interview IX recounts the origins of Orti Urbani Garbatella, Rome's first community garden, which started in the 1990s as an act of illegal occupation to resist speculative building projects. This occupation was led by a group of "weekend gardeners, without experience or permits" (Interview IX), who reclaimed concrete-covered land. Their efforts reflect a broader



trend in UA at the time, when most urban gardens were considered illegal and operated outside formal frameworks, largely overlooked by local authorities (Interviews III, IV).

Interviewees also stressed that the early stages of UA initiatives in Rome were marked by bureaucratic obstacles and limited resources, and described the administrative processes required to approve UA projects as slow and cumbersome (Interview VIII). Despite Rome's rich green heritage, urban gardens have historically not been a priority for local administrations, who have tended to focus on more pressing issues (Interview XII), and the municipal administration struggled to provide sufficient support, as staff reductions hindered the basic maintenance of green spaces (Interview IX). These challenges supported the development of grassroots movements, with citizens forming associations to fill the gaps in local government activities (Interview VI).

During the 2000s, Rome's UA movement began to institutionalize; while some gardens, like Orti Garbatella, were born out of political resistance, others actively sought collaborations with local authorities from the beginning (Interview III; Certomà & Martellozzo, 2019), leading to much discussion around the impact of policies and institutions on community gardening, particularly concerning how they could support or hinder these projects (Celata & Coletti, 2018).

The journey towards the creation of the regulation of UA in Rome also began in the early 2000s, as urban gardening gained momentum and started seeking institutional recognition. In response to the growing interest in community gardening, the City of Rome aimed to establish common rules for food safety and working conditions. In 2002, it created the Municipal Unit for Urban Gardens and Allotments (Servizio Orti Urbani) within the Department of the Environment (Celata & Coletti, 2018; Interviews IV, V). The goal of this unit was to map existing allotments and develop guidelines for their management (Interview III). Although the map was completed in 2006, it was never published due to concerns that formalizing gardens might impede future urbanization plans (Interviews IV, V, VII).

During this period, the concept of urban gardening also evolved to include more collective/community gardens. However, in 2008, the right-wing mayor Giovanni Alemanno moved—for political reasons—the Municipal Unit for Urban Gardens and Allotments to the Department of Agriculture, emphasizing the agricultural significance of community gardens rather than their community-building character (Celata & Coletti, 2018). In 2010, the municipality established community allotments in Via della Consolata, with an emphasis on reconnecting people, including children, to the land. This development signaled a growing interest of the municipality in getting involved or directly participating in UA processes. However, the city also seemed to frame the gardens as a way to externalize some maintenance costs and reduce municipal maintenance burdens, as per Interview III:

In the vegetable gardens of Vicolo Silvestre, via Consolata, created by Alemanno with 500 thousand euros, the municipality offers help in return for help. The park was wild, the gardeners managed it, and they had to guard the park. (Interview III)



4.2. 2010–2015: Resolution 38 on Urban Agriculture

After 2010, there was a growing awareness of the need to regulate urban gardening in Rome. Although illegal occupation was still common, four of the five gardens in this study had obtained permission from private owners or were linked to EU-funded projects. The shift toward formal recognition was strongly supported by civic associations such as Zappata Romana, which has mapped UA initiatives across the city and facilitated communication between gardeners, authorities, and other stakeholders (Interviews III, VI). As of October 2024, the map included 218 active gardens, demonstrating the growing scale of the movement. Zappata Romana's mapping and networking efforts have helped raise awareness about these grassroots initiatives, some of which were previously unaware of one another's existence (Interview VI). The increased network organization and collaboration has also increased the influence of urban garden initiatives, allowing them to negotiate more effectively with municipal authorities (Certomà et al., 2020). Interview XIII captures this transition, noting that the shift from "abusive to regulated" UA in Rome reflects a growing awareness among citizens of their ability to work within formal structures, leading to the establishment of shared regulations.

In the early 2010s, the Rome also participated in three EU-funded projects focused on community gardening strongly promoted by Risorse per Roma, an in-house company of the City of Rome. Mayor Ignazio Marino, elected in June 2013, actively promoted community gardening with a focus on reconnecting citizens with nature and improving public spaces, shifting away from the previous administration's emphasis on food production (Celata & Coletti, 2018). According to Celata and Coletti (2018), Marino's left-wing orientation and commitment to sustainability issues led him to emphasize the social and environmental benefits of community gardening, rather than its rural or agricultural aspects as the former right-wing administration had done. Marino saw these initiatives as a way to encourage citizen activism and improve urban spaces.

In 2014, eleven grassroots associations collaboratively developed the "Guidelines for the Management of Community Allotments and Gardens in Rome" (Interview III). These guidelines, inspired by the UA regulation of the city of Marseille (Interviews IV, IX), were presented to the City Council with the aim to officially recognize community gardening as an instrument for advancing environmental sustainability and societal well-being (Celata & Coletti, 2018). Amendments to Rome's governance are handled through multiple layers of review and decision-making. First, a proposal for a new resolution is developed by stakeholders such as citizens, municipal authorities, and committees. Each of Rome's 15 Districts (Municipalità) then reviews the proposal and provides feedback. The proposal is then forwarded to the Giunta, the city's executive body, for discussion and voting. After the Giunta's decision, the proposal proceeds to the Capitol Assembly (Assemblea Capitolina), Rome's highest legislative body, for debate, amendments, and final approval.

The Regulation for the Assignment and Management of Municipal Green Areas, Urban Gardens and Allotments was eventually approved by Mayor Marino's administration in July 2015 as Resolution 38 of 2015, filling a policy vacuum (Celata & Coletti, 2018). The terms of this 2015 UA regulation are the result of years of roundtable discussions involving most of the gardens in Rome, which organized themselves through the group "Orti in comune" (Gardens in Common). These rules were first discussed and conceived as internal regulations for the gardens themselves (Interviews XI, XII) and were crafted by gardeners with several aims in mind. One of the major aim was to provide widely accessible public space for social cohesion through food production:



The garden uses agriculture as a tool, but the ultimate goal of the urban garden is to create communities that have in common a certain spirit from a certain predisposition that they use as a public square. Also, many come here after their shift or on weekends, so we have thought of facilities that allow them to grow food quickly as a hobby. There's Wi-Fi for those who want to study, and a grill. (Interview I)

The regulation has allowed easier access to the gardens to the weakest [people] through specific access criteria. (Interview VII)

Another major objective was to foster institutional dialogue and enhance legitimacy: As Interviewee XII notes, the existence of a regulation allows community gardens to be recognized as reliable, while Interviewee I highlights that a goal of the process was to establish non-adversarial relationships with the municipality. This legitimization process and the increased collaboration with institutions also required a clearer definition of the respective roles, rights, and duties of the State and citizens. A further aim was to grant greater autonomy to non-profit organizations to enhance their capacity to contribute to public well-being. As Interviewee IV explains, "Resolution 38 allows citizens to contribute through the administration, to say, 'that territory hosts an illegal dump, give me the permission to save it from being toxic."

Overall, the purpose of Resolution 38 was to facilitate the emergence, diffusion, and formalization of community gardening in Rome. It offered public land for community gardening free of charge, signaling the municipality's commitment to supporting the practice, and designated the Environmental Protection Department (Civil Protection) as the entity responsible for defining the areas for urban gardening and monitoring their condition. The areas designated as urban farms were selected based on their physical and ecological characteristics, following the Land Use Plan of Rome. The municipality also offered opportunities for specific agreements with citizens or associations already informally using public areas for UA.

Associations could apply for a six-year renewable lease for the use of a designated area and were responsible for implementing and managing the urban garden project. They also had the responsibility of subdividing the land into smaller plots and ensuring that citizens took care of them. Plot allocation priorities were based on specific criteria defined by the association, e.g., unemployment or age. The responsibilities of Associations also included opening and closing the gates of the garden area according to agreed-upon times, conducting soil and irrigation water analysis before food production, and maintaining common areas and furnishings. Plot holders were responsible for directly managing and cultivating their assigned plot, and temporary replacements were allowed only under certain conditions. The association held the authority to revoke plot allocations in case of non-compliance or if the holder transferred to another city. The municipality retained the right to revoke assignments and terminate the relationship with the association in case of serious breaches or reasons of public interest.

The use of public land for free community gardens aligned with the city's master plan, but the construction of permanent structures was prohibited, and the produce could not be commercialized. Private groups or cooperatives managing urban gardens also had to follow specific rules, including the prohibition of pesticides, chemical fertilizers, and GMO seeds. The regulation emphasized the role of community gardens in protecting the environment, fighting poverty and social exclusion, and educating young people. Therefore, managing associations were responsible for social inclusion activities, environmental initiatives, waste management, and promoting organic practices.



4.3. 2015-2024: From Conflict to Collaboration

The first attempt to revise and adapt Resolution 38 occurred during the tenure of Pina Montanari, Councilor for the Environment under Mayor Raggi (Interview III). After Montanari's resignation, only one further meeting was held in November 2019. Despite this limited engagement, a completely revised regulation marked by a strong administrative centralization and a much-diminished role of citizen initiatives was drafted and sent to District councils for revision.

The drafting process for this new regulation faced criticism for its lack of consultation and controversial changes, particularly regarding garden assignment criteria. The draft was published for review on August 6, 2020, during the holiday season when many gardening groups were less active (Interviews VI, IX). Although the Environmental Commission reviewed the proposal again in September and October 2020 (Orti in Comune, 2020a, 2020b, accessed May 2023), the proposal was eventually canceled due to legal issues (Interview VII), leaving Resolution 38 as the standing regulation.

Gardeners strongly opposed the revised regulation's expectation that gardens should follow top-down criteria that had never been subject to public discussion. They argued, for example, that it was unfair to introduce fees after years of voluntary efforts spent revitalizing neglected land, and that a common discussion was needed to clarify the reasons behind this choice. As noted in one interview:

Raggi saw political enemies in the pool of gardeners. The allocation of land was seen as something coming from above, because the push from below was seen as an appropriation of public land. (Interview XIII)

This conflict led to growing awareness among citizens of their key role in taking care of the "bene comune" (common good), as described in Interview IX: in their fight to have their work recognized, and not to be required to pay fees after years of voluntary labor to restore neglected land, volunteers began to realize that their role extended beyond a personal engagement in gardening. They were contributing to the common good, advancing the welfare of the broader community.

Alongside this shift in awareness, the regulation was revised through several meetings, where the principle of "horizontal subsidiarity" was also incorporated for the first time. This principle, championed by Labsus—an association for the promotion of urban commons in Italy (Ciaffi, 2020)—acknowledged the active role of citizens in addressing gaps left by administrations (Interviews IX, X) and emphasized the importance of empowering communities to act in the public interest and collaborate with institutions. The principle of horizontal subsidiarity is enshrined in Article 115 of the Italian Constitution and recognizes both the central role of citizens in taking care of the collective good, as well as institutions' responsibility to provide the framework and resources for citizens-led initiatives (Ciaffi, 2020). The principle challenges the approach of delegating and privatizing public functions by emphasizing collaboration and community participation in managing public spaces. It also emphasizes the community's ability to take part in urban decision-making and exercise power for the common good, repositioning citizens' role from that of mere voters to that of active participants in shaping their communities (Ciaffi, 2020).



Interviewee IX describes this change as a departure from neoliberal logics, highlighting how it signaled a move toward governance arrangements in which public entities and civic associations manage shared resources on more equal terms, challenging the asymmetry and one-sidedness often associated with neoliberal logics. This approach exemplifies a governance model that is neither bottom-up nor top-down, nor involves multiple centers of decision-making, but is collaborative and deliberative. The municipality acknowledges its failure in managing public spaces, while citizens express their willingness to manage them collectively (Interview I). This collaborative pact aims to achieve a balanced management approach where both parties commit to mutually agreed-upon rules, ensuring accountability on both sides.

Interview I also highlights that the collaboration pact differs from a traditional contract, as it is jointly formulated, with both parties determining their terms and the actions to be taken. Within the framework of horizontal subsidiarity, UA gardens can be considered a type of commons (Interview I), and the transition from informal land occupation to a regulated state itself can be viewed as a cooperative process. Interview XII stresses that collaborative pacts are not simply about granting land to citizens but represent a mutual commitment between citizens and institutions to undertake specific actions (Interview XII).

In those years, stakeholder groups also advocated for linking the previous Resolution to the Commons legislative framework, allowing for the recognition of the subsidiarity relationship between those who regenerate public spaces and the administration, thus ensuring that responsibilities and benefits are shared equally (Interview III). Under this arrangement, the administration enters a collaboration pact for the shared management of green spaces designated as urban community gardens. The land is then allocated to an association that signs the pact and submits a project proposal to the City Council outlining its intended use. These pacts enable the provision of economic support, tools, partnerships, and other resources needed for managing the space, suggesting a shift from one-way assistance to mutual aid in the stewardship of public spaces. The administration commits to provisions such as insurance coverage for gardeners and guaranteed water access; in other words, gardeners maintain the plots, while the city provides services and infrastructure (Interviews I, XII).

In November 2022, after nine months of revision of the regulation of UA during which 11 public meetings (called "Urban Local Groups" according to the URBACT methodology; URBACT, n.d.-b) were held to discuss amendments, Orti in Comune shared the proposed new regulation for the urban community gardens of Rome with the Councilor for the Environment and the President of the Capitoline Environment Commission. Activists were also advocating for the establishment of a permanent consultative body, the "Consulta degli orti urbani" (Permanent consultation body for urban vegetable gardens), to address issues relevant to community gardens and allotments and maintain dialogue with the city administration, transcending changes in political leadership (Interview III).

On the 25th of October 2024, the regulation was unanimously approved by the Capitoline Assembly of Rome (City of Rome, 2024b). According to the website:

In defining the new regulations, the City of Rome's objectives include developing community resilience, promoting healthy and conscious food consumption, enhancing the green and agricultural heritage, the urban landscape, encouraging good practices related to the recovery, recycling and reuse of natural resources and creating paths of participation and active citizenship as opportunities for



social aggregation that foster interpersonal relationships, *knowledge and enhancement of the urban environment*, developing moments of sociability and meeting aimed at integration and social inclusion. (City of Rome, 2024b, translated from Italian)

A comparison of the texts of Resolution 38 and the new regulation reveals both recurring themes and notable modifications. MAXQDA's Word frequency function shows that "commons" and expressions like "intergenerational encounters," "co-governance," "collaboration," "co-management," "cooperate," and "co-planning" appear for the first time in the new regulation, signaling a discursive shift toward more participatory and commons-oriented governance frameworks.

Furthermore, the concept of "awareness" emerges as a key theme in relation to the revision process, as it was consistently mentioned across all interviews. Awareness was built or developed during exchanges and interactions between different stakeholders, and the methodology employed by the EU-funded (URBACT) project RU:RBAN of bringing stakeholders together through the "Urban Local Group" meetings was key to fostering this awareness. According to Interviewee VII, "the urban local group increased the awareness and maturity of all people involved in the process," a sentiment echoed by Interviewee VI, who emphasized that "it was necessary to sit at the table, and whoever was behind the table understood other perspectives." Or, as elaborated upon by Interviewee XIV:

The URBACT method coordinated by Risorse per Roma was very important because it provided rules and a democratic method for conducting local meetings where all stakeholders are involved. This goes hand in hand with a coherent policy and the co-creation process, which applies the 'collaboration agreements for the care of green areas' based on the principle of horizontal subsidiarity.

In conclusion, this section has described the continuous evolution of institutional arrangements employed in the governance of UA in Rome, from informal grassroots initiatives to the current commons legislative framing adopted in the regulation approved in October 2024. The following section explores the governance implications of this commoning process.

5. Discussion

The development of UA in Rome and the shift in how it is conceptualized offers a vivid illustration of how urban commons theories can take shape in practice. The evolution of institutional arrangements connected to UA, particularly through the creation of the 2015 regulation and its subsequent changes until the 2024 version, shows the collaborative governance processes that are foundational to urban commons. This progressive institutionalization not only structures UA as a commons-oriented land-use strategy but also demonstrates how such frameworks legitimize the role and actions of grassroots movements during political contestation.

In this discussion section, we first examine how the theoretical principles outlined in the literature review are reflected in the Rome case study. We then elaborate on the commoning of UA from a legislative standpoint, addressing how this helps answer the three research questions:



- What are the implications of repositioning UA within a commons-oriented legislative framework for its governance structures? (RQ1)
- How does this shift impact stakeholder relationships, particularly between citizens and local authorities?
 (RO2)
- How does this case study deepen our understanding of collaborative governance in urban commons? (RQ3)

5.1. Understanding Urban Agriculture as Urban Commons

From its 2015 version onward, the regulation has conceptualized UA as a commons by going beyond a narrow focus on land use for food production. It has adopted a multifunctional perspective that encompasses a wide range of objectives, such as food security, environmental sustainability, social cohesion, and economic development. This approach aligns closely with the theoretical framework of urban commons, which views shared resources as serving both individual and collective well-being within urban environments (Feinberg et al., 2021). Framing UA within the commons approach contributes to a redefinition in the understanding of public goods, positioning grassroots activism as a recognized contributor to societal progress, rather than just as an oppositional force. This aligns with the description of CBIs provided in the theoretical framework.

The governance of UA in Rome also reflects the state-society co-creation dynamic in urban commons scholarship. Grassroots movements through which citizens come together to address gaps in local government support highlight the self-organizing and participatory dimension of urban commons; at the same time, the collaboration between citizens and local administrators in institutionalizing UA demonstrates the blurring of roles between the state and civil society (Mansfield & Mendes, 2013). This dynamic is evident in Rome's UA regulation: while responsibilities such as the maintenance of urban gardens are shared by both parties, the principle of horizontal subsidiarity—enshrined in the Italian Constitution and a core tenet of the 2024 regulation—places greater obligations on local administrations in exchange for citizens' collective stewardship of commons. The principle also formalizes the collaborative pact between the government and its citizens, reflecting a shared stewardship of public spaces (Foster & laione, 2015).

Collaborative governance theories highlight the collaborative and deliberative nature of this state-society co-creation. By recognizing shared needs and responsibilities, UA governance becomes a collaborative pact between citizens and institutions, where both parties contribute to managing the public good, blurring individual and collective aims. This collaboration addresses a democratic deficit, expands inclusion, and enhances responsiveness, as seen in Bäckstrand's (2004) descriptions of collaborative governance. Given that, as noted in earlier sections, co-creation emphasizes a participatory, capacity-enhancing approach from the outset (Leino & Puumala, 2021), the case of UA in Rome can indeed be understood as a process of co-creation. This is reflected mainly in the change in the relationship between the actors involved due to adaptative and continuous collaboration.

The study, however, also shows the tensions between grassroots activism and the institutionalization of urban commons. For instance, the city's framing of community gardens as a tool to externalize maintenance costs, albeit while providing support, illustrates the complex power dynamics between state and civil society (Certomà & Giaccaria, 2024). While this partnership reflects the co-creation of governance, it also highlights



the challenge of navigating neoliberal logics within a commons framework. Still, the perception of community gardens as spaces appropriated by citizens, and the attempts to formalize their collective use, can be seen as a pushback against neoliberal urban management, which often commodifies and privatizes public space (Ernwein, 2017).

5.2. Legislative Reframing: Awareness, Horizontal Subsidiarity, and Collaborative Governance

Rome's UA regulation process illustrates how grassroots *awareness* of collective stewardship has catalyzed legislative innovation, transforming commoning from informal activism into a codified framework for co-governing urban resources. As citizens shifted from occupying neglected spaces to advocating for recognition of their role in maintaining the "bene comune" (common good), their efforts underscored the realization that commoning transcends individual action, constituting a *public good* that requires institutional reciprocity. This awareness, articulated in many of the interviews, propelled the adoption of horizontal subsidiarity, a principle enshrined in Italy's legal framework (Article 118) which redefines citizen-state relations by mandating collaborative governance. By embedding this principle into the 2024 regulation, Rome's policymakers acknowledged that urban commons thrive not through privatization or state control, but through shared responsibility between institutions and organized communities.

Regarding the implications for governance structures (RQ1), the legislative reframing of UA as a commons reconfigures governance architectures by replacing hierarchical oversight with collaborative pacts. These pacts, co-designed by citizens and municipalities, formalize shared ownership of public spaces while distributing responsibilities. This aligns with Ostrom's principle of "collective-choice arrangements," but urban commons scholarship provides a more appropriate framework for capturing the complexity of contested urban land rights.

In relation to stakeholder relationships (RQ2), horizontal subsidiarity repositions citizens from petitioners to co-decision-makers, mitigating power asymmetries. Interviews reveal that Rome's UA groups initially viewed the municipality as an adversary. However, the regulation's collaborative pacts reframed this relationship: citizens gained negotiating power in exchange for formalizing their stewardship. This reciprocity echoes what Mansfield and Mendes' (2013) wrote on "blurring of state-society roles." At the same time, horizontal subsidiarity could also still be placed in broader debates about the neoliberal co-optation of commons (Ernwein, 2017), because while the city avoids privatization, it still externalizes maintenance costs to citizens.

Regarding the understanding of collaborative governance in urban commons (RQ3), Rome's case demonstrates that such collaborative governance hinges on two pillars. The first is legislative legitimization: horizontal subsidiarity provides a constitutional basis for citizen-led initiatives, transforming activism into a governance model. The second is reciprocal accountability, where collaborative pacts bind both parties to outcomes. The legitimization of urban commons governance during the political struggle for the recognition of UA projects suggests that the framework is not only applicable to current efforts but also provides a path for future political initiatives striving for collective goals.

Furthermore, the reciprocal nature of these engagements highlights how UA in Rome has gone beyond the formal recognition of commons to become a shared societal norm. The collaborative nature of governance in this context is reflected in the structured meetings and exchanges between citizens and local governments,



which demonstrate how co-creation shapes policy and governance structures. This aligns with the theory that collaborative governance fosters shared responsibility in managing public goods and strengthens the blurring of state and citizen roles in governance (Mansfield & Mendes, 2013).

In sum, the governance of UA in Rome exemplifies the practical application of urban commons and collaborative governance theories. The case highlights how co-creation, horizontal subsidiarity, and reciprocal engagement play central roles in managing common goods, fostering inclusive and participatory governance, and promoting sustainable urban development. This approach not only reframes the UA movement but also opens up opportunities for other politically engaged projects to institutionalize as they strive to advance the public good. The everyday practices of UA governance contribute to shaping and reimagining urban public spaces in Rome, challenging traditional urban planning paradigms.

6. Conclusions

Local governments are increasingly promoting community self-organization and co-creation as mechanisms for delivering public goods (Igalla et al., 2021), and the growing interest in UA is developing alongside a growing interest in municipal public policy (Halvey et al., 2021). This study highlights the need for policymakers to adopt collaborative governance models for UA, with shared participation between public administrations and citizens in decision-making processes. Such models reflect the blurring boundaries between state and civil society, which foster a co-creative approach to managing urban spaces.

Central to this governance shift is the principle of horizontal subsidiarity, which calls for local governments to support UA by providing essential resources such as infrastructure, legal frameworks, and technical assistance. As demonstrated by this case study, structured co-creative processes such as roundtable discussions empower citizens and administrators to collectively shape governance systems, building a culture of reciprocal engagement and shared stewardship of urban commons. These collaborative mechanisms help to legitimize and sustain UA initiatives, enhancing their capacity to respond to changing urban needs. Moreover, the legitimization of grassroots movements during political contestation provides a new framework for the recognition and institutionalization of collective efforts aimed at advancing the public good.

The research findings show a shift from government-centric approaches to collaborative governance models in urban commons management. By emphasizing co-creation and horizontal subsidiarity, these models provide a solution to overcome the challenges of neoliberal urban management and commodification of public space, promoting a deeper integration of grassroots initiatives into institutional frameworks. This approach also advances a revolution in the conceptualization of public goods, positioning these grassroots projects as legitimate contributors to the public interest and sustainable urban development, rather than marginal opposition movements.

The study makes three theoretical contributions: First, to urban commons theory by demonstrating how grassroots initiatives can transition into institutionalized governance frameworks through co-creation. Second, to our understanding of how collaborative governance models can function using horizontal subsidiarity as a mechanism for balancing institutional oversight with community autonomy. Third, it challenges neoliberal urbanism paradigms by providing empirical evidence of non-commodified public space



governance. From a practical perspective, the findings offer policymakers replicable models for participatory decision-making and adaptive legal frameworks that recognize UA as critical urban infrastructure. The study also fills a research gap by reconstructing the story of UA regulation in Rome until the approval of the new regulation in October 2024.

Several limitations warrant consideration. First, the single-case study design limits generalizability across different political and national contexts, and the study also covers a limited number of gardens considering the size of Rome. Second, since the new regulation was only recently approved, this prevents an assessment of the long-term durability of the governance framework and the extent to which implementation will align with the regulation's declared objectives. Third, the analysis focuses on successful collaborations, making it difficult to assess power asymmetries in co-creative processes.

Future research should explore the long-term effectiveness of co-creative processes in UA governance and apply the urban commons framework to other collective projects evolving from political contestation to institutionalization. Moreover, it would be relevant to analyze the role played by conflict in co-creation and collaborative governance, not only between citizens and institutions, but also among gardeners themselves over competing visions of urban stewardship. Addressing these aspects will further strengthen our understanding of UA as a commons that benefits both communities and the environment.

Acknowledgments

This work partly results from research carried out in 2023 under the supervision of Prof. Ilona Otto (Wegener Centre, University of Graz) and Prof. Maharjan Keshav Lall (Hiroshima University).

Funding

This work was partly supported by JSPS KAKENHI Grant Number JP25K18315.

Conflict of Interests

The authors declare no conflict of interests.

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
- Bäckstrand, K. (2004). Scientisation vs. civic expertise in environmental governance: Eco-feminist, eco-modern and post-modern responses. *Environmental Politics*, 13(4), 695–714. https://doi.org/10.1080/0964401042000274322
- Bentzen, T. Ø. (2022). Continuous co-creation: How ongoing involvement impacts outcomes of co-creation. *Public Management Review*, 24(1), 34–54. https://doi.org/10.1080/14719037.2020.1786150
- Bianchi, I., Pera, M., Calvet-Mir, L., Villamayor, S., Ferreri, M., Reguero, N., & Maestre Andrés, S. (2024). Urban commons and the local state: Co-production between enhancement and co-optation. *Territory, Politics, Governance*, 12(9), 1333–1352. https://doi.org/10.1080/21622671.2022.2108491
- Brandsen, T., & Honingh, M. (2016). Distinguishing different types of coproduction: A conceptual analysis based on the classical definitions. *Public Administration Review*, 76(3), 427–435. https://doi.org/10.1111/puar.12465
- Cavallo, A., Di Donato, B., & Marino, D. (2016). Mapping and assessing urban agriculture in Rome. *Agriculture and Agricultural Science Procedia*, 8, 774–783. https://doi.org/10.1016/j.aaspro.2016.02.066



- Celata, F., & Coletti, R. (2018). The policing of community gardening in Rome. *Environmental Innovation and Societal Transitions*, 29, 17–24. https://doi.org/10.1016/j.eist.2017.09.002
- Certomà, C. (2016). 'A new season for planning': Urban gardening as informal planning in Rome. *Geografiska Annaler: Series B, Human Geography*, 98(2), 109–126. https://doi.org/10.1111/geob.12094
- Certomà, C., Chelleri, L., & Notteboom, B. (2020). The 'fluid governance' of urban public spaces. Insights from informal planning practices in Rome. *Urban Studies*, *57*(5), 976–995. https://doi.org/10.1177/0042098018819734
- Certomà, C., & Giaccaria, P. (2024). Dialogic practices of urban gardening in Rome: "Reading for difference" in social innovation. *Urban Geography*, 45(2), 258–280. https://doi.org/10.1080/02723638.2023.2169487
- Certomà, C., & Martellozzo, F. (2019). Cultivating urban justice? A spatial exploration of urban gardening crossing spatial and environmental injustice conditions. *Applied Geography*, 106, 60–70. https://doi.org/10.1016/j.apgeog.2019.03.007
- Ciaffi, D. (2020). Servizi ibridi e condivisi, per prendersi cura dei Beni comuni. LABSUS. https://iris.polito.it/handle/11583/2928060
- City of Rome. (2015). *Resolution 38 of 2015* (Regulation of Urban Agriculture). https://www.comune.roma.it/ PCR/resources/cms/documents/Delib_N_38_17.07.2015.pdf
- City of Rome. (2024a). *Deliberation n.*117 of 25th of October, 2024 https://www.comune.roma.it/web-resources/cms/documents/Nuovo_regolamento_Deliberazione_Assemblea_Capitolina_n._1172024.pdf
- City of Rome. (2024b). *Orti urbani*, *Assemblea approva nuovo regolamento*. https://www.comune.roma.it/web/it/notizia/orti-urbani-assemblea-approva-nuovo-regolamento.page
- Dubová, L., Macháč, J., & Vacková, A. (2020). Food provision, social interaction or relaxation: Which drivers are vital to being a member of community gardens in Czech cities? *Sustainability*, 12(22), Article 9588. https://doi.org/10.3390/su12229588
- Eizenberg, E. (2012). Actually existing commons: Three moments of space of community gardens in New York City. *Antipode*, 44(3), 764–782. https://doi.org/10.1111/j.1467-8330.2011.00892.x
- Ela, N. (2016). *Urban commons as property experiment: Mapping Chicago's farms and gardens* (SSRN Scholarly Paper No. 2744294). Social Science Research Network. https://doi.org/10.2139/ssrn.2744294
- 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
- Ernwein, M. (2017). Urban agriculture and the neoliberalization of what? ACME: An International Journal for Critical Geographies, 16(2), 249–275. https://doi.org/10.14288/acme.v16i2.1387
- Feinberg, A., Ghorbani, A., & Herder, P. (2021). Diversity and challenges of the urban commons: A comprehensive review. *International Journal of the Commons*, 15(1). https://doi.org/10.5334/ijc.1033
- Follmann, A., & Viehoff, V. (2015). A green garden on red clay: Creating a new urban common as a form of political gardening in Cologne, Germany. *Local Environment*, 20(10), 1148–1174. https://doi.org/10.1080/13549839.2014.894966
- Foster, S., & Iaione, C. (2015). *The city as a commons* (SSRN Scholarly Paper No. 2653084). Social Science Research Network. https://doi.org/10.2139/ssrn.2653084
- Foster, S. R., & laione, C. (2019). Ostrom in the city: Design principles and practices for the urban commons. In D. Cole, B. Hudson, & J. Rosenbloom (Eds.), *Routledge handbook of the study of the commons* (pp. 1–24). Routledge.
- Gómez-Villarino, M. T., Urquijo, J., Gomez Villarino, M., & García, A. I. (2021). Key insights of urban agriculture for sustainable urban development. *Agroecology and Sustainable Food Systems*, 45(10), 1441–1469. https://doi.org/10.1080/21683565.2021.1917471



- Guitart, D., Pickering, C., & Byrne, J. (2012). Past results and future directions in urban community gardens research. *Urban Forestry & Urban Greening*, 11(4), 364–373. https://doi.org/10.1016/j.ufug.2012.06.007
- Gustafson, P., & Hertting, N. (2017). Understanding participatory governance: An analysis of participants' motives for participation. *The American Review of Public Administration*, 47(5), 538–549. https://doi.org/10.1177/0275074015626298
- Gutmann, A., & Thompson, D. (1996). Democracy and disagreement. Ethics, 108(3), 607-610.
- Halloran, A., & Magid, J. (2013). The role of local government in promoting sustainable urban agriculture in Dar es Salaam and Copenhagen. *Geografisk Tidsskrift-Danish Journal of Geography*, 113(2), 121–132. https://doi.org/10.1080/00167223.2013.848612
- Halvey, M. R., Santo, R. E., Lupolt, S. N., Dilka, T. J., Kim, B. F., Bachman, G. H., Clark, J. K., & Nachman, K. E. (2021). Beyond backyard chickens: A framework for understanding municipal urban agriculture policies in the United States. *Food Policy*, 103, Article 102013. https://doi.org/10.1016/j.foodpol.2020.102013
- Hardt, M., & Negri, A. (2009). *Commonwealth*. Harvard University Press. https://doi.org/10.2307/j.ctvjsf48h lgalla, M., Edelenbos, J., & van Meerkerk, I. (2021). Institutionalization or interaction: Which organizational factors help community-based initiatives acquire government support? *Public Administration*, *99*(4), 803–831. https://doi.org/10.1111/padm.12728
- 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
- Leino, H., & Puumala, E. (2021). What can co-creation do for the citizens? Applying co-creation for the promotion of participation in cities. *Environment and Planning C: Politics and Space*, 39(4), 781–799. https://doi.org/10.1177/2399654420957337
- Mansfield, B., & Mendes, W. (2013). Municipal food strategies and integrated approaches to urban agriculture: Exploring three cases from the Global North. *International Planning Studies*, 18(1), 37–60. https://doi.org/10.1080/13563475.2013.750942
- Meerkerk, J. (2024). Understanding the governing of urban commons: Reflecting on five key features of collaborative governance in Zero Waste Lab, Amsterdam. *International Journal of the Commons*, 18(1), 397–410. https://doi.org/10.5334/ijc.1282
- Nagendra, H., & Ostrom, E. (2014). Applying the social-ecological system framework to the diagnosis of urban lake commons in Bangalore, India. *Ecology and Society*, 19(2). https://doi.org/10.5751/ES-06582-190267
- Orti in Comune. (2020a, September 20). *Post on the history of guidelines of UA* [Status update]. Facebook. https://www.facebook.com/orticomunitari/posts/pfbid02LNV4HRctU9sMtx4z5f3a2ZPMMPE5QoNc TNE1Cc7unnAqQdaQMiSFVbow1pDE3QVI
- Orti in Comune. (2020b, September 29). Post on the history of regulation discussions [Status update]. Facebook. https://www.facebook.com/orticomunitari/posts/pfbid02M7jxVueTnFebsZUpjmWsmbCZLrYZQVb2vu 4wgneCCeiU62ouLKDj9XpVDxYaBWJMI
- Orti in Comune. (2021, November 3). Post on the history of EU-funded projects on UA in Rome, Italy [Status update]. Facebook. https://www.facebook.com/orticomunitari/posts/pfbid0XLKHda6ehsTXtFoNDjRNtq WX5sR3VguquVxtYUrHgDXu1geDYKxG2CQsAvf3t9VHI
- Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge University Press. https://doi.org/10.1017/CBO9780511807763
- Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, 325(5939), 419–422. https://doi.org/10.1126/science.1172133
- Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review*, 100(3), 641–672. https://doi.org/10.1257/aer.100.3.641



Rogge, N., & Theesfeld, I. (2018). Categorizing urban commons: Community gardens in the Rhine-Ruhr agglomeration, Germany. *International Journal of the Commons*, 12(2). https://doi.org/10.18352/ijc.854

URBACT. (n.d.-a). *Resilient urban and peri-urban agriculture*, *Rome*, *Italy*. http://remakingthecity.urbact.eu/resilient-urban-and-peri-urban-agriculture-rome-italy--78.case

URBACT. (n.d.-b). Local groups methodology. https://archive.urbact.eu/urbact-local-groups

URBACT. (2019). RU:RBAN. https://urbact.eu/networks/rurban

Voorberg, W. H., Bekkers ,V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357. https://doi.org/10.1080/14719037.2014.930505

Wadumestrige Dona, C. G., Mohan, G., & Fukushi, K. (2021). Promoting urban agriculture and its opportunities and challenges—A global review. *Sustainability*, 13(17), Article 17. https://doi.org/10.3390/su13179609

About the Authors



Micol Sonnino is a doctoral candidate at the Department of Geography and Regional Research at the University of Vienna. Her research interest lies in exploring the integration of participatory methods for empowering communities to shape urban sustainability transformations.



Simona Zollet received a Masters' degree in Environmental Science and Sustainable Development from Ca' Foscari University of Venice, Italy, and a PhD in International Development and Cooperation from Hiroshima University. She is currently assistant professor at Hiroshima University. Her interdisciplinary research background includes sustainability science, sociology of agriculture and food systems, and rural studies. She is currently conducting research on urban-to-rural migration and on how to create more resilient local communities and food systems at the rural-urban interface.