Transformative Pathways from Farm to Table:
Opportunities and Challenges for Public Food Procurement to (Re)build Regional Food Systems

by

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Dedication

To my family

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List of Abbreviations

AFN: Alternative Food Network

CEE: Cooperative for Ecosystem and Early Childhood in the Metropolitan Areas

MAFRA: Ministry of Agriculture, Food, and Rural Affairs

SFMP: Seoul Food Master Plan 2020

UCPM: Urban-rural Coexistence Public Meal Program

UFEF: Universal, Free, Eco-friendly School Lunch Program

Abstract

Amid escalating global concerns regarding the adverse impacts of industrialized, profit-oriented food systems — including climate change, biodiversity loss, and disparities in access to healthy food — a wave of initiatives is emerging to reshape these market-driven food systems. From grassroots movements such as the Slow Food Movement and the local food movement, to newer government-led initiatives like the Milan Urban Food Policy Pact and Food Trails, these initiatives aim to overhaul institutional structures that underpin corporate-dominated practices across the food production, distribution, and consumption spectrum. For those actions to gain constant momentum, it is crucial to comprehend their operational mechanisms and how they can bring permanent change to conventional food systems.

Focusing on the pivotal role that city governments and urban planning can play in food system innovation, this dissertation investigates the opportunities and challenges presented by public food procurement, an emerging government intervention strategy to enhance sustainability in regional food systems. Public food procurement utilizes public institutions such as schools, hospitals, and welfare facilities to directly connect local farmers and consumers, establishing local food supply chains that not only uplift the livelihoods of small and medium-scale sustainable farmers but also ensure that broader populations have more equitable access to nutritious food. City-led public food procurement programs, with their significant purchasing power in densely populated areas, stand out for their potential to substantially drive sustainable

innovation in regional food systems. While municipalities in Brazil, North America, and Europe have pioneered public food procurement, its importance is often understated in mainstream food policy. Indeed, compared to extensive studies on private or non-profit initiatives such as food hubs and farm-to-school programs, the role of government-led public food procurement in reshaping regional food systems has been relatively unexplored.

This dissertation comprises three distinct papers, each using different theoretical frameworks and analytical methods, yet all centered around understanding the governance mechanisms that enable such transformative initiatives and examining their implications for collective sustainability transitions in food systems. The Urban-rural Coexistence Public Meal Service (UCPM), initiated by the Seoul Metropolitan Government in 2017, serves as a compelling case study due to its unique approach of employing a place-based model and establishing exclusive food supply chains between pairs of urban districts and rural towns. Through in-depth analysis, this study reveals crucial insights into the factors influencing the development of South Korea's public food procurement programs and their broader implications for sustainable food procurement. Additionally, I address the conceptual and practical challenges faced by UCPM stakeholders in implementing a place-based model of public food procurement, with a focus on the objectives of localization and sustainability. Lastly, I examine the different types of governance that have emerged within the UCPM, including cooperation, co-optation, and contestation, with a particular emphasis on the interactions between the government and civic actors. This investigation highlights the importance of reflexive governance and collaborative planning, which take into account the trade-offs between distinct interpretations of program agendas and the power dynamics inherent in planning processes.

Ultimately, this research sheds light on the complex interactions among various societal factors—landscape contexts, institutionalization, and the significant role of local agents—in promoting sustainability and equity within food systems. The findings enrich our understanding of the governance dynamics that facilitate changes in food systems and provide insights into promising strategies for fostering future sustainable and equitable practices.

Chapter 1
Introduction

"A significant part of the pleasure of eating is in one's accurate consciousness of the lives and the world from which food comes." – Wendell Berry

1. Background

The beginning of this food story can be traced back to a scorching summer day in 2011, during the usual hot and humid weather of South Korea (hereafter, Korea). I found myself leisurely strolling through my neighborhood near Seoul, perspiring in the heat, when my attention was captured by a bustling construction site where an old corner store once stood. This store had been a fixture at the entrance of my apartment complex for a considerable period of time. However, now it was being replaced by a new and stylish shop. The freshly installed shopfront sign revealed that it was one of the increasingly popular consumer co-ops that had gained visibility in the late 2000s. These co-ops were emerging alongside the nationwide growth of urban gardening practices[1], serving as a response to food safety concerns arising from the

1 Urban agriculture in Korea has a rich history that dates back to the early 1990s when weekend farms started to flourish as individual leisure activities in suburban areas. However, it was not until May 2012 that the government

series of food scandals that plagued Korea during the 2010s (See Figure 1 for a depiction of my own patio garden from 2011).



Figure 1. Patio garden as a viable type of urban agriculture[2] (photos taken on April 25, 2011)

recognized the importance of urban agriculture and officially established comprehensive support through the enactment of "The Act on Promoting and Supporting Urban Agriculture." Reflecting on this notable progression, my master's thesis at Seoul National University, titled "Sociological Reflections on the Activation of Urban Agriculture," delved deep into the sociological factors that contributed to the growing interest in urban agriculture and the increasing involvement of the public sector. The thesis critically examined the sociological underpinnings behind the rise of urban agriculture in Korea and shed light on the motivations and implications of public intervention in this field, primarily historically spearheaded by the civic sector.

[2] Among the various forms of urban gardening, patio gardens or rooftop gardens that utilize vacant spaces were deemed the most viable types of agriculture in densely populated urban areas like Seoul (RDA, 2016).

The arrival of this novel co-op grocery store in my neighborhood ignited a spark of curiosity within me about the innovative ways in which people were producing and consuming food, as well as the underlying principles driving such initiatives. Simultaneously, it brought me back to a thought-provoking question that arose whenever I encountered the dilemma of choosing between organic and more affordable non-organic options at the supermarket: why did more sustainably grown foods, which prioritize health and environmental considerations, often come with a higher price tag, thus perpetuating disparities in access to nutritious sustenance for certain populations? Participating in an urban agriculture cooperative offered me an opportunity to engage in critical reflection on the workings of the modern food system. It became increasingly evident, through the insights shared by practitioners, that the obstacles to accessing healthy foods could not be solely attributed to a lack of knowledge or willingness on the part of individuals. Rather, they were deeply ingrained within the structural foundations of market-driven food systems, which prioritize quantity and profitability over quality and sustainability. These findings also align with recent research, further validating the need for systemic changes in our food systems (Freire & Rudkin, 2019; Leeuwis et al., 2021; Shaker et al., 2023; Wright et al., 2016).

If the market alone proves insufficient in ensuring access to food as a fundamental human right and guaranteeing the long-term sustainability of our food systems, what forms of public intervention could we envision? Contemplating this conundrum, this dissertation examines the opportunities and challenges presented by public food procurement, an emerging type of government intervention aimed at enhancing sustainability within regional food systems. By leveraging public institutions such as schools, hospitals, or welfare facilities as platforms for connecting local farmers with consumers, public food procurement endeavors to establish local

food supply chains that not only uplifts the livelihoods of small and mid-scale farmers dedicated to sustainable agriculture but also ensures more equitable access to nutritious food for broader populations (Morgan & Sonnino, 2007, 2013; Stahlbrand, 2017). In particular, city-led public food procurement programs, which harness their substantial purchasing power by the government in densely populated areas, have the potential to significantly drive sustainable innovation within regional food systems (Lehtinen, 2012; Morgan & Morley, 2002).

This dissertation consists of three standalone papers, each employing separate theoretical frameworks and analytical methods. However, the central focus remains on understanding the governing mechanisms that facilitate such transformative initiatives and exploring their implications for collective efforts in achieving sustainability transitions in food systems. To provide a comprehensive case study, I delve into the Urban-rural Coexistence Public Meal Service (UCPM), a novel government-led public food procurement program initiated by the Seoul Metropolitan Government in 2017. The UCPM serves as a compelling empirical unit for the purpose of this research, enabling an exploration of the historical narratives that have shaped transitions in Korean public food procurement policies, culminating in the establishment of the UCPM. Through an in-depth analysis of the evolution of South Korean public food procurement programs, this dissertation uncovers insights into the factors that have influenced their development and the broader implications for sustainable food procurement (Chapter 2). In the subsequent chapter, I address the conceptual and practical challenges faced by UCPM stakeholders in implementing a place-based model of public food procurement that emphasizes the locality and sustainability of regional food supply chains (Chapter 3). By zooming in on the different types of governance that have emerged within the UCPM, with a particular focus on the

interactions between the government and civic actors, I highlight the importance of reflexive governance that takes into account power dynamics during the planning processes (Chapter 4).

Ultimately, this research sheds light on the complex interplay between various societal factors – landscape backgrounds, institutionalization, and the pivotal role played by local agents – in advancing the principles of sustainability and equity within food systems. The findings contribute to our understanding of the governing dynamics underlying changes in food systems and provide insights into effective approaches for promoting sustainable and equitable practices in the future.

2. Food Systems as a Catalyst for Societal Transitions

Food serves a purpose beyond nourishment; it is a profound expression of culture and society, reflecting the environmental, social, and economic well-being of communities. The concept of the "food system," encompassing all the actors, activities, actions, and processes spanning the continuum from the farm to people's plates and landfills, is intricately intertwined with the values and philosophies that shape our society. In operational terms, the food system involves everything from production, storage, processing, and manufacturing, to distribution, marketing, retail, consumption, and disposal of goods (See Figure 2 on the next page), with significant environmental, health, and societal implications (Nguyen, 2018; Von Braun et al., 2021).

A systems thinking approach offers valuable insights into the interconnected elements of food chains and their interdependencies. This approach encourages a shift from focusing solely on individual components to understanding the broader *processes* and knowledge foundations that shape the system, emphasizing the recognition of interrelationships among various

components and agents within the system (Capra, 1985, 1994). The food system framework, applied as a tool of systems thinking in the context of food, serves as an analytical tool to improve our understanding of agriculture, food security, and nutrition (Borman et al., 2022). This framework describes the connections and feedback loops between different elements and processes, illustrating their impact on food security, nutrition, and socio-economic and environmental outcomes (De Brauw et al., 2019; Pingault et al., 2017). By adopting a systems thinking perspective, researchers and policymakers gain a deeper understanding of the interconnections and dynamics inherent in food practices within a larger system. This understanding informs the development of policies and strategic interventions that aim to achieve desirable outcomes within the food system, enabling a more effective and comprehensive response to contemporary food challenges.

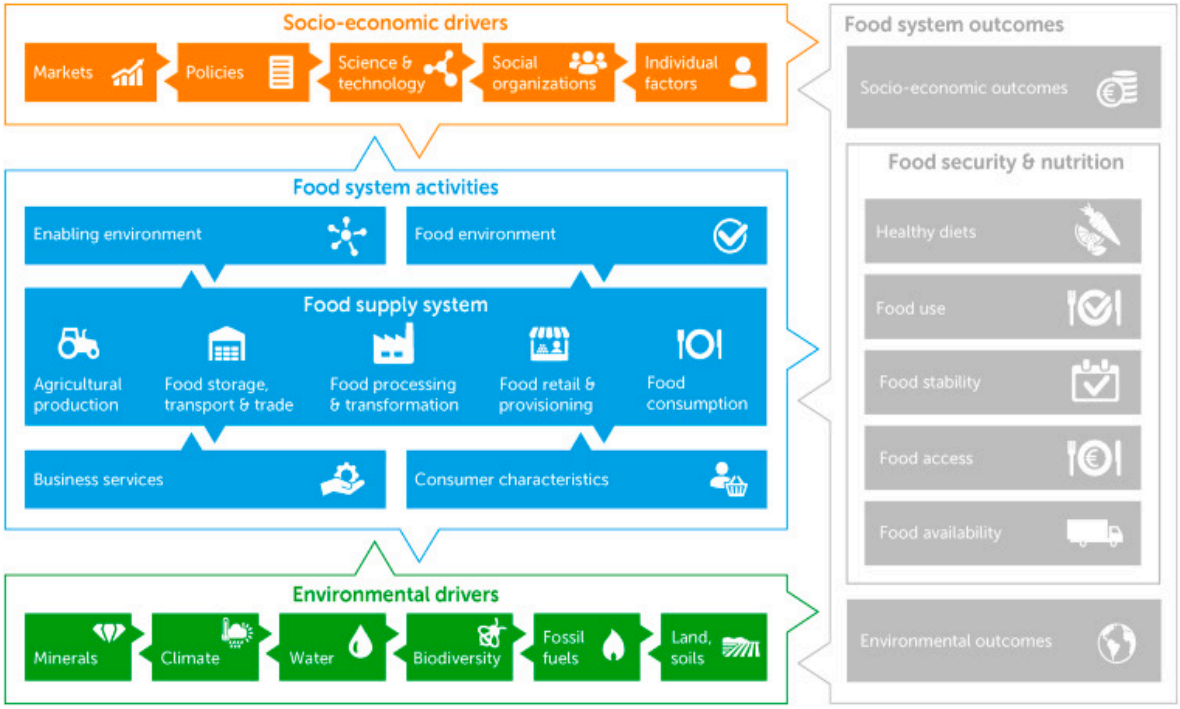


Figure 2. A food systems approach framework
Adapted from Van Berkum et al. (2018)

The complex nature of food systems suggests that transitioning how we handle food, from the smallest scale of individual dinner tables to the largest scale of global trade, can have a significant impact on different sectors of society. Figure 2 visually represents these intricate relationships. Food production is closely linked to our management of natural resources and the environment. Transportation and food processing depend on land use, infrastructure, and energy systems. Furthermore, food distribution and consumption practices are largely shaped by the structure of industries. The interdependencies within the food system make it a challenging field for innovation, requiring coordinated efforts across a wide array of scales and stakeholders. However, these interdependencies also underscore the wide-ranging societal implications of the food system. When collective initiatives are embraced, changes in our food practices can catalyze meaningful transformations with far-reaching effects, extending beyond the food system to areas such as environment, transportation, and business practices. This further emphasizes the potential of food system transitions to inspire and inform transformative efforts in other domains, providing valuable lessons and insights for effective policy tools and governance models.

3. Challenges: Corporate Concentration in Food Systems

The consolidation of global corporate food systems in recent decades, characterized by a small number of transnational food corporations controlling over 40% of the global retail market (Hoffman, 2013; Horstink, 2017) (See Figure 3), has led to a trend where the focus on price and profit often outweighs considerations of environmental and social repercussions (Morgan & Morley, 2002). This trend has resulted in significant disparities in access to nutritious food, with implications ranging from the perpetuation of chronic hunger and malnutrition to the exacerbation of chronic noncommunicable diseases such as obesity and diabetes, which can be

attributed to Westernized diets and sedentary lifestyles (Clapp, 2018; Hawkes et al., 2012). Data from 2022, provided by the World Food Programme and UNICEF (2022), reveals that the inability to afford a healthy diet affected nearly 3.1 billion people globally, an increase of 112 million from the previous year. This increase, largely reflective of surging food prices during the COVID-19 pandemic, has been further aggravated by fluctuations in staple food prices due to the disruption of global food markets, a consequence of the war in Ukraine. Interestingly, despite a constant prevalence of malnutrition among children under five years, there has been a noticeable increase in overweight conditions within this age group and obesity in the adult population (WFP & UNICEF, 2022), culminating in an increased incidence of noncommunicable diseases.



Figure 3. ‘Big 10’ food and beverage global companies
Infographic by Joki Gauthier for Oxfam (2013)

This data presents the challenging societal paradox of the "double burden," where hunger and obesity coexist, underscoring the complexity of resolving global food insecurity and dietary health issues. Scholars suggest that the double burden of malnutrition is the result of the growing consumption of inexpensive, high-calorie ultra-processed foods, which is facilitated by corporate concentration in food systems (Haddad et al., 2014; Monteiro et al., 2013; Popkin et al., 2012; Shrimpton & Rokx, 2012). This global phenomenon not only has health implications but also extends to broader consequences for the natural environment. Escalating concerns over environmental degradation in the context of the Anthropocene — including climate change, biodiversity loss, and deforestation — are closely linked to the agricultural practices embedded in our food systems. Studies indicate that food systems account for approximately one-third of global anthropogenic greenhouse gas emissions, with nearly 20% of these emissions attributed to the transportation of food across long distances (Crippa et al., 2021; Li et al., 2022; Zhu et al., 2023).

4. City Government: Food Systems Innovator

In response to these multiple challenges, there has been a surge in initiatives aimed at moving away from food practices embedded in profit-centric and corporate-dependent food systems (Bezner-Kerr et al., 2011; Horrigan et al., 2002; Houser & Stuart, 2020). Efforts to counter the negative impacts of corporate consolidation in food systems encompass a range of transformative actions, including grassroots social movements like the Slow Food Movement, local food movement, and alternative food networks, as well as more recent government-driven

initiatives such as the Milan Urban Food Policy Pact[3] and the establishment of food policy councils worldwide (Clancy et al., 2008; den Boer et al., 2023; Schiff, 2008). The objective of these transformative endeavors is to overhaul existing profit-driven, exploitative food systems by decentralizing food supply chains and reinstating local food system ownership.

However, scholarly discussions have predominantly focused on environmental aspects of such a transition, overlooking the exploration of the social, economic, and political dimensions that are crucial to achieving sustainable food initiatives (El Bilali et al., 2021). The field of planning, with its interdisciplinary approach to addressing urban and regional issues and its array of planning and policy tools, provides a comprehensive framework to bridge the gap in food systems research and develop practical solutions. When urban planning scholars proposed the concept of food systems planning in the early 2000s, they highlighted the institutional invisibility of food systems to policymakers and their subsequent relegation as rural and agricultural concerns, a byproduct of industrialization and urbanization (Pothukuchi & Kaufman, 1999). This perspective, compounded by a prevailing reliance on market forces as the optimal mechanism for food chain management, resulted in limited public intervention in food systems (Pothukuchi & Kaufman, 2000). Nevertheless, the global food crisis of the late 2000s sparked a reevaluation of these market-centric food systems, bringing their inherent volatility and vulnerability to the fore (Rosin et al., 2013; Sage, 2014). Baines (2014) suggests that food prices, reflecting broader societal dynamics, are a quantitative manifestation of corporate power restructuring the political economy of food. This evolving understanding underscores the pivotal role that planners can

[3] The Milan Urban Food Policy Pact, initiated in 2015, is a global alliance of city-level government-led initiatives that aim to promote social and environmental sustainability through innovations in urban food systems. As of May 2023, over 200 cities across the globe have joined the pact, demonstrating their commitment to sustainability agendas.

play in integrating food considerations into overarching planning agendas and strategies, positioning agrifood systems as an integral *public* sphere that safeguards public health, natural resources, and national security (Morgan, 2015).

More recently, there has been growing recognition of the role of city governments in promoting sustainable principles within regional food systems. Urban governance has emerged as a critical factor in steering the transition towards more sustainable food systems, given the visibility of contemporary food issues in municipal settings, which are characterized by high density and concentrated power (Morgan & Sonnino, 2010). As a result, many innovative solutions and transformative initiatives are primarily conceived and implemented at the city level, highlighting the influential role of municipal governments as key actors in shaping the food chain drawing upon theirs political and economic clout. In the context of new urban food governance, public institutions have become central players alongside traditional stakeholders such as market actors and rural producers within the agrifood system (Renting & Wiskerke, 2010; van Gameren et al., 2015). While non-governmental organizations and private enterprises have spearheaded initiatives to (re)build the middle of food systems – the intermediate stages between food production and consumption – through strategies such as food hubs, farm-to-school programs, and farm-to-institution programs (Hoey et al., 2018; Matson & Thayer, 2013; Robert & Weaver-Hightower, 2011), government-led food initiatives have also demonstrated their transformative potential. Successful examples can be found in various global cities in countries such as Brazil, Italy, and Finland, where school food and public plate programs implemented by municipal governments have made significant strides in promoting healthier and more sustainable food practices (Aegerter et al., 1990; Morgan & Sonnino, 2007; Wittman & Blesh, 2017).

5. Public Food Procurement and the Korean Context

Public food procurement represents a fundamental aspect of public intervention in food system transformations, as it leverages the government's purchasing power to influence local food sourcing based on volume (Morgan & Sonnino, 2007; Rimmington et al., 2006). This strategy positions public entities such as schools, hospitals, and carceral facilities as anchor institutions that generate steady demand for locally and sustainably produced food. Given the substantial consumption of food by urban populations in these institutions, they have a tangible impact on regional food systems. Schools, in particular, serve as essential catalysts for broader food system changes. Parent organizations, driven by a profound concern for their children's well-being, often take the lead in advocating for essential food system improvements and forging connections with other food initiatives such as local food and peasant movements, as evident in the Korean case (further details in Chapter 2). As a united front, these connections wield considerable influence in driving innovations within the food system and compelling the government to take necessary actions.

Over the past few decades, Korea's public food procurement programs have undergone a four-phase evolution, including: a) the outsourcing of school food canteens to private companies (witak geubsik), b) the direct management of school food canteens (jik-yeong geubsik), c) the Universal, Free, Eco-friendly school lunch program (UFEF), and d) the Urban-rural Coexistence Public Meal Program (UCPM) in Seoul (details in Chapter 2). While phases a), b), and c) have been implemented nationwide for schools from elementary to high, the UCPM is a city-level program specifically adopted in certain districts of Seoul, with a focus on early childhood education centers, in conjunction with selected rural towns. These transitions highlight the significant role of the state in transforming mainstream food practices as they necessitate the

government's involvement in crafting necessary legal and administrative structures, and in mobilizing political resources across a range of public entities. At the core of this evolution, however, school food movements led by parents have played a central role in driving advancements in food sourcing for public meal services. These movements have had a significant impact, extending their influence beyond K-12 education institutions in Korea to include daycare centers, preschools, and community children's centers that participate in the latest UCPM (refer to Figure 4 for a timeline).

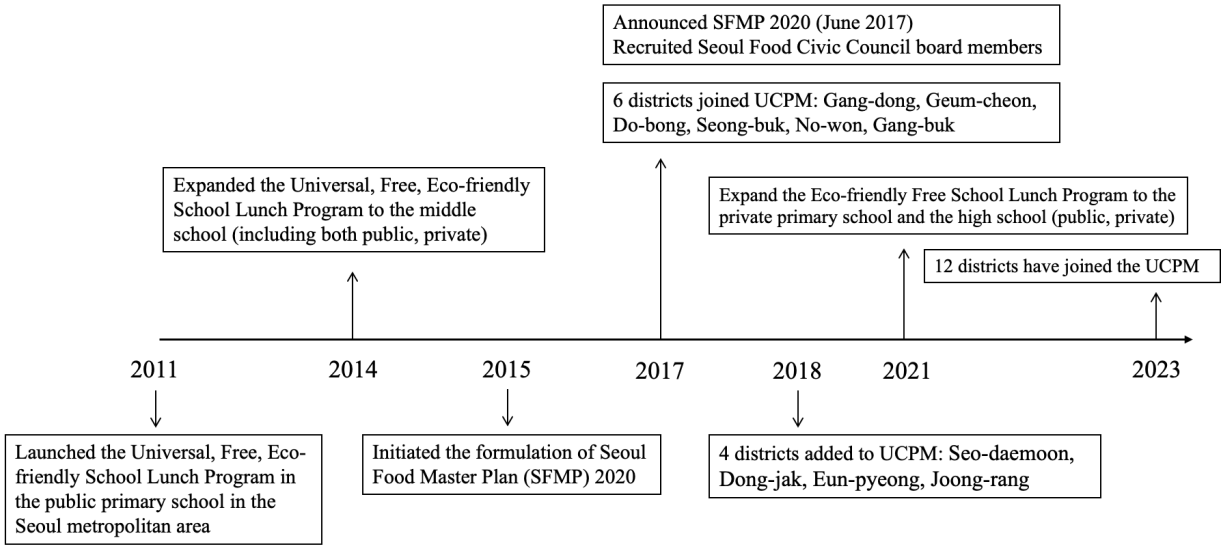


Figure 4. Timeline of public food procurement program implementation in Seoul

Notably, the Seoul Metropolitan Government has committed substantial resources to the development of public meal services, as nearly twenty per cent of Seoul's population relies on daily meals from public institutions like schools, daycare centers, welfare facilities, and government offices. The Seoul Food Civic Council, established as part of the Seoul Food Master Plan 2020 (2017-2020), the first comprehensive official food plan of Seoul, has served as a

crucial organization in advising and monitoring city food policies, including those concerning public meal services. The council was organized into ten subdivisions, each consisting of ten to fifteen members (See Appendix A), which included leaders of civic food organizations, scholars affiliated with universities and public research institutes, civic experts from relevant institutions (e.g., hospitals, schools), and journalists. However, the Seoul Food Civic Council does not possess decision-making rights or legal authority, which at times limits the scope of its influence and actions. While the council serves as a valuable advisory body, its recommendations may need further support from higher authorities to translate into concrete policy changes. Still, the council's engagement signifies a municipal commitment to collaborative governance and citizen involvement in shaping municipal food policies, contributing to the overall goal of fostering inclusive and sustainable urban food systems.

It is important to acknowledge that public plate programs, including farm-to-school initiatives, are not unique to Korea; they are gaining traction in various global cities as well. For instance, the 10 Cents A Meal program, recently introduced in Michigan (USA), is a state-funded initiative that specifically targets early childhood education sites within the state. This program supports the direct sourcing of Michigan-grown fruits, vegetables, and dry beans by providing subsidies of up to 10 cents per meal (Groundwork Center for Resilient, 2021). The Good Food Purchasing Program has achieved remarkable success in enhancing the quality of public meal services across cities in the USA. By promoting desirable standards for food sourcing based on five core values – local economies, environmental sustainability, valued workforce, animal welfare, and nutrition (See Figure 5), the program has played a pivotal role in offering sustainable and nutritious food options in public institutions. Furthermore, it provides comprehensive guidance to participating institutions at each stage of program adoption, enabling

seamless integration and impactful outcomes. The program's effectiveness has even resulted in the implementation of municipal-level ordinances in cities such as San Francisco, underscoring its positive influence on transforming food procurement practices in the public sector.



Figure 5. Certification standards included in the Good Food Purchasing Program[4]

What sets the UCPM apart from other global programs, nevertheless, is the government's *direct investment* in essential food systems infrastructure. This investment encompasses technical support, educational programs, local warehouses functioning as food hubs, cargo trucks, and human resources, along with financial subsidies for participating facilities and adherence to sustainable food sourcing standards. The UCPM serves as an innovative institutional model of

[4] Source: Good Food Purchasing (https://goodfoodpurchasing.org/, accessed on July 12, 2023).

public food procurement, establishing one-to-one connections between urban districts and selected rural towns through anchor institutions like early childhood education centers and welfare facilities in Seoul. By creating direct food supply chains from rural to urban areas, the program aims to create a reliable market for small to mid-sized farmers dedicated to sustainable farming practices in rural communities. The UCPM simultaneously strives to enhance access to nutritious locally grown food for urban populations, regardless of income constraints. For instance, each meal provided through public lunch programs, such as the UFEF and UCPM, to students and young children is offered free of charge and meticulously prepared from scratch using locally and sustainably grown ingredients (e.g., rice, fruits, vegetables, meat). To ensure the efficient and direct distribution of environment-friendly agricultural products, a significant portion is channeled through publicly-run food hubs in Seoul. These food hubs play a critical role in facilitating the delivery of fresh and healthy food items to various public institutions, contributing to more transparent food supplies.

A typical meal served at Korean schools comprises rice, soup, and three side dishes. Figure 6 on the next page displays a sample of lunches provided at a public daycare center attended by my child, which is a participant in the UCPM. Each district-level office, responsible for monitoring public meal services, provides a monthly meal plan, taking into consideration nutritional factors and seasonal food sources. For children younger than school age, they usually have two snacks and a lunch per day. Specifically, on a day in June 2023 as shown in Figure 6, the morning snack consisted of yogurt and paprikas, while the lunch tray featured rice, fish ball soup, pickled cabbages (referred to as kimchi, one of the staples in Korea, but without spicy seasoning for children younger than 4), seasoned eggplants, and fried vegetables and chicken. The afternoon snack included tea and seasoned. rice cakes. Rice serves as the main staple in

every meal in Korea, making it a crucial focus of the government's efforts to achieve rice self-sufficiency in the domestic food market (averaging over 90% in the recent five years, according to the Ministry of Agriculture, Food, and Rural Affairs). This emphasis on self-sufficiency is also reflected in the concerns of farmers' organizations, who advocate for maintaining robust rice production as an essential component of food sovereignty and advocate against opening up to the global rice market.



Figure 6. A lunch at a local daycare center attended by the author's child
Source: A daycare center located in Seong-buk District in Seoul

Another distinctive aspect of the UCPM is that it is a city-initiated program with the aim of revitalizing shrinking rural communities outside the city regions. Economic disparities between urban and rural areas have been a persistent issue in Korean society, stemming from rapid industrialization and urbanization focused on the cities (Joo, 2018). According to data from Statistics Korea in 2016, the ratio of rural household income to nominal urban household income

(for two people) was only 63.5%, significantly lower than the 104.8% recorded in 1988. Furthermore, with approximately one in five people residing in the Seoul metropolitan areas, most economic, educational, health, and cultural infrastructures are concentrated in the city region, leading to a continuous influx of population to the metropolitan area. This urban-centric development has created challenges for the growth and sustainability of rural communities, making the UCPM's focus on enhancing urban-rural linkages even more crucial.

6. Emerging Questions and Research Agenda

In response to the rise of city government-led public food procurement, this dissertation sets out to explore the transformative role of public food procurement in shaping food governance and driving sustainable practices within urban environments. By delving into the dynamics of public food procurement programs, this research sheds light on effective strategies for promoting sustainable food sourcing in cities. Moreover, this study examines the key factors driving changes in food practices within city environments, emphasizing the pivotal role of city governments in facilitating these transformations.

Throughout the dissertation, the following questions will be addressed in their respective chapters:

1. How have policy paradigm shifts in public food procurement over time influenced the development of innovative city-level food initiatives? (Chapter 2)
2. How are the notions of "local" and "sustainable" defined and challenged in the context of place-based public food procurement? What are the trade-offs resulting from various interpretations of these concepts in practice? (Chapter 3)

3. What relationships are formed between the government and civic organizations in light of the growing institutionalization of grassroots practices? What roles do these entities play in instigating policy transitions? (Chapter 4)

By addressing these questions, this research aims to provide valuable insights into the evolving landscape of public food procurement and its profound impact on shaping sustainable and resilient food systems in urban settings. An in-depth analysis of the Urban-rural Coexistence Public Meal Program (UCPM) will highlight practical opportunities and challenges in implementing place-based approaches to institutional public food procurement, while also uncovering emerging partnerships between government and grassroots actors as they work together to institutionalize bottom-up, local practices.

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Chapter 2
Transitions in South Korean Public Food Procurement Policy: Landscape Context, Institutionalization, and Local Agents[5]

Addendum

While quite a few revisions have been incorporated into the dissertation version of this paper, this chapter, being a previously published paper, has some limitations. Firstly, the methodology section, particularly the use of the case study approach, could have benefited from a more detailed explanation. This has now been addressed in Chapters 3 and 4. Secondly, the rationale for employing the Multi-level Perspective theory and its contributions to the planning field, as well as its implications for planners and practitioners, could have been articulated more clearly, given that this dissertation contributes to research in the planning field. These issues have been addressed in Chapter 5 (Conclusion), which offers a comprehensive synthesis of the results from each chapter. Thirdly, it would have been helpful to further analyze the concrete distinction between the sustainability transition literature and the larger sustainability discussions or shared arguments. Finally, the results of Chapters 3 and 4 offer more substantive context and detailed insights into the operation of the UCPM, aspects that were not adequately covered in this chapter.

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[5] This chapter has been modified from a version that was published in Environmental Innovation and Societal Transitions on April 29, 2023, accessible via: https://doi.org/10.1016/j.eist.2023.100731.

1. Abstract

The main objective of transformative food actions is to effect fundamental changes in the institutional structures that shape current food practices. For those actions to gain constant momentum, it is necessary to understand the types of operations and the mechanisms through which they can permanently impact conventional food systems. To provide an empirical operationalization of the Multi-level Perspective, a prominent framework in the sustainability transition literature, this study examines the decades-long evolution of South Korea's public food procurement policy. Policy paradigm shifts in South Korea describe transitional processes in which accumulated dynamics between local actors and the incumbent regime achieve a tipping point at the juncture of niche movements, landscape pressure, and institutionalization. This paper argues that niche and regime are not inherently confrontational, as is frequently assumed in the broader literature, by highlighting the fact that niche innovations can continuously inform adaptations and additional shifts in policy paradigm.

2. Introduction

Concerns regarding climate change and the vulnerabilities in food supply chains caused by profit-driven industrial agriculture have led to a global consensus on the need for food system transformation, both in research and practice (Bezner-Kerr et al., 2011; Horrigan et al., 2002; Houser & Stuart, 2020). Transformative actions aim to fundamentally alter institutional structures currently promoting neoliberal and corporate-concentrated trends in food practices across production, processing, distribution, consumption, and waste disposal. Understanding the mechanisms and types of operations required to permanently impact conventional food systems is necessary for gaining momentum in these actions. This study draws on the sustainability

transitions literature, recognized by scholars as a promising framework for identifying transitions from unsustainable to sustainable practices, to reconstruct a historical narrative of transformative initiatives in South Korea (hereafter Korea)'s public food procurement since the early 1990s.

The literature on sustainability transitions is a developing field that explores the intricate and long-term socio-technical processes involved in moving towards a sustainable society (Grin et al., 2010). These transitions involve shifts or "system innovations" in socio-technical configurations (Coenen et al., 2012), leading to multidimensional and fundamental transformation processes that shift established socio-technical systems towards more sustainable modes of production and consumption (Markard et al., 2012). Various stakeholders, including firms, industries, policymakers, politicians, consumers, civil society, engineers, and researchers, play a vital role in these transitions by reproducing, maintaining, and modifying transition-related components (Geels, 2011). The multi-level perspective (MLP) is a theoretical framework that conceptualizes and promotes such sustainability transitions by emphasizing the role of three analytical levels (*niche, regime, and landscape*) in generating systemic change through interacting processes (Geels, 2005; Grin et al., 2010).

While effective for explaining structural dynamics leading to social transformations, some scholars suggest it tends to overlook several critical components. These include the roles of individual agents and state apparatus, the processes that precede and follow the development of niche innovations, and the spatial dimension of transition mechanisms (Coenen et al., 2012; Genus & Coles, 2008; Johnstone & Newell, 2018; Sarabia et al., 2021; Smith et al., 2005; Smith & Raven, 2012). To address these criticisms and explore the potential of a revised MLP, this study undertakes a comprehensive analysis of the shifts in Korean public food procurement policy through an empirical operationalization of the theory. The focus of the study lies in

examining the interplay between landscape-level factors, institutions, and niche movements, which potentially illuminates the ways to interpret and apply the MLP, with the aim of defining a sustainable trajectory. The Korean scenario not only highlights the ongoing governance interactions between grassroots activism and the existing policy but also underscores the significance of institutionalization processes with particular consideration of the political context, which continually shape policy adaptations and instigate further shifts in policy paradigms. This paper emphasizes this multi-dimensional, political nature of policy transitions, moving beyond the confines of the traditional MLP approach.

Given that agrifood systems are enmeshed in dynamic ecological, economic, and social processes and are influenced by external pressures, a theoretical framework for sustainability transitions can provide future visions and offer insights into effectual components and pathways of social change that are crucial for transforming food systems (Thompson & Scoones, 2009). Although sustainability transitions scholarship has not adequately addressed agrifood systems yet (el Bilali, 2019), this study fills this gap by operationalizing the MLP through the lens of food systems using Korea's public food procurement programs as a case. Public food procurement has gained increasing attention as a transformative tool to re-embed and re-localize regional food systems (Morgan & Morley, 2002; Morgan & Sonnino, 2013) due to its purchase power and innovative policy tools. Public food procurement programs in Korea have evolved through four phases: a) contracting out school food canteens to private companies (witak geubsik), b) self-operating school food canteens (jik-yeong geubsik), c) the Universal, Free, Eco-friendly school lunch program (UFEF), and d) the Urban-rural Coexistence Public Meal Program (UCPM). The trajectory of these paradigm shifts demonstrates the ability of niche movements to influence mainstream food policy and establish economically and environmentally viable regional food

systems. Public procurement programs also provide a clear example of the state's role in transformative food actions, as they necessitate government involvement in expanding sustainable food chains through public entities acting as anchor institutions.

The long-term, evolutionary paths of socio-technical change provide insight into the nature of structure and agency (Coenen et al., 2012). The food policy transitions in Korea can be categorized into four stages: a) strong government regulation during the dictatorship prior to the 1980s, b) burgeoning grassroots movements in the 1990s opposing the expansion of free trade agreements and global food corporations (the school food movement, the local food movement '*shintoburi'*), c) implementation of innovative food policies since the 2010s resulting from bottom-up actions (Universal, Free, Eco-friendly school lunch program: UFEF, urban agriculture, local food plans), and d) a current experimenting phase of food politics in which cooperation and co-optation coexist in public-led food planning (Urban-rural Coexistence Public Meal program: UCPM, launched in 2017 as an expansion of the UFEF into other public institutions). This study focuses on periods since the early 1990s when bottom-up grassroots movements gained visibility and influence as Korean society democratized.

While a few studies have used the MLP to explore the potential of public food procurement to effect change in conventional food systems (Gaddis & Jeon, 2020; Stahlbrand, 2016), there is a dearth of knowledge on the long-term, adaptive aspect of public food procurement policy innovations in the context-specific setting. This study aims to answer three theory-grounded questions: 1) how does a grassroots innovation enable a policy paradigm shift and sustain its impacts? 2) what role does the government play in transition dynamics as a regime-level actor (support or suppression)? and 3) how can a spatial perspective – urban-rural linkage enhanced by public food procurement – be incorporated into an analysis using the MLP?

A close analysis of Korean public food procurement programs reveals a possible pathway in which accumulated dynamics between grassroots actors and the existing institutional practices produce a paradigm shift in public policy at the juncture of external economic and political forces, bottom-up movements, and policy response. Ultimately, this study argues that niche- and regime-level initiatives are not intrinsically antagonistic, as is frequently assumed in the broader literature, and suggests that the focus should be on the capacity of niche-innovations that consistently adapt to and push for policy innovations.

This paper begins by outlining the theoretical background of this study, highlighting key characteristics of the MLP as a heuristic framework for elucidating sustainability transitions. Following the methodology section, the study examines three distinct phases of Korea's public food procurement initiatives centered on school food policy since the 1990s: contracted-out school food programs (*witak geubsik*), directly-run school food canteens (*jik-yeong geubsik*), and the Universal, Free, Eco-friendly school lunch program (UFEF). The paper then shows innovative elements of the Seoul Food Masterplan 2020 as an umbrella policy of the Urban-rural Coexistence Public Meal Service program (UCPM), which emerged as an expanded version of the UFEF to reinvigorate local food economies and urban-rural linkages. Finally, this paper discusses the theoretical implications of this study and suggests policy recommendations for ongoing transformative food projects.

3. Theoretical Background

3.1 Multilevel perspective: a heuristic framework for sustainability transitions

Sustainability transition scholarship emerged in the early 2000s in response to environmental challenges which require long-term systemic transformation for resolution (Geels, 2010). One perspective on sustainability transitions emphasizes socio-technical transformations that involve both technological breakthroughs and societal changes (Geels, 2004, 2010). The MLP framework is widely used in the literature on socio-technical transformations to illustrate the multidimensional nature of complex transitions (Geels, 2002, 2011; Smith et al., 2010). As a middle-range theory that bridges the divide between grand theory and abstracted empiricism (Geels, 2010, 2011), the MLP views transitions as non-linear processes of interactions at three analytical levels, each of which is functionally distinct: *niches* (the micro level locus for radical innovations), socio-technical *regimes* (the locked-in and stabilized structure at the meso level), and a socio-technical *landscape* (the macro level exogenous context imposing externalities on the other two levels) (Grin et al., 2010; Rip & Kemp, 1998).

A socio-technical regime is an established system with a 'deep structure' that stabilizes the existing system through semi-coherent rules governing and coordinating the activities of social groups by reproducing elements within the system (Geels, 2011; Holtz et al., 2008). These regime rules, such as policies and institutional practices, demonstrate the "duality of structure" by functioning as both a medium and a result of action (Geels, 2011). The socio-technical landscape, which remains constant, changes incrementally or generates rapid external shocks, comprises exogenous events and trends, such as demographic changes, macroeconomic trends, political developments, wars and crises, deep cultural and societal values, and climate change (el Bilali, 2019; Lachman, 2013; van Driel & Schot, 2005). Changes at the landscape level can

create chances for niche activities to develop or exert pressure on regimes to change (Geels, 2011; Smith et al., 2010).

Although there is a tension between two perspectives on transitions – an open-ended process as a societal phenomenon versus a normative direction to accomplish (Schäpke, 2018), – transitions are generally defined in the MLP as regime shifts from one socio-technical system to another. The dialectic interactions between niche, regime, and landscape produce transitions, underscoring the importance of aligning processes at the three levels (Geels, 2011; Grin et al., 2010). Geels and Schot (2007) proposed different types of transition pathways based on the competitive or symbiotic nature of multi-level interactions: 1) transformation (a moderate landscape pressure when niche-innovations are not fully developed yet, which compels regime actors to alter the direction of developments), 2) de-alignment and re-alignment (a divergent, large, and abrupt change at the landscape level when niche-innovations are not fully developed yet, which results in the dismantling of the existing regime, the coexistence of multiple niche-innovations, and the (re)construction of a new regime), 3) technological substitution (significant landscape pressure when niche-innovations are adequately developed, which enables a niche-innovation to break through and replace the incumbent regime), and 4) reconfiguration (symbiotic innovations develop in niche, permeate into the regime, and trigger further adjustment in the regime). This typology represents a specific view on transition pathways within the MLP framework, highlighting the presence and critical roles of agency.

Some scholars argue that the typology presented oversimplifies certain aspects of niche innovations, including their diversity in organizational forms and strategies (Audet et al., 2017). Transitions do not always follow a single path but may occur as a series of paths in a pluralistic pattern where multiple pathways unfold concurrently (Geels & Schot, 2007; Vlahos et al., 2017).

Furthermore, the view of transitions as regime shifts has faced criticism for its analytical and empirical shortcomings, particularly in neglecting to consider transition outcomes across multiple levels, especially from a long-term perspective (Pitt & Jones, 2016). Geels & Schot (2007, p. 400) argue that what may appear as a regime shift at one level could be viewed merely as an incremental change in inputs for a wider regime at another level. To avoid confusion regarding analytical levels, this study views food procurement policy and relevant institutions as components of the mainstream food *regime*, suggesting that a policy shift does not necessarily entail an whole change in the incumbent regime. Instead, this paper focuses on interactions between niche and regime components, as well as the long-term implications of policy paradigm shifts that could signal a regime transition. An analysis of governance dynamics underpinning those paradigm shifts can offer empirical information on the roles of agency and the nature of niche-regime interactions towards a sustainability transition.

3.2 Niche, regime, and landscape in the food systems literature

A sustainability transition approach provides a framework to understand alternative food initiatives within the context of a shift towards more sustainable food practices. One of the few studies that applies the MLP lens to food systems is by El Bilali (2019), who documents how the MLP is conceptualized and operationalized in the literature on agrifood systems. The *niche* indicates a network of food systems actors who collaborate to develop alternative rules and practices (Bui et al., 2016), including organic agriculture, agroecology, urban agriculture, community-supported agriculture, farm-to-table, fair trade, and local food movements (el Bilali, 2019; Konefal et al., 2019; Marsden, 2013). A perspective on food as commons, such as public food procurement, tends to be associated with those who challenge dominant power structures,

regardless of where they position themselves within the transition process. It is important to consider the originality of niche innovations in relation to the incumbent regime, however, as not all alternative food initiatives are reformist or transformative (Sutherland et al., 2014; Vivero-Pol, 2017). El Bilali (2019) also underscores the importance of internal niche dynamics, particularly 'niches-in-the-making (niche formation and development),' to understand how a niche becomes robust and mature enough to scale up and out.

Regimes in agrifood systems are only vaguely defined and articulated (Holtz et al., 2008), with the intensive, conventional, industrial agro-food sector and its related laws and practices being the dominant regime (El Bilali, 2019). Three decades ago, Friedmann and McMichael (1989) coined the concept of a "food regime" to describe the implicit rules governing agro-food relations that are based on international and geopolitical terms as well as the world food economy. Regimes in food systems include business codes, regulations, food safety laws, existing business network, logistics transport and infrastructure (Hinrichs, 2014), as well as "key government actors and their associated institutional structures in the agricultural sector, the political discourse on agricultural development, dominant agricultural practices, and the associated pattern of ecosystem services and human well-being" (Järnberg et al., 2018, p. 412). However, there has been a lack of holistic understanding of the relationships between production and consumption within food systems cycles, as much research on food systems transformation has concentrated exclusively on a single component (either production or consumption) of the food supply chain (el Bilali, 2019).

The landscape has also been largely overlooked in MLP-based food system studies. External trends and exogenous factors at the landscape, such as globalization, agrifood market internationalization, population growth, global financial crisis, changes in diets and lifestyles,

(neo)liberalization, international treaties and conventions, and climate change, can exert pressure on the regime, generate opportunities for niche innovations to triumph, or protect niches from the incumbent regime (El Bilali, 2019; Geels, 2011; Smith et al., 2010). Still, these factors do not necessarily favor niches, which could result in the destabilization and de-alignment of regimes. Thus, it is necessary to examine the landscape's stabilizing effects on regimes and how regime reconfiguration brings about landscape alterations (Geels, 2011).

3.3 Niche-regime interactions: anchoring, bricolage, and hybrid actors

The tension and dynamics between growing niches and stabilized regimes imply the possibility of system reconfiguration resulting from the emergence of new niches and regime instabilities (Geels, 2002; Geels & Schot, 2007). The relationship between niches and regimes concerns how niche- and regime-actors interact, negotiate, and bridge, as they consist of groups and networks of actors adhering to specific rules and practices (el Bilali, 2019). To better articulate the conceptual middle ground between niches and regimes, Rotmans & Loorbach (2010) propose an additional analytical level, *niche-regime*, where innovations at the niche level are sufficiently empowered and matured to threaten the incumbent regime (See Figure 7 on the next page). The niche-regime level helps illustrate micro-politics and interactions between niche and regime initiatives, especially when there is a lack of explanation about the comprehensive context of niche development and the role of actors in triggering, initiating, and accelerating transitions. As the linking process between niches and regimes has mostly been regarded as haphazard and coincidental (Geels, 2002; Smith, 2007), local and regional players, as well as dynamics between institutions operating at various territorial scales and system levels, require further attention (Sarabia et al., 2021).

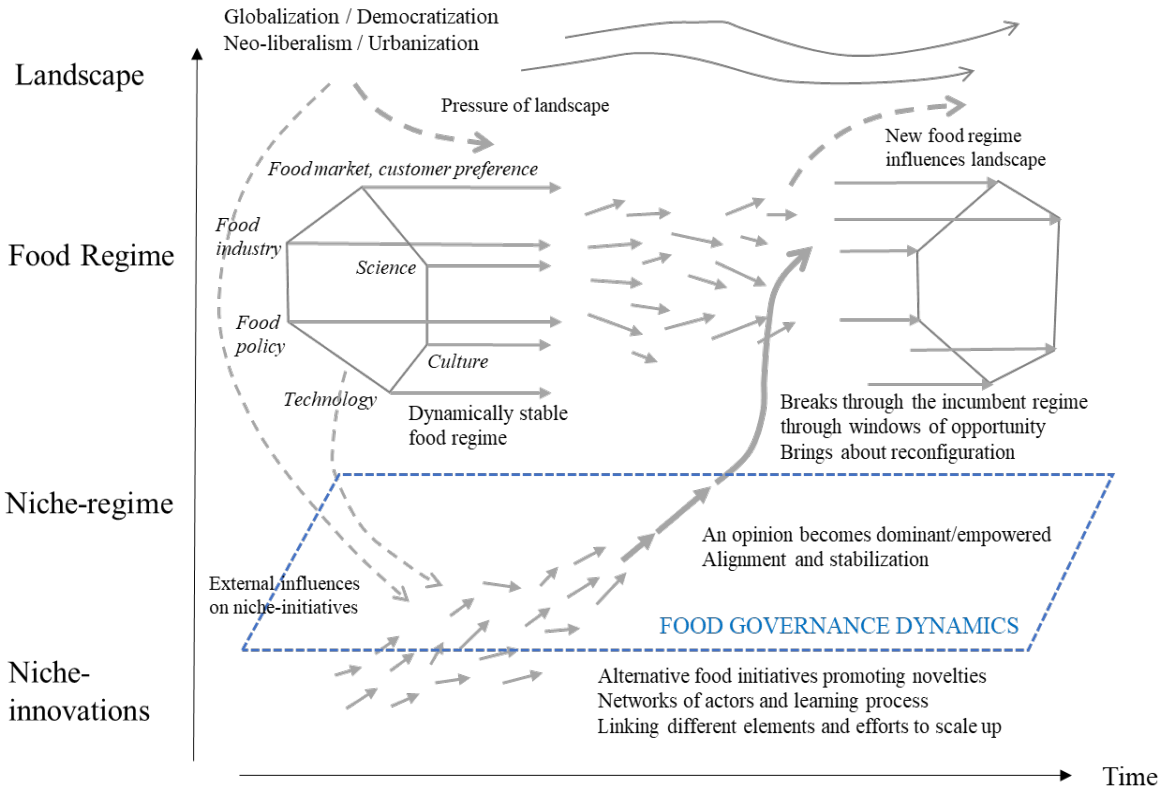


Figure 7. Application of food systems concepts to a refined MLP model
Modified from Geels (2005)

Elzen et al. (2012) defined "anchoring" mechanisms as an emerging form of linking between a niche and a regime that creates a durable niche-regime linkage. Niches can anchor to regimes in three different forms: 1) technological linking (promoting new technical systems), 2) network anchoring (creating and expanding new networks and social groups), and 3) institutional anchoring (establishing new rules or institutions). "Bricolage" is a comparable idea to anchoring in that it allows for the integration of disparate components and collaboration among actors in the evolutionary and incremental transition process (Garud & Karnøe, 2003). Emphasizing the roles of certain actors playing in both niche and regime within this linking process, Sutherland et

al. (2014) framed them as "hybrid actors" involved in the multiple levels of the agrifood system. This study highlights the roles that these hybrid actors (e.g., grassroots activists employed by the government as government officials) play within the anchoring process through networking and institutionalization. The concepts of anchoring, bricolage, and hybrid actors all suggest that transitions from niches do not occur through a unilateral, bottom-up process, but rather through mutual interactions where niches and regimes are not inherently competitive or confronting, as seen in this study.

Although the concept of anchoring is vital in comprehending transition dynamics, the mechanism of institutionalizing niche innovations, which is an integral part of the niche-regime linking process, has often been overlooked, thereby neglecting the political narrative in transition processes (Smith & Sterling, 2010; Smith & Raven, 2012). Additionally, Pitt & Jones (2016) argue that many scholars have neglected the outcomes of transitions, particularly the scaling up and out processes as a form of policy transfer. To address the limited presence of politics in transition research, a niche-focused perspective could serve as a bridge between innovative activities and the political sphere (Seyfang & Smith, 2007). However, the fundamental question of why scaling is desirable and what exactly should be scaled (e.g., actors, programs, or outcomes) remains unanswered.

This paper examines the Korean context of the evolution of public food procurement programs to illustrate the importance of institutionalization in elevating grassroots ideas from local to state or national levels by codifying certain elements of those niche practices. Without an understanding of the processes through which grassroots ideas are selected, institutionalized, and transferred into policy – inherently intertwined with politics – scaling-up could compromise the initial philosophy of niche initiatives. Therefore, gaining in-depth insight into the political

dynamics affecting the mechanisms of institutional anchoring between niche- and regime- actors is essential to formulate a governance system and policies that uphold the innovative principles and functionality of niche practices.

In light of these considerations, this study aims to answer two overarching questions: 1) what short- and long-term outcomes of niche innovations can be achieved through institutionalization and policy innovation, and 2) what roles niche- (e.g., grassroots organizations and activists) and regime- (e.g., governmental bodies, government officials) actors play at multiple territorial levels (local, regional, and national) in leading a sustainability transition.

4. Methods

Transitions are complex processes involving long-term structural changes that require a rich contextual understanding of the complicated development that occurs to be fully comprehended (Grin et al., 2010). This study employs the MLP framework to provide a theory-grounded case study of the public food procurement programs in Korea, with the aim of making contributions to the sustainability transition literature. The study examines the transitional history of Korean public food policy, specifically the evolution from national-level school food service to the most recent municipal-level public food procurement. This transition provides insight into the pathways that grassroots initiatives can take to achieve transformative outcomes. The study uses the dynamics of the alternative food movements and the incumbent regime in Korea over the past few decades as an example of niche-regime interactions where micropolitics occur between local agents and institutions under landscape pressures.

This paper consists of two parts: the first section presents the transitional history of school food policy in Korea from the 1950s to the 2010s, while the second section examines

recent transformative efforts in municipal-level public food procurement. The evolution of school food policy in Korea was documented through an analysis of various sources, including archival data (primarily on national food policy prior to the 1990s, available at The Archives of Korean History, National Institute of Korean History, and National Archives of Korea), national and municipal government documents (including press releases, blueprints, white papers, and policy evaluation reports), press materials (such as newspapers and news clips), secondary literature (published journal papers and books), and national and local regulations accessible via the Korean Law Information Center (See Appendix B). In-depth semi-structured interviews (N=32) and site visits were conducted to investigate the development and implementation of the Seoul Food Master Plan 2020 (SFMP 2020) and the Urban-rural Coexistence Public Meal Service Program (UCPM). Interviewees include government officials (N=12), staff members at district-level public meal centers and rural food hubs (N=12), rural farmers (N=2), urban consumers using the UCPM (N=3), and scholars who participated in the design of the SFMP and the UCPM (N=3). Some of the interviewees were recruited using snowball sampling from the initial interviewees. During interviews, it was discovered that many UCPM stakeholders had previously been involved in local or national school food movements. Additional data on school food movements was gathered by asking questions about the context of school food movements and how each interviewee's experience led to their current position in the UCPM governance.

I analyzed collected qualitative data using the Dedoose software program using selected codes (refer to the methods section in Chapter 4) and reconstructed coded data according to specified school food program periods. This procedure helped establish a more cohesive historical narrative of the transitional routes in Korean public food procurement over decades. Document analysis and key informants were used to verify the information gathered through

semi-structured interviews. The intermediate result of data analysis on the history and context of school food movements was corroborated by key informants with prior experience in the field through cross-checking. The ongoing nature of Korean school food movements allowed for triangulation of collected data, enabling the study to look into the past through current voices.

5. Findings

5.1 The evolution of school food policy in South Korea

5.1.1 Outsourcing school food: a neoliberal reflection of school meal programs

School food programs have been at the center of public food procurement strategies in Korea for decades (Table 1 on the next page). The post-war era of the 1950s saw the advent of Korean public school food service, where foreign aid from countries and international organizations provided milk powder, wheat flour, and corn flour to provide free school lunches. During this post-war period, the United States provided a significant amount of food aid to foreign countries, including Korea, through the Food for Peace program (PL480). This aid was part of the US government's plan to distribute domestic agricultural surpluses to politically important countries (Friedman & McMichael, 1989; Müller, 2014). The influx of food commodities and agricultural inputs from the PL480 made Korea's food system more dependent on the American food regime. Free lunches for elementary school students (primarily milk and bread), funded by foreign aid, persisted up until the early 1970s, when the government started charging parents for school meals and scaled back social welfare initiatives as external food aid assistance came to an end. A food poisoning outbreak that caused a death in 1977 eventually led to the temporary termination of the public lunch program (Kang, 2011; Gaddis and Jeon, 2020), putting individual parents in charge of acquiring their children's daily school meals.

Program	Free lunches with foreign food aid	Witak Geubsik (Outsourcing-type)	Jik-yeong Geubsik (Direct management)	Universally Free, Eco-friendly School Meals
Timeframe	1950s – 1970s	1996	2006	2011~
Relevant law	PL 480 (USAID)	Fifth revision of National School Meals Act	Reformed National School Meals Act	Local-level ordinances (No National law)
Alternative food movements	-	Organic agriculture (part of larger peasant movements), food cooperatives	School food movements (in solidarity with peasant movements)	School food movements, local food movements

Table 1. Evolution of School Food Policy in Korea since 1980s

The first National Act on School Meals, enacted in 1981, shifted the focus of public school meal service from social relief work to providing nutritious food to support the physical and mental growth of school-age children. This act granted national and local governments the authority to subsidize school meals, though the majority of expenses still fell on parents and individual schools. The act laid the foundation for Korean-style school meals, which typically comprise rice, soup, and side dishes. Institutional efforts to enhance public school food services, however, yielded only marginal outcomes until the 1990s. This was when the need to revamp the school food program became urgent, as more women joined the workforce, and public concern about undernourished children grew in tandem with the rapid economic development of the 1980s (Yoon, 2014). The fifth revision of the National School Meals Act, passed in 1996, introduced *Witak Geubsik* in response to the rising demand for state support of school food services. The *Witak Geubsik* system contracts with commercial entities, including major food conglomerates, to handle the procurement and preparation of school meals. Song (2018) attributes the emergence of top-down *Witak Geubsik* to neoliberal trends in Korean public policy

in the late 1980s, which enabled food corporations to penetrate the niche market of institutional food service.

Like many other countries, Korea faced pressure from the rise of free trade and the globalization of agricultural markets in the 1990s. Opposition to neoliberalization and globalization of agri-food systems (e.g., the General Agreement on Tariffs and Trade and the World Trade Organization) and their adverse impacts on domestic agri-food systems was a common theme among alternative food movement organizations. The democratization of Korea in the late 1980s allowed civic organizations to voice their opinions publicly. With the establishment of the first civilian administration at the start of the 1990s, the national government delegated much of its authority, including the capacity to set budgets and manage finances, to self-governing local governments. With the decentralization of power and the expansion of civil society, a variety of grassroots initiatives, such as organic agriculture and food cooperatives, which were two major food systems movements in the 1990s, had the potential to take off. Organic agriculture, as part of a larger peasant movement, led political moves to urge policy support to subsidize small- and mid-sized domestic farmers competing with the growing global corporate food system. On the other hand, food cooperatives focused on building direct-sale networks between farmers and customers by establishing self-owned short supply chains and protecting quotas for agrifoods supplied from specific rural communities. These types of alternative food initiatives aimed to protect local agriculture and farmers in response to changes in the domestic political landscape and the global food market. However, it was not until the latter half of the 2000s that schools became an integral part of local food movements.

5.1.2 The rise of school food movements and direct-run school food canteens

The *Witak Geubsik* system was implemented to reduce the financial burden of providing public school meals by outsourcing the service (Yoon, 2014). Yet, this move subjected the service to corporate food systems prioritizing profit over quality and safety, leading to incidents of food poisoning and administrative corruption. Consequently, nationwide school food movements emerged in the 2000s, spearheaded by grassroots activists[6] and concerned parents who shared common goals with the existing peasant movement of protecting the local food system and supporting small-scale farmers. Despite the diverse range of organizations and regions involved, these movements formed "bricolage" coalitions at the national level to navigate complex laws and administrative bodies, and to pressure the government to reform shool food systems (Jeong, 2007). The Nationwide School Lunch Network, one of the major grassroots organizations committed to improving public school food service, advocated for school meal service that "a) is school-managed, b) is available free to all students, and c) uses organically grown local foods" (Kang, 2011, p.125). One interviewee who was a member of a civic organization that spearheaded a national push to establish local legislation on school meals described the essence of the grassroots school food movement:

> "School food movements are the archetype of civic movements. School food movements sought to develop a new policy from the ground up, in contrast to earlier civic movements that mainly intended to control top-down policies, comply with them, or offer support. … We were concerned about the source of school meals, which we connected to fundamental problems in the domestic

[6] Local farmers groups in Ganghwa-Gun were the first to call for public assistance to improve the quality of school meals (Jeong, 2007).

> agrifood system, while the government was concentrating on food safety and nutrition." (Interviewee 3)

In 2003, Naju County adopted the first local legislation mandating the purchase of domestic agricultural products for school lunches. By providing financial incentives for local food procurement, Naju's school food ordinance aimed to promote the consumption of domestic agrifoods and improve children's nutrition and health (The ChoongAng, 2003). The county's efforts, however, were thwarted by the province and national governments, which claimed that the local ordinance violated WTO regulations by preferring domestically produced food over imported food, potentially causing a trade dispute (Gwon, 2003). Following court battles, it was suggested that local ordinances intending to encourage the consumption of locally sourced food use the term "good agricultural products" rather than "domestic product."

Beyond Naju County, other school systems continued to rely on *Witak Geubsik*. However, due to the inadequate allocation of funds, only a small percentage of the budget was reserved for food purchases, with the remaining funds being diverted towards operational and human resource expenses. As a result, the quality of the meals provided by contracted private companies dwindled, leading to a rise in food poisoning incidents. Furthermore, the cooks and dietitians hired by these private firms were predominantly part-time workers with unstable employment, which made it difficult for them to address management-related concerns. In light of these issues, a school food worker emphasized the necessity of introducing directly run school meal services and highlighted the shortcomings of *Witak Geubsik.* The worker expressed a desire for a new approach, currently being considered and referred to as *Jik-yeong Geubsik*:

> "The Office of Education can directly engage school nutritionists and schools to make the best use of the funds for food procurement through the direct-run school meal service (Jik-yeong Geubsik). School meal service should be monitored by students and external organizations. Food procurement should be handled by a single party, and direct transactions with farmers would be ideal. Female kitchen staff and dietitians should be directly employed and appropriately compensated by schools." (Kim, 2006)

The *Jik-yeong Geubsik* system, which was implemented through the reformed 2006 School Meals Act in Korea, places the school principal in charge of planning and executing school meal services. The responsibility of selecting, purchasing, and inspecting food items cannot be delegated to a third party under this new system. The reformed national act also clearly outlines the responsibilities of the national and local governments in providing operational and financial support for school food programs. For instance, governments may support food expenses for the use of "agricultural products of excellence quality," while the founder or operator of the school and parents bear the financial responsibility for expenses in principle.

At this point in Korea's national school food history, the national school food policy had undergone a significant shift to emphasize the expanding role of the government in response to bottom-up school food actions and changing social demands. This shift was made possible through the coordinated national-level measures taken by grassroots organizations to institutionalize their demands and put reforms in place for school lunch programs. By addressing the general issue of food safety for children and upholding solidarity with the peasant movement, school food movements were able to mobilize resources and generate momentum for scaling up local food procurement. This, in turn, helped position their agendas in the broader context of local food systems.

5.1.3 Local Adoption of Universal, Free, Eco-Friendly School Food Program

School food movements have achieved 1) the incremental introduction of free school meals, 2) the use of domestic agrifoods, 3) a shift from *Witak* to *Jik-yeong Geubsik*, 4) improved nutrition of school meals, and 5) greater transparency of school food service information (Jeong, 2007). More than 95% of schools successfully transitioned to *Jik-yeong Geubsik* within a few years of the reformed enactment in 2006, leading to an increase in efforts to make school meals accessible to all, healthier, and eco-friendly. In 2001, Gwacheon City launched the first universally free school meal program for elementary school students at the municipal level, and two years later, Naju County passed the first local ordinance mandating government support for the use of environment-friendly local produce. In 2010, Jeongseon County introduced the first universally free *and* eco-friendly school meals for all students across kindergarten to high schools.

Years of grassroots school food activism led to a substantial political realignment of school food discourse in the beginning of the 2010s, with progressive candidates linking the idea of universal welfare to school food winning the majority of local elections. The expansion of universally free, eco-friendly school food programs was backed by these politicians and superintendents of education at the provincial and municipal levels.[7] Since then, numerous municipalities have updated their school meals programs by enacting local ordinances and establishing relevant plans. According to the Ministry of Education, as of March 2020, 97.4% of the students in elementary, middle, high, and special-education schools in Korea received free

[7] South Korean superintendents of education in 17 regions have been directly elected since 2006.

school meals (but not necessarily using eco-friendly ingredients, with the lack of data on accurate percentage of universally free *and* eco-friendly school meal programs).

Seoul has the most notable track record among these municipalities for implementing its universal, free, and eco-friendly school food program (UFEF) at the city level. Since Seongbuk District, one of Seoul's 23 subdistricts, started its district-level UFEF in 2010 by subsidizing the entire cost of school meals, Seoul's UFEF has been fully adopted across all levels of schools as of 2021. The city government views school food as a fundamental human right connected to the right to education and now provides every student with free public education and eco-friendly school meals from elementary to high schools. The UFEF in Seoul expanded in three phases: Phase 1 in 2011 partially implemented the program in elementary schools, Phase 2 from 2012 to 2014 expanded it from elementary to middle schools, and Phase 3 from 2019 to 2021 incorporated high schools (Seoul Metropolitan Government, 2021). To operate the UFEF at the district level, the Seoul Metropolitan Office of Education, Seoul Metropolitan Government, and district-level local governments each contribute 50%, 30%, and 20%, respectively, of the overall budget (Seoul Metropolitan Government, 2021).

The objectives of UFEF are clearly stated in the first article of Seoul's municipal ordinance, which was originally adopted in 2011:

> "… by providing financial support for universally free school meals at schools within Seoul, this ordinance aims to promote the physical and mental development of children and adolescents and the formation of healthy eating habits. By encouraging the consumption of eco-friendly agricultural and livestock products, it aims to complete supply chains of agricultural and livestock products and contribute to sustainable regional development."

The article demonstrates how the UFEF aims to support local food economies in wider regions by utilizing the purchasing power of schools in Seoul, while also providing nutritious, healthy food to every student, irrespective of their socioeconomic status. *Orbon*, a public distribution hub established by the Seoul Metropolitan Government, has been instrumental in localizing supply chains and increasing transparency with transactions, supplying 75% of certified organic or sustainably grown agrifoods for the UFEF (Seoul Metropolitan Government, 2021). To further these efforts, the Seoul Metropolitan Government plans to 1) develop shorter, direct distribution channels that local farmers can rely on for stable demand from schools via contract farming and 2) allocate more resources for sustainable agriculture by incentivizing public purchases of eco-friendly agrifoods through *Orbon*.

The transition to universally free, eco-friendly school meal programs[8] across Korea was also fueled by the local food movements in the 2010s, with schools playing a pivotal role as anchor institutions providing a consistent demand. The global food crisis of the late 2000s, which caused major price fluctuations, exposed the volatility of corporate food systems. Furthermore, several food scandals in Korea heightened public concerns about food safety and food sovereignty, leading to the growth of local food movements and urban agriculture aimed at achieving self-sufficiency. Kim (2013) argues that connecting local food and school food movements through public food procurement is one way to reform school food systems, and many grassroots activists in Korea believe that public food procurement has the potential to transform wider food systems.

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8 In the Korean context, the transition towards plant-based protein, which has significantly emerged in North America and Europe in recent years, is not yet the primary focus of public meal services. Thus, the eco-friendly aspect of the UFEF can be seen as primarily centered on reducing carbon footprints during the distribution process, with less emphasis on those produced during meat production.

> "Among other goods or services, food procurement is most highly public. Public food procurement financed with public funds is the area where the public benefit of national finance can be most emphasized. … We should recognize the importance of public food procurement within food systems transitions. Public food procurement (through universally free, eco-friendly school meals) can be an effective tactic for transforming food systems." (Hope Food Network & Grassroots National Solidarity, 2013, pp. 258–259)

5.2 Seoul Food Masterplan 2020: A Major Shift in Urban Food Policy

The late 2000s saw the Free Trade Agreement between Korea and the US, which required Korea to open up its agriculture and livestock industries. This resulted in widespread protests, particularly due to concerns about the import of US beef with BSE dangers (bovine spongiform encephalopathy, mad cow disease). In response, farmers' groups and grassroots organizations coordinated national food sovereignty campaigns, highlighting issues with the domestic agrifood market, shrinking rural economies, high dependence on food imports, and Westernized diets. These movements have stimulated civic initiatives to explore small-scale food system transformation measures, such as local food, communal production, and urban agriculture, as a counterpoint to the prevailing food system. With the increasing prominence of these initiatives, national and local governments have developed food policies and planning to bolster and amplify these grassroots models. Despite diverse goals and conflicting opinions on specific approaches (e.g., reforms within/outside the capitalist system), civic players have generated a collaborative momentum for food system transformation, as exemplified by the practice of "bricolage," a conjunction of various initiatives.

In 2015, Seoul joined the Milan Urban Food Policy Pact along with more than 100 global cities, agreeing on municipal-level commitment to building "sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework" (Milan Urban Food Policy Pact, 2015). The United Nations' Sustainable Development Goals also inspired city-led efforts to transform regional food systems. To design an urban food plan, the Seoul Metropolitan Government collected feedback from various groups, including civic organizations, food activists, farmers, and academics, by conducting public hearings and forming task force teams comprising both government and civic members. A significant number of task force team members were involved in farmers' organizations or school food movements.

The Seoul Metropolitan Government finally introduced the Seoul Food Master Plan 2020 (SFMP 2020) in 2017 as its first comprehensive food plan (Seoul Metropolitan Government, 2017). This plan emphasizes the importance of citizens' wellbeing, public health, social welfare, and sustainable environment. One of the SFMP 2020's primary objectives is to establish collaborative governance with the civic sector. The former mayor, Park, for example, believed that the failure of collaborative governance should never be accepted, even if a policy ultimately turns out to be unsuccessful. Focusing on five key areas – healthy food, food security, urban-rural coexistence, food safety, and governance building – the SFMP 2020 ultimately envisions a socially and ecologically sustainable urban food system that ensures the universal access to healthy and safe food:

> "All Seoul citizens have the right to healthy and safe food. None of Seoul citizens should starve or eat low-quality food because of economic circumstances. Any social, local, or cultural issues should not interfere with access to healthy and safe food. … We recognize that enhancing the accessibility, safety, and sustainability

> of food is a social responsibility …" (The Declaration of Universal Right to Food for Seoul Citizens, SFMP 2020)

The declaration features nine strategies that align with innovative food system agendas, including expanding public food service, creating a food system that promotes the coexistence of urban and rural communities, supporting mid-sized, small-sized, and family farms, developing integrated food policies that relate to various planning areas (such as labor market, housing, transportation, and urban design), promoting biodiversity, and establishing a participatory planning process. The SFMP 2020, as an urban food plan, highlights the importance of spatial considerations in developing urban food policies. It aims to revitalize rural farming communities to address the longstanding spatial disparities between urban and rural areas that emerged from Korea's intense urbanization and industrialization since the 1960s. Additionally, the SFMP 2020 underscores the city's commitment to enhancing the universal right to food, a vital aspect of the right to the city, ensuring the well-being and quality of urban life for all city dwellers. To conclude, it showcases the potential of leveraging urban initiatives to transform broader regional food systems, aligning with domestic needs and global movements towards sustainability.

5.3 Towards inclusive public food procurement: Urban-rural Coexistence Public Meal Service

One of the major projects launched through the SFMP 2020 is the Urban-rural Coexistence Public Meal Service Program (UCPM), an expansion of the UFEF into early childhood education centers (e.g., daycare centers, preschools, local children centers) and welfare facilities. The UCPM aims to source sustainably grown agrifood directly from small-/mid-scale and family farms by matching urban districts in Seoul with rural towns. The program does not rely on the *Orbon* (a public food hub operated by Seoul for eco-friendly food items) as a

central food hub. Instead, respective district-level public meal centers serve as food hubs in Seoul and exclusively source food from the matched rural towns. As of March 2023, there are 12 pairs of districts and towns participating in the UCPM program.[9] For example, if District A is paired with Town B, food from Town B is directly distributed to participating institutions in District A through a district-level public meal center. To incentivize participation, the Seoul Metropolitan Government subsidizes food expenses for institutions that purchase more than 60% of their monthly food items through the UCPM.

Many of the interviewed stakeholders who work for the UCPM (e.g., local governments, district-level public meal centers, coordinating local food hubs in rural towns) have previous experience with cooperatives or school food movements. Some of the interviewees have worked for local governments, playing key roles in the design and implementation of public food services at the local level. According to Interviewee 23, many grassroots activists joined public and governmental institutions after the local elections in 2010, which were won by progressive candidates on the promise of expanding universally free and eco-friendly school meal programs. Interviewees 22 and 23 concur that the influx of grassroots players into the government was a crucial steppingstone in broadening the scope of school food movements and institutionalizing more inclusive public meal services. It is important to note that the current government-led initiatives, such as the SFMP 2020 and the UCPM, draw on a history of collaborative governance with alternative food movements. This underscores the importance of hybrid actors

[9] The diffusion of the program has experienced delays since its initial implementation in 2017 due to conflicts among various stakeholders (e.g., small business owners, private sector, excluded grassroots organizations), logistic limitations (e.g., delayed construction of necessary infrastructure), and a shortage of available food from the rural towns.

across civic sector and the governmental domain, demonstrating the potential for bottom-up initiatives to be incorporated into broader policy frameworks.

The UCPM aims to create stronger social networks between urban and rural stakeholders through its one-to-one pairing system, which goes beyond mere materialistic transactions. This program seeks to establish district-level public meal centers not only as local food hubs but also as communication channels between urban and rural stakeholders. The Seoul Metropolitan Government and district-level governments plan to transform these centers into local food centers that will act as intermediary organizations to design comprehensive local food plans based on local needs and connect urban and rural communities. The UCPM is a place-based public food procurement system that represents a unique experiment in creating local-based food supply chains across niche and regime domains, from local level to regional, and institutionally more centralized level.

6. Discussion

The evolution of policy paradigms for public food service in Korea over the past few decades demonstrates the ongoing dynamics between local agents and institutions, revealing critical tipping points shaped by landscape factors (e.g., democratization, globalization, food crisis, political turnover), institutions (national trade negotiations and local laws), and niche-level grassroots actors. Coulson and Sonnino (2019) assert that the future of local food governance is significantly influenced by the political-economic context, micro-politics, and spatial imaginary. The Multi-Level Perspective (MLP) framework, as discussed in the theoretical background section, can be beneficial for clarifying the complexities and pathways of sustainable food systems transitions, given that food connects various spaces, relations, and processes in a

complex web of interconnections at multiple levels. This paper argues that to comprehend the factors leading to transformative outcomes in public food procurement efforts and their potential for enhancing sustainability, a thorough and historical reflection on policy innovations in public food service is necessary. Such a scholarly effort should take into account the roles of both government and local actors, along with the pre- and post-development of niche innovations, and time and space-specific conditions. Ignoring these factors is often seen as a drawback of the MLP framework, but it is crucial to consider them to avoid missing the finer details of niche-regime dynamics at the ground level. Tackling these potential shortcomings of the MLP framework can offer us a more lucid idea of the mechanisms that facilitate sustainability transition.

The study of policy changes in public food procurement in Korea provides a valuable illustration of the importance of niche-regime dynamics in advancing sustainable food governance. The recent development of the UCPM facilitated collaboration between the government and local grassroots actors to promote sustainable food procurement practices. Niche actors, with the assistance of hybrid actors who link across the government and grassroots sector, were able to influence policy outcomes by creating opportunities through forming alliances and networks with favorable regime players, particularly government officials recruited from civic organizations. The Korean case demonstrates the importance of network and institutional anchoring processes to connect niche and regime actors (Elzen et al., 2012), as grassroots food initiatives have expanded and intensified nationwide networks leading to the legislation of alternative food practices, which helps continue and solidify with bottom-up innovations. More specifically, central to these networking dynamics within the civic sector is the distinctive convergence of peasant and consumer movements. This unique characteristic of the Korean

scenario is heavily influenced by the critical role rice farming plays in maintaining food sovereignty.[10] Understanding the complex nature of interactions between multi-level actors, processes, and time-space conditions (e.g., urbanizations, globalization) is crucial in unraveling these anchoring mechanisms, which is not a one-sided procedure but a mutual one. As such, the MLP framework and theory-grounded case studies can help scholars and policymakers identify feasible ways to facilitate sustainability transitions in food supply chains.

An analysis of the historical development of public food procurement programs in Korea reveals the intricate dynamics at play between global, regional, and local factors within food politics. The transition from outsourcing food services (*witak geubsik*) to direct management of school food canteens (*jik-yeong gebsik*) reflects national and municipal attempts to reduce dependence on globalized food systems and localize regional food systems through legal institutions. The introduction of the one-to-one pairing approach of the UCPM, along with the public food hub *Orbon* in Seoul, specifically showcases a city-wide initiative to encourage the consumption of locally sourced food. Whereas the *Orbon* model continues to depend on bulk ordering from educational institutions, which may perpetuate large-scale monoculture, the UCPM takes a different approach by providing support for small and medium-sized farmers to enhance the diversity and resilience of agricultural systems. It scales back and focuses on developing more direct, tightly linked networks of stakeholders across both urban and rural areas. This one-to-one pairing system enables physical and cognitive proximity between producers and consumers, reducing food transportation distances and emphasizing the role of

[10] As per the Korean Statistical Information Service, as of 2000, rice farms accounted for a substantial 77.9% of all farming households, underscoring their significance. However, its proportion has experienced a drastic decrease, down to 51.8% in 2020.

local communities in transforming regional food systems. In addition, Seoul's food masterplan proposes a new understanding of 'local' by extending the scope of urban policy beyond the city limits to include adjacent and rural communities. The urban-rural co-existence agenda of the SFMP 2020 proves that the city acknowledges its responsibility as a critical stakeholder to enhance broader regional and national food systems. This perspective highlights the dynamic, inclusive, and flexible nature of 'local,' rather than its monolithic and potentially reactionary tendencies (Sonnino, 2009).

The case of Korea illustrates that transitions can take pluralistic patterns, as argued by some sustainability transition scholars (Geels & Schot, 2007; Vlahos et al., 2017), often involving institutional changes. The emergence of *Witak Geubsik* and *Jik-yeong Geubsik* can be categorized as transformations (see 2.1 section for the typology) that featured niche innovations that were not yet fully matured. Specifically, during the 1990s, *Witak Geubsik* relied on conventional players like food corporations, while *Jik-yeong Geubsik* incrementally (re)introduced the public sector (Orbon) to manage food procurement in the subsequent decade. A reconfiguration is currently underway in the UCPM with the government outsourcing to grassroots organizations such as cooperatives and nonprofit food organizations, based on symbiotic niche innovations that have the potential to influence the regime. Examining patterns and identifying factors that drive a particular pattern can help determine effective tools and governing structures to create sustainability transitions. While institutionalization is commonly seen as effective in securing transformative momentum and ensuring program continuity at the regime level by many interviewees, it should not be considered as the ultimate goal. The extent of formal institutionalization may differ depending on factors such as political willpower, networks with government officials, and competent intermediary organizations (food policy

councils) (Dahlberg, 1994). Therefore, it is essential to examine political and context-specific circumstances that shape and impact a governing structure to achieve broader regime change.

Policy innovations can drive food systems transformation towards food justice and sovereignty. The recent declaration of the right to food in Seoul exemplifies how government perspectives have shifted from viewing food as a commodity to combat hunger to acknowledging safe, healthy, and culturally appropriate food as a universal right and a crucial aspect of citizen well-being. Public food service, as part of broader social welfare programs, can significantly impact various local food systems stakeholders. For instance, the UFEF and UCPM policy target groups encompass a diverse range of demographics, including economically disadvantaged school-aged children, the disabled, the elderly, and rural farmers. Public institutions can also leverage their purchasing power through institutional food procurement to support local food economies, which have long been dominated by multinational, profit-driven food corporations. Transitions in mainstream public food service policy in Korea indicate the potential of food as public goods to broaden the scope of public dialogue on what to eat, whom to feed, and how to nourish citizens as an important political and social agenda.

The role of local grassroots initiatives such as school food movements should not be overlooked in making policy innovations. Social movements have been instrumental in driving policy changes and creating broader coalitions at regional and national levels to push through policy resistance (Hess, 2016). This study supports the notion that social movements can have a significant impact on creating fundamental shifts in the food regime, as argued by other scholars (Friedman & McMichael, 1989; McMichael, 2014; Song, 2018). Through scaling up and expanding co-learning opportunities, as seen in the case of Korea, grassroots activists in school food movements have effectively mobilized resources from both the civic sector and

government, influencing policy shifts by forming alliances and networks with favorable regime players such as politicians and governmental officials. In some cases, school food activists have even become part of regime institutions, creating niche-regime interactions that provide opportunities for other grassroots actors (Diaz et al., 2013; Ingram, 2018). These hybrid actors played a critical role in bridging the gap between the niche and regime levels by incorporating grassroots ideas into public policy and implementing niche-driven institutional reforms through political instruments. The UCPM, which resulted from decades of grassroots food movements, is a testament to the cumulative potential of diverse bottom-up initiatives as collective power. As argued by Lutz & Schachinger (2013), niche innovations cannot exist in isolation from dominant regime and landscape practices. Rather, niche actors actively leverage regime resources to achieve breakthroughs within niche-regime dynamics as mutual interactions. The findings of this study are also in line with the recent notion suggesting that regime shifts may occur "from within." This perspective suggests that systemic transformations are potentially driven more significantly by internal dynamics or modifications within the prevailing system, rather than relying entirely on external disruptions or interventions (Mattioni et al., 2022; Runhaar et al., 2020). It underscores the importance of intrinsic changes, hinting that the path to systemic evolution could be through gradual, internal adjustments within the system's existing structure and norms, rather than by abrupt, externally imposed shifts.

7. Policy Implications and Conclusion

This study has utilized the MLP framework to examine the paths of public food procurement programs in Korea, focusing on the intersections of landscape factors (external pressures), regime practices (government, institutions), and niche movements (grassroots

actions). Through the evolution of grassroots school food initiatives into municipal efforts to reshape regional food systems, the Korean case highlights the potential of niche-driven development as a catalyst for food systems transformation. Niche actors have the ability to respond to environmental pressures, frame their innovations as political tools, and engage in partnerships and coalition building to impact and participate in the policy process (Gaddis & Jeon, 2020). These niche activities can be fostered and embraced by regime players through niche-regime interactions. The Korean case reveals that a niche innovation is an ongoing process in which niche players remain open to new experimentation, adapt to institutions, and create new opportunities to influence public policy. Institutionalization can serve as a strategy for niche actors to consolidate change and achieve policy continuity, demonstrating the potential for collaborative approaches to drive meaningful transformation in the food system.

The trajectory of Korean public food procurement programs suggests a transitional process characterized by dual configurations of spatial scale. Rather than being a fixed concept based on geographic terms, a unit of space is understood as a flexible notion that can be used by both niche and regime players to achieve their political agendas. While grassroots food activism and recent public food procurement programs share a common agenda of shortening and re-localizing food systems (from global to local), Korean school food movements have scaled up to form national-level governance of local actions, thereby gaining more voice and power (from local to national). Seoul's food master plan signals the city's readiness to extend responsibility for regional food systems beyond its city-based locus (from local to regional). This multifaceted approach to spatial conceptualization highlights the emergence of a relational market as a niche-in-the-making, which the UCPM envisions as a network of niche actors in urban and rural areas.

The study emphasizes the need for a spatial perspective that strengthens urban-rural linkages and inspires efforts to reduce urban-rural inequalities in sustainable food planning practices.

Finally, it is crucial to recognize that institutional reforms, which grassroots activists may rely on to ensure policy continuity, can be disrupted by political leadership changes, thereby affecting the trajectory of transformative initiatives. Recent scholarly work emphasizes the need to understand the politics of sustainability transitions (Dutt, 2022; Novalia et al., 2021; van Oers et al., 2021), offering opportunities or threats to niche innovations, when informing policy decision-making (Luederitz et al., 2017; Williams & Robinson, 2020). Gaining a comprehensive understanding of niche-regime interactions is crucial for fully comprehending the transitional mechanisms propelling sustainable food governance. To effect lasting structural change, it is imperative to consider the roles of both grassroots movements and state agencies, and to develop robust evaluation methods to assess the effectiveness of transformative efforts.

However, this study does have certain limitations. Principally, its findings may not be readily generalizable due to its focus on a specific context. To address this, future research must engage with a variety of global cases that present distinct contexts and conditions. This will help us overcome the limitations of our study and gather more evidence to enhance the traditional Multi-Level Perspective (MLP). By acknowledging these limitations and pointing towards future research, this study serves as a stepping stone to better understand food governance transitions.

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Chapter 3
Rethinking "Local" and "Sustainability" in Territorial Agrifood Chains: A Takeaway from Place-based Public Food Procurement[11]

1. Abstract

Public food procurement is increasingly seen as an effective strategy to address challenges arising from corporate consolidation in food systems. Despite extensive studies on private or non-profit ventures such as food hubs, farm-to-school, or farm-to-institution programs, the role of government-led public food procurement in reconstructing regional food systems has been comparatively underexplored. This paper examines the potential and challenges of a place-based approach to public food procurement, drawing on a pioneering case from South Korea. By delving into the governance dynamics surrounding the two primary program motives, "local" and "sustainable," this paper contends that diverse and occasionally conflicting interpretations of these concepts may compromise the transformative potential of such initiatives. This misalignment could potentially dissuade farmers from adopting sustainable agriculture practices and restrict the availability of healthy food options for urban consumers. This study suggests that policymakers and practitioners cultivate a comprehensive understanding of the spatial and social characteristics of urban-rural connections to facilitate effectively localized and sustainability-

[11] This chapter is modified based on an article currently under review for publication in Geoforum.

focused public food procurement, while considering the trade-offs among different perspectives. Through this nuanced approach, we can better navigate the complexities of integrating local and sustainable practices within public food procurement strategies.

2. Introduction

The food system, encompassing the production, distribution, and consumption of food, has significant impacts on environmental, social, and economic well-being of communities (Feenstra, 1997). In recent decades, the emphasis on price and profit over the hidden costs of environmental and social impact caused by corporate concentration and industrial practices has progressively led to inequitable food access, nutritional deficiencies, an increase in non-communicable diseases such as obesity and diabetes, and environmental degradation (Clapp, 2018; Hawkes et al., 2012). In response to these crises, efforts have emerged to decentralise and re-localize food supply chains through initiatives such as food hubs, farm-to-school, and farm-to-institution programs (Hoey et al., 2018; Matson & Thayer, 2013; Robert & Weaver-Hightower, 2011).

Public food procurement is gaining increasing attention as a comprehensive strategy for transforming conventional food systems. The scale of public procurement and its stable volume of purchases offer unique opportunities to establish an alternative supply chain that decreases disparities in access to healthy food, revitalizes local food economies, and incentivizes sustainable farming practices (Morgan & Morley, 2002; Sonnino & McWilliam, 2011). While some North American and European municipalities are at the forefront of implementing public food procurement as a means to reshape regional food systems, it is still frequently overlooked in mainstream food policy (Morgan, 2014; Sonnino, 2009). A few notable global examples of

government-led public food procurement initiatives include Belo Horizonte and the Programa Nacional de Alimentação Escolar in Brazil (Rocha & Lessa, 2009; Wittman & Blesh, 2017), and school food systems in Italy and Finland (Morgan & Morley, 2002). The recently introduced 10 Cents A Meal program in Michigan (USA) serves as another example promoting local food purchases through schools and early childhood education centers as anchor institutions (Colasanti et al., 2019). Empirical evidence about the opportunities and challenges that these types of public procurement initiatives present is important to inform similar initiatives seeking to transform conventional food practices.

This study delves into the governance dynamics of the Urban-rural Coexistence Public Meal Service (UCPM), a place-based public food procurement initiative implemented in Seoul, South Korea. The UCPM, launched by the Seoul Metropolitan Government, is an institutional public food procurement model designed to establish direct, shortened supply chains that connect rural producers and urban consumers. The program sets its sights on two key objectives: promoting "local" and "sustainable" food sources, with the aim of providing a stable market for small to mid-sized farmers committed to sustainable agriculture and enhancing urban consumers' access to healthy, local food. Notably, what distinguishes the UCPM from other similar programs is its government-led investments in creating alternative food channels intended to replace profit-oriented conventional food markets, including both hard infrastructure (e.g., food hubs, transportation) and soft one (e.g., subsidies, education, technical support). The UCPM's ultimate goal is to strengthen urban-rural linkages by reconstructing the middle of the food system, spanning processes from food production to consumption. At the administrative unit level, the program forms pairings between rural towns and urban districts in Seoul, thereby

enabling direct food supply to anchor institutions such as early childhood education centers (e.g., daycare centers, pre-schools), welfare facilities, hospitals, and government buildings.

Despite witnessing tangible success — as reflected in the increased percentage of environment-friendly[12] local food purchases at facilities in Seoul participating in the UCPM (for example, 47.3% of total food purchases compared to 13.3% for non-participating institutions in 2018[13]), — it also reveals potential divisions among stakeholders due to differing interpretations of policy agendas and long-term visions. As Stone (1997) argues, ambiguity or conflicts in defining policy goals can hamper program diffusion, emphasizing the political intricacies embedded in policy-making and decision-making processes. This research aims to dissect the hurdles that transformative food initiatives may encounter when enhancing locality within regional food systems, using the UCPM's development and implementation as a descriptive case study. This study brings to light the divergent perspectives surrounding the concepts of locality and sustainability among food systems stakeholders, which inevitably lead to trade-offs between various interpretations and approaches. Specifically, this paper examines the practical challenges that arise when promoting territorial food systems in contrast to the prevailing global food system, which is detached from specific local contexts and de-territorialized. The results of this study offer valuable insights into the complexities associated with advancing sustainable and locally-rooted food supply chains within the context of regional food systems.

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[12] The National Act on the Promotion of Environment-friendly Agriculture and Fisheries and the Management of/and Support for Organic Foods Etc. defines "environment-friendly agro-fishery products" as comprising three categories of foods: a) *organic* agro-fishery products, b) *pesticide-free* agricultural products, and c) *antibiotic-free* fishery products and fishery products without using active treatment agents.

[13] Interim Evaluation Report of the UCPM Implementation" conducted by the Eco-friendly Public Meal Service Team of the Seoul Metropolitan Government in 2019.

The article begins by exploring the context of emerging city-level initiatives aimed at creating alternative food systems, highlighting the controversial debates regarding the definitions of locality and sustainability. It then outlines the methods used to investigate Seoul's trajectories to develop the UCPM. The findings suggest that the ambiguous nature of "local" and "sustainable" (interchangeable with "environment-friendly" in policy terms, further discussed in Section 5.3) agendas may jeopardize the governance function and implementation of place-based public food procurement. The study reveals that disagreements over how to define and realize these terms hinder the transformative potential of such initiatives, primarily by discouraging farmers from adopting sustainable agricultural practices or limiting access to healthy food options. Embracing this approach will enable place-based strategies for public food procurement to effectively establish territorial local food chains with distinct local identities, ensuring diversity within food systems.

3. Theoretical Background

3.1 The emergence of transformative urban food policy: towards local and sustainable

High-density urban areas have a significant impact on regional food systems, given the substantial amount of food consumed by urban residents (Lehtinen, 2012; Morgan & Morley, 2002). However, urbanization and industrialization have led to a fragmentation of food in urban areas, pushing farmland outside of cities and creating a perception that food is a rural issue (Pothukuchi & Kaufman, 1999; Vitiello & Brinkley, 2014). The fragmentation of local-based food supply chains and weakening of urban-rural linkages in economic and social aspects have had significant implications for the food systems in many regions (Sonnino, 2009). Consequently, this historical trend has led to an increased reliance on the global corporate food

system, where large multinational corporations dominate the production, distribution, and marketing of food products. Local food producers and small-scale farmers often face challenges in accessing markets and maintaining their traditional agricultural practices. The shift towards global corporate food systems has raised concerns about issues like food security, environmental sustainability, and social equity, prompting a growing interest in revitalizing local and regional food systems through initiatives like public food procurement programs.

The emergence of urban food policy marks a departure from the prevailing governance of the agrifood system, which is largely dominated by private market forces with minimal influence from local municipalities and the civic sector (Renting & Wiskerke, 2010). In the new urban food governance landscape, public institutions, including governmental bodies and educational/welfare facilities, play a growing role alongside market actors and rural producers, who have traditionally been considered central stakeholders in the agrifood system. Recent city-level initiatives such as the Milan Urban Food Policy Pact and the Food Trails, which connect municipalities worldwide committed to enhancing urban food systems, showcase the potential of urban food policy to transform regional food systems. By fostering collaboration among cities and sharing best practices, these initiatives contribute to the development of more robust and environment-friendly food systems that benefit both urban and rural communities (Robertson et al., 2023).

Building local and sustainable food systems has become a priority in many transformative food initiatives. In a seminal work, Feenstra (1997) identified the fundamental attributes of local food systems as being tied to specific locales, promoting ecological sustainability, economically viable for farmers and consumers, and enhancing food justice within communities. While these characteristics have been widely acknowledged as crucial policy

goals, the persisting scholarly debates surrounding the interpretation of "local" and "sustainable" within food systems underscores the existence of conceptual ambiguities and challenges that arise during policy implementation and enforcement (Stahlbrand, 2017). For instance, the inherent hybridity of food, which is made of ingredients and labor from various sources, makes it challenging to create a strict distinction between local and global products (Kirkpatrick, 2007; Schmitt et al., 2018). Furthermore, the socially constructed nature of the term "local" implies that the social and environmental dimensions of food policy outcomes may not always correspond with the geographical delineation of "local" (Hinrichs, 2003). Rigid adherence to localism may also lead to the "local trap," wherein local food is not necessarily more ethical or ecologically preferable to non-local alternatives, potentially disregarding the social, cultural, and ecological costs associated with local purchasing (Born & Purcell, 2006).

The localization of food systems has been hailed as a means of reducing food miles and carbon footprints (Morgan & Sonnino, 2010), thereby establishing a close association between local food movements and sustainability. Nevertheless, recent scholarship urges caution in assuming a straightforward connection between the two concepts. Sustainability, much like the notion of locality, entails a multifaceted and politically influenced process that necessitates trade-offs between various approaches (Béné et al., 2019). While some argue that sustainability can be achieved through the development of short food supply chains or the consumption of organically produced goods (Foster et al., 2007), others advocate for a more comprehensive framework that encompasses economic, social, environmental, and governance dimensions (Chiffoleau & Dourian, 2020). To illustrate, the Food and Agriculture Organization of the United Nations (FAO, 2018) describes sustainable food systems as those that "deliver food security and nutrition

for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised" (p.1).

The complexities involved in operationalizing local and sustainable food systems indicate the indispensable nature of adopting an interdisciplinary approach when formulating policy solutions tailored to specific contexts. For example, Feagan (2007) proposes a reflexive and dialectical investigation into the "social, cultural, and ecological particularity" of everyday practices as a means to navigate these complexities. This research highlights the importance of understanding the diverse perspectives of involved stakeholders, such as farmers, local practitioners, consumers, and government officials, in shaping the implementation of placed-based food procurement strategies. By delving into the intricacies of how locality and sustainability are interpreted and put into practice through the UCPM (Urban-rural Coexistence Public Meal Service) case, the study unveils the complexities and trade-offs that can arise in achieving sustainable and locally-rooted food systems.

3.2 A place-based, territorial approach to institutional public food procurement

Historical examples have consistently demonstrated the transformative impacts of public food procurement on regional food systems. These initiatives have not only triggered broader changes in food practices but also served as catalysts for directing further food-related initiatives. One such example is Italy's Public Plate Program, which began in the mid-1980s to encourage sustainable food consumption in local school and university canteens. This local program, based on municipal food policies that prioritize social and cultural values related to food, promoted the consumption of fresh, seasonal, and locally sourced produce at education institutions. This approach yielded environmental benefits as well as fostered stronger connections between local

producers and consumers (Morgan & Sonnino, 2007). Similarly, in the 1990s, local private colleges in the United States led an institutional food procurement program that significantly increased domestic food purchases (Aegerter et al., 1990; Yazman, 1991). Nowadays, the public provisioning of food is widely acknowledged among policymakers and practitioners as a potent instrument for advancing food security, food justice, and sustainability. This recognition is accompanied by an expanded scope of associated initiatives, such as agroecological practices, short food supply chains, and school lunch programs. These initiatives share a common overarching goal, namely, the establishment of a more sustainable and equitable food system through the support of small-scale farmers, the promotion of local food production, and the mitigation of environmental impacts related to food transportation (Stefani et al., 2017).

Recent research provides empirical support for the assertion that public food procurement serves as a powerful driver for incentivizing sustainable food practices (Morgan & Sonnino, 2007; Rimmington et al., 2006), highlighting the crucial role of government involvement in facilitating the localization and expansion of food procurement initiatives (Morgan, 2008; Renting & Wiskerke, 2010). For example, Stahlbrand (2017) explores the transformative potential of public food procurement in (re)shaping the *middle* of food systems. By leveraging unique and innovative policy tools, the government can exert a meaningful influence on the food sourcing practices of various social entities. Specifically, the farms "to" institutions approach (e.g., such as "farm to school" programs), supported by government-led strategic investments in hard and soft infrastructures constituting the middle of food systems (e.g., warehouses, logistical systems, networking for knowledge sharing), can foster alternative supply chains that establish more direct relations between local producers, institutional purchasers, and ultimately individual consumers. This approach aims to empower stakeholders in local food systems by creating

alternative governance structures that challenge corporate profit-driven distribution systems and facilitate streamlined pathways for local food procurement in sustainable manners.

Nonetheless, the pursuit of replicating and expanding public procurement strategies has encountered a myriad of obstacles, warranting a comprehensive scholarly investigation. A compelling case that illustrates intrinsic limitations hindering stable local food procurement can be found in a school food initiative in New York City (USA), which faced restricted growing seasons and inadequate packaging and distribution infrastructure (Market Ventures et al., 2007). Furthermore, the existence of a fragmented legal framework at the national, local, and supranational levels, prioritizing food safety and economic considerations over sustainability goals, poses additional challenges to implementing procurement initiatives at the local level (Sonnino, 2009). The recent outbreak of the COVID-19 pandemic significantly exacerbated the situation by disrupting food procurement networks, primarily due to the closure of numerous public facilities. Consequently, a substantial number of farmers were faced with the predicament of finding alternative channels to sell their surplus produce, as they lost key customers through contract farming as a result of declining demand (Campbell & McAvoy, 2020; Schreiber et al., 2022).

Section 2.1 sheds light on the complexities of operationalizing the fundamental objectives of "local" and "sustainable" due to conceptual ambiguities Without political considerations surrounding competing interpretations and an agreement on shared definitions, there is a risk of hampering coherence throughout program implementation. To better understand and operationalize the concepts of "local" and "sustainable" in food systems, two distinct approaches have emerged as potential facilitators. The first approach, known as place-based food systems, places emphasis on factors such as the interconnectedness of the environment, building trust-

based relationships within supply chains, promoting community food security and sovereignty, ensuring public health, developing local infrastructures, and fostering a democratic process that involves civic participation in program development (Feenstra, 2019). This approach, when utilized to design concrete measures for program formulation and monitoring, fosters a more comprehensive and practical comprehension of local and sustainable food systems. It transcends the constraints of a defensive localism, which is a narrow and protective approach to promoting localism, driven by the desire to shield local resources and economies from external influences (Morgan & Sonnino, 2010). Instead, the place-based food systems approach seeks to strike a balance between supporting local economies and incorporating broader environmental and social considerations.

The Integrated Territorial Paradigm, coined by Renting & Wiskerke (2010), offers an alternative approach that highlights the significance and effects of innovative initiatives in expediting the transition to sustainable agrifood systems. In the Integrated Territorial Paradigm, the focus is on recognizing and valuing the unique resources ingrained in the local context and social relations of proximity within food systems, moving away from the standardized and placeless model often seen in modern agrifood systems. Territorial embeddedness refers to an agrifood system deeply rooted in and shaped by the unique characteristics of the local area, while also integrating with other local-level activities such as nature conservation, tourism, care, and education (Renting et al., 2008). This approach fosters stronger social relations by leveraging geographical proximities, promoting a more interconnected food system. The interconnectedness of food systems can have positive ripple effects beyond the local level, as it helps avoid the pitfall of solely focusing on local sourcing without considering broader environmental and social

impacts. Embracing territorial embeddedness contributes to the resilience and sustainability of food systems, benefiting both local communities and the larger regional context.

The integrated territorial paradigm proposes a governance model that strives for equilibrium by incorporating a variety of governance mechanisms, and partnering with diverse institutions and societal actors. This prevents any single entity from dominating the decision-making process and encourages communities to reassert control over their local food systems, previously dominated by global food corporations. Such locally-centric but decentralized food governance is better equipped to meet each community's unique needs and preferences, promoting not only food security but also social and economic well-being. Despite these advantages, Renting and Wiskerke (2010) caution that the current initiatives in line with the integrated territorial paradigm face limitations due to their small scale and localized nature, restriccting their ability to replicate and expand into other areas. To address these challenges, Rending and Wiskerke propose hybrid organizational structures, such as food hubs, which combine the unique attributes of local projects with the benefits of longer, larger-scaled supply chains. This strategy aims to circumvent the constraints often encountered at the niche level, thereby amplifying the impact of these local initiatives within the larger, regional context.

The UCPM adopts a place-based approach to institutional food procurement, blending components of two alternative approaches — place-based food systems and the integrated territorial paradigm. The program emphasizes territorial resources, including seasonal harvests and unique agricultural contexts, while also incorporating hybrid organizational structures into the reshaping of regional food supply chains, such as publicly operated food hubs in both urban and rural areas. An examination of the UCPM mechanism reveals how the principles of locality and sustainability are articulated in these new approaches, as well as the conceptual obscurity

challenges policymakers and practitioners face in scaling up a place-based model of public food procurement. More attention is required to address these challenges to ensure the successful and widespread adoption of territorial and sustainable food procurement strategies.

4. Methods

With a consideration of the unique aspects of the Urban-rural Coexistence Public Meal Service (UCPM) (discussed in Chapter 1), which sets it apart from similar initiatives in different global cases, this study utilizes a case study methodology recognized for its explanatory power in understanding social change, tracing complex social processes, and identifying patterns (Creswell & Poth, 2016; Gerring, 2006). Specifically, I employ the single case study approach to gain insights from detailed descriptions and context-specific understandings of an intricate phenomenon, providing opportunities for theoretical refinements (Dyer Jr & Wilkins, 1991; Siggelkow, 2007). The UCPM, a case of city-led public food procurement programs, represents an emerging municipal-level initiative aimed at advancing sustainability transitions in food systems. This program illustrates dynamics surrounding processes through which the two primary objectives of innovative food movements – locality and sustainability – are interpreted, consumed, and embodied into a policy program in practice. As a collective unit of relevant actors and institutions, the UCPM case encompasses local institutional apparatus such as ordinances and official food plans, identified stakeholders of interest across urban and rural areas (e.g., farmers, consumers, government officials, practitioners, civic activists), and political dynamics leading the formulation and implementation processes of the UCPM.

Yin (2018) emphasizes the efficacy of a single-case approach, especially when the research can access a situation previously unexplored in empirical studies. This study focuses on

a novel case of place-based public food procurement, which involves proactive government intervention in establishing both hard (warehouses, transportation) and soft (networking, technical support) infrastructures to promote physical and social connections between pairs of urban districts and rural towns. Unlike many existing cases driven by grassroots, non-profit, or private organizations, or by joint efforts of civic entities and the government where investment in physical infrastructure is primarily the responsibility of the private sector, the UCPM case has limited precedents in the literature. Consequently, the description information from this type of case will be revelatory, effective in generating context-specific knowledge and expertise, which can inform policy making or guide future research (Flyvbjerg, 2006). The findings of this study offer insights for various global cities seeking to enhance public-sector investment and transform regional food systems through place-based public food procurement.

Additionally, I have structured this study as an embedded case study (See Figure 8) to examine policy dynamics across multiple subunits of analysis (e.g., metropolis level, local/district level, organizational level, and individual level). An embedded single-case study proves valuable when analyzing elements from embedded units of a single case (Yin, 2018), especially for a case like the UCPM which features layered levels of operational mechanism. This embedded case study design allows me to consider the distinct backgrounds and conditions of local implementation at the district level, where the substantive interpretation and adoption of program occur. It also enables me to explore the differentiated features in interim program outcomes, with district-level units adhering to the shared structure of program guidelines and administrative governance from the metropolis level. Ultimately, the embedded case study design provides a comprehensive understanding of how the UCPM functions across various levels, revealing the intricate policy dynamics implicated in scaling up local practices.

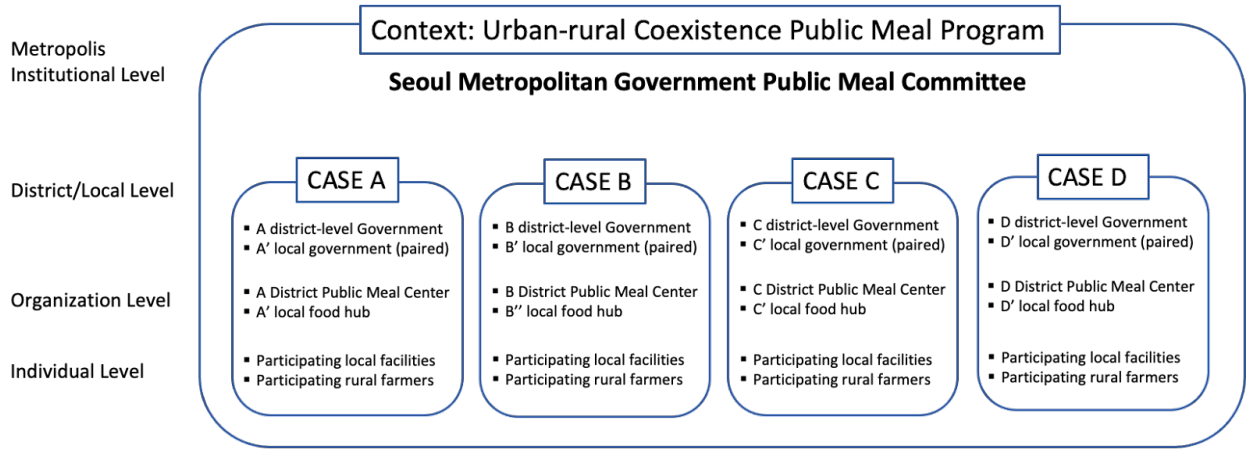


Figure 8. The UCPM as an embedded case study

The research methods employed in this study consisted of direct observations conducted at food hubs, district-level public meal centers, and participating farms and institutions. Additionally, in-depth semi-structured interviews were conducted with key stakeholders, totaling 32 participants (See Table 2 on the next page; See Appendix D for the list of interview questions). Moreover, document analysis was performed on various government official documents, program blueprints, meeting minutes, professional reports, local ordinances, and press materials (See Appendix B). To ensure confidentiality, all geographical indicators and interviewer information were de-identified. Introductory informal meetings and discussions with key informants and a thorough document review facilitated the selection of the four urban-rural pairings for in-depth exploration of local-level dynamics through which main program concepts are implemented. The four pairs of urban districts and rural towns selected for this study were early adopters of the UCPM, having joined in either 2017 or 2018. Selection criteria

encompassed program implementation duration and the innovative nature of district-level practices.

Analytical Level	Interviewees	Number
Metropolis institutional level	a. City Government officials b. Members of Public Meal Committee	4
District/local level	a. District government officials b. Rural government officials	8
Organization level	a. Staff at district public meal centers b. Staff at local food hubs	14
Individual level	a. Participating farmers b. Food purchasers of participating local facilities	6

Table 2. Analytical levels, interviewees, and the number of interviews

Each pair has unique characteristics in terms of their local-level food initiatives and affiliated towns (See Table 3 on the next page). District A, for example, has strong urban agriculture programs and was among the first to join the UCPM, along with town A', which is widely known as a successful example of innovative food systems to support circular local food economies. District B was an early adopter of the Universal, Free, Eco-friendly School Lunch Program over a decade ago, with leadership from the District Office and civic support. In contrast, town B' has a limited history of grassroots engagement, but benefits from the involvement of the National Agricultural Cooperative Federation, which organizes local farmers and distribution channels. District C joined the UCPM due to the strong will of the head of the District Office, and town C' has a notable history of municipal efforts to develop a public school

food system and contract farming with local farmers committed to sustainable agriculture. Lastly, District D showcases grassroots initiatives to connect urban customers and rural farmers through direct supply chains, while town D' has devoted itself to building a sustainable regional food system with the support of both governmental and local grassroots actors.[14] The finding of this study hint that cases where local actors have the background and knowledge of innovative food movements are inclined to absorb and apply better the principles of the UCPM.

Urban District	Year of start	Local-level food initiatives context
A District	2017 - 2018	Strong civic initiatives for urban agriculture
B District		Early implementation of the Universal, Free, Eco-friendly school lunch program
C District		Relatively weak
D District		Grassroots initiatives for alternative agrifood supply chains

Table 3. Characteristics of the four selected Districts

Concerns about construct and external validity were addressed through three key approaches: (a) triangulation of sources of evidence, (b) maintaining a chain of evidence, and (c) integrating theory into the study. Triangulation of multiple sources of evidence facilitated the re-examination and refinement of examined concepts and operational measures, such as local food and environment-friendly food systems, during both data collection and analysis, thereby increasing construct validity. Maintaining a chain of evidence helped to track the flow of the

[14] The findings of this study hint that cases where local actors have a background and knowledge of innovative food movements are more likely to absorb and apply the principles of the UCPM effectively, which is discussed in the results section.

study design from research questions and protocol questions to the database and findings, thereby strengthening the link between operational concepts and measures. Finally, the introduction of a theoretical framework of local and sustainable food systems, specifically the place-based food systems and integrated territorial paradigm, contributed to the analytical generalization of findings.

5. Results

5.1 Sustainable and inclusive urban food systems: the role of public food procurement in Seoul

The Seoul Metropolitan Government has made substantial investments in public food procurement operations, driven by the fact that daily food provision at public institutions including schools, daycare centers, welfare facilities, and government offices serves roughly 20% of Seoul's entire population (as of 2021, approximately 9.97 million). This issue is of particular relevance in the context of regional food systems, where public food procurement can play a crucial role in expanding more just and sustainable food supply chains. The government's investment in this area reflects a recognition of the importance of ensuring access to healthy and sustainable food for its citizens. These efforts also align with global initiatives such as the United Nations' Sustainable Development Goals and the Milan Urban Food Policy Pact, which emphasize the importance of sustainable food systems and access to nutritious food for all. To illustrate, Seoul joined the the Milan Urban Food Policy Pact as one of initial signatory cities in 2015, and blueprints of the SFMP 2020 makes clear connections between its objectives and the United Nations' Sustainable Development Goals as a global-level umbrella guideline.

The Seoul Metropolitan Government has prioritized the development of collaborative partnerships with civil society for policy formulation and implementation, as evidenced by the SFMP 2020. This comprehensive food program for Seoul, launched in June 2017, aims to enhance the urban and regional food system through a series of urban initiatives. To achieve this objective, the government initiated the first phase of the SFMP 2020 in March 2015, which included public hearings and workshops with stakeholders from the civic sector, such as non-profit organizations, food activists, practitioners, and scholars. The Public Meal Service Team at the city government is responsible for coordinating communication among stakeholders, formulating policy ideas, and monitoring the program. Through prioritizing collaboration and partnership, the Seoul Metropolitan Government has been establishing a more participatory and inclusive approach to urban food policy.

The SFMP 2020 sets out to establish urban food systems that promote equitable access to healthy food, environmental sustainability, urban-rural coexistence, and collaborative governance. The UCPM is a crucial component of the third agenda of the SFMP 2020, focused on enhancing urban-rural coexistence by leveraging the successful model of the Universal, Free, Eco-friendly School Lunch Program. While the school lunch program mainly targets primary, middle, and high schools by operating a centralized public food hub (Orbon), the UCPM expands its policy target to early childhood education centers, welfare facilities, and government buildings. In other words, the UCPM operation is currently separate from the school lunch program, as they have different policy targets. However, some stakeholders express their aspirations to integrate the two systems into a single program in the future. The UCPM system is accomplished by enabling direct food supply from small and medium-sized farmers to these public institutions in Seoul via a number of public food hubs in rural towns and urban districts.

Produce is collected daily based on pre-orders at rural food hubs funded and/or directly operated by local governments and then transported to the associated district-level public meal centers in Seoul, which distribute the food to each institution (See Figure 5). By pairing an urban district with a rural town within an exclusive food supply chain, institutional purchasers can source local and sustainably grown foods at reduced prices without intermediaries, allowing producers to earn higher profits on their crops than they would through private market sales.[15]

To participate in the UCPM, urban districts and rural towns must meet certain criteria. First, urban districts must ensure sufficient demand for environment-friendly foods to enable rural towns to benefit from economies of scale through contract supply and farming. Second, rural towns must demonstrate a strong local capacity to supply a variety of environment-friendly foods to urban institutions. Other evaluation factors for rural areas include the presence of food processing facilities, support programs at the local level, and well-developed networks of producers committed to sustainable agriculture in rural towns. The selection committee for the UCPM is comprised of agrifood specialists who evaluate potential rural town candidates, share information with district-level administration, collect feedback, and make the final decision. In 2017, the UCPM began with six districts contracting with six rural towns, following the signing of a memorandum of understanding between the Seoul Metropolitan Government and provincial governments representing the rural towns. As of May 2023, 12 out of 25 districts in Seoul had joined the UCPM in pairs with 12 rural towns. While Seoul initially aimed to have all 25 districts join by 2019, the slower pace of district-level implementation reveals obstacles to program

[15] "Interim Evaluation Report of the UCPM Implementation" conducted by the Eco-friendly Public Meal Service Team of the Seoul Metropolitan Government in 2019.

expansion, including district-level backlashes due to conflicts of interest and the ongoing COVID-19 pandemic, which has prompted nationwide shutdowns.



Figure 9. Facilities at district-level public meal centers and rural food hubs to aggregate and distribute locally sourced environment-friendly food products (photos by author)

5.2 Empowering small- and mid-scale farmers for sustainable agriculture

The place-based one-to-one pairing strategy of the UCPM is a deliberate approach aimed at fostering smaller-scale and sustainable relationships between food system stakeholders in both urban and rural areas, with the primary objective of promoting the participation of small and medium-sized, family-owned local farms. According to a civic expert involved in the

development of the UCPM (Interviewee 1), policymakers introduced contract farming at the district-town level to counter the consolidation of large-scale industrial farms that often result from programs like the previously established Universal, Free, Eco-friendly School Meal Program, which relies on large-volume purchases. In this earlier program, policy actors, as noted by this interviewee, pointed out that volume- and scale-based contracts inadvertently limited opportunities for target groups comprising farms with restricted political and economic influence.

In order to empower small-scale diversified agriculture over large-scale industrial monoculture, the UCPM adopts specific guidelines for food sourcing, guided by three principles: a) guaranteeing universal access to safe and healthy food at affordable prices, b) creating a food system that strengthens the relationship between urban and rural areas, both economically and culturally, and encourages the supply of produce from small to medium-sized and family-owned farms, and c) establishing food quality standards that can be trusted by both producers and consumers. The primary goal of the UCPM is to promote a shift from dominant large-scale monoculture in the agri-food industry to more sustainable agriculture by encouraging alternative practices at a smaller scale. As part of this effort, the UCPM mandates the procurement of only "environment-friendly" agrifoods with certificates.

To qualify as "environment-friendly," produce must meet certification standards at *either* the national or local level as outlined in the UCPM guidelines (See information in Table 4 on Page 87). At the national level, foods are classified into two categories: *organic*, which prohibits the use of agricultural chemicals like pesticides, herbicides, and growth hormones (in livestock), as well as chemical fertilizers and antibiotics, and *non-pesticide*, which only allows less than one-third of the recommended amount of chemical fertilizer and prohibits the use of other

agricultural chemicals, including pesticides and herbicides. Additionally, the UCPM embraces supplementary requirements such as non-herbicide, non-GMO (Non-Genetically Modified Organisms), and no exposure to radiation. The specifications of local-level certificates that are also accepted by the UCPM, another layer of certification that is distinct from the national one, vary depending on individual rural towns.

Out of the four rural towns examined in this study, two currently have their own local certification programs that oversee the usage of agricultural chemicals in produce. For instance, Town A' requires produce to adhere to the national-level GAP (Good Agricultural Practices) standard which permits limited use of agricultural chemicals, but prohibits herbicides. In contrast, Town D's local food certificate forbids the use of herbicides, soil disinfectants, and plant growth regulators all together. When multiple certificates coexist, food items from rural towns paired with national-level certificates are generally preferred over those with local certificates. As such, the UCPM incentivizes the use of sustainably grown produce by establishing quality guidelines for procured food, thereby increasing market share and fostering sustainable agricultural practices in the long term.

However, the ambiguity of the term "environment-friendly" and its interchangeable use with "sustainable," even within the policy guidelines, creates challenges in effectively implementing regulations for the production and distribution of sustainably grown agrifoods. For instance, the national certification system uses the term "environment-friendly" to encompass only organic and non-pesticide agricultural products with minimal chemical use. This regulatory focus on controlling chemical use implies that the government prioritizes environmental sustainability over other aspects of sustainability, such as social, economic, and cultural perspectives, in its view of sustainable agriculture. The varying interpretations of policy concepts

among stakeholders is a phenomenon frequently observed in various planning practices. However, a significant observation from the UCPM case is the potential trade-offs that arise between different emphases on sustainable agriculture and products. If sustainability is narrowly defined, focusing predominantly on technical chemical usage without long-term institutional support and plan for cultivating sustainable agriculture, this can pose significant barriers to becoming a qualified producer. Such a restrictive definition could eventually hinder the expansion of sustainable agricultural production, despite potentially improving the quality of agrifood available to consumers.

National-level Certifications for Environment-friendly Agricultural Products

Category	Certification Logo	Standards
Organic		- Avoidance of all kinds of agricultural chemicals (including pesticides, herbicides, and growth hormones) - Avoidance of chemical fertilizers - Avoidance of antibiotics - Avoidance of GMO products - A transitional phase of three years of practicing organic agriculture is required to obtain the certificate
non-pesticide		- Avoidance of all kinds of agricultural chemicals - Avoidance of GMO products - Permitted use of less than one-third of recommended amount of chemical fertilizers

Table 4. Overlaps and differences across certifications for agricultural product

(Table continues on the next page)

National-level GAP (Good Agriculture Practice) Certification

GAP	GAP (우수관리인증) 농림축산식품부 GAP MAFRA KOREA	- Permitted use of both agriculture chemicals and chemical fertilizers as recommended by the relevant national law - Permitted use of GMO products - Monitoring the entire process of food production, harvest, storage, and distribution

Examples of Local-level Certifications[16]

Town	Standards
Town A’	- Adherence to GAP standards - Avoidance of herbicides
Town D’	- Avoidance of herbicides, soil disinfectants, and plant growth regulators - Permitted use of other agriculture chemicals as recommended by the relevant law

Table 4. Overlaps and differences across certifications for agricultural product

[16] Although local-level certificates have specific logos to express their locality and environment-friendliness as well, this chapter does not include them to maintain the confidentiality of each town.

5.3 Dynamics of local food procurement: perspectives, challenges, and implications

Some stakeholders of the UCPM believe that adopting a place-based approach to public food procurement, which entails connecting two specific regions through an exclusive direct supply chain based on geographical and administrative pairings of two units, has the potential to address two key concerns. Firstly, it could help prevent the concentration of industrial agriculture firms, ensuring a more diverse and sustainable agricultural landscape. Secondly, it could distribute greater public resources to more small- and mid-scale family farms by encouraging contracts for diversified production in smaller quantities than previous public procurement contracts required. The UCPM designers and advocates envision the establishment of a region-wide network of solidarity among those committed to sustainable agriculture and local food systems, capitalizing on the strong place-based connectivity between urban and rural communities. Nevertheless, their perceptions and expectations of the UCPM's place-based approach expose a critical gap in enhancing the locality of the regional food system.

According to various stakeholders interviewed, the concept of "local food" may not be easily applicable in a highly urbanized metropolis such as Seoul. They tend to view "local" as a municipality-driven unit and argue that the city's production capacity is insufficient to meet its food demands, particularly when considering urban agriculture initiatives. For example, Interviewee 4, a stakeholder who manages a district-level public meal center, highlights that food sourced from remote rural areas outside the city cannot be strictly defined as local. Instead, they propose enhancing urban-rural linkages to source food from rural areas in a sustainable manner. These stakeholders expect Seoul, being the largest city in the country, to place greater emphasis on consuming locally sourced food from the wider region. They believe that this approach will foster a stronger connection between urban and rural areas, promoting a more regionally

integrated food system. In a conversation with a civic expert (Interviewee 1) involved in formulating the UCPM, it becomes evident that the concept of local food within the UCPM extends beyond geographical boundaries. It serves as a means of resisting the control exerted by corporate-driven food systems, encapsulating a collective yearning for sustainable and community-oriented approaches.

> [During the development of the UCPM] we initially had some reservations about using the term "local food" due to its frequent misuse. However, we ultimately chose to embrace it as a means to contrast with global food systems, capitalist agricultural policies, and the Green Revolution spearheaded by transnational food and seed corporations. True "local food" goes beyond mere local production; it embodies alternative principles that challenge profit-oriented food systems. In my opinion, comparing local food systems to the corporate-driven global ones, rather than getting caught up in specific attributes, would be more impactful in capturing public attention and reducing widespread confusion. (Interviewee 1).

The rural participants in this study express concerns that the UCPM's definition of "locality" may be constrained to an administration-drive unit, as reflected in the distribution-oriented approach. Food hub managers in rural areas echo this belief, emphasizing the need to develop long-term capacities of rural communities. This includes creating physical infrastructure, such as marketplaces for direct sales and food processing facilities, as well as envisioning community redevelopment, fostering local cooperatives, and building trust among stakeholders to increase contract farming. One manager (Interviewee 20) stressed that "local" should encompass more than just direct sales and should also take into account the cultural and historical heritage of communities. This perspective extends beyond viewing food merely as a

substance from a materialistic standpoint. This manager also highlights the role of the local food system in empowering farmers and maturing regional food governance.

> When you compare it to conventional food systems that depend on wholesale markets and intermediaries, you'll see that farmers who engage in the local food system have greater autonomy over their production. It's like they're calling the shots. The UCPM's approach of matching specific regions is all about establishing *regional* food governance. But here's the catch: if we stick to a really narrow definition of "local," we run the risk of leaving out certain regions from accessing public resources. We must adopt a broader and more inclusive perspective in our approach (Interviewee 20).

His perspective, interpreting "local" as a broader set of values derived from the local context, was supported by other stakeholders who advocate for the incorporation of multifaceted perspectives of locality. They believe that embracing various dimensions of locality can foster food systems that are not only sustainable but also resilient:

> There was this consumer co-op that argued that since South Korea is smaller than some US states (See Appendix C for a map-based comparison), pretty much anything can be considered local. But if we want to truly support local food systems, we must focus on revitalizing local communities, which becomes more achievable when they are geographically proximate to one another (Interviewee 4, a district-level public meal center manager).

> Local food initiatives are not just about setting up farm stands where you can buy fresh produce straight from the source. The real game-changer is getting farmers on board through contract farming and building sustainable relationships with the community (Interviewee 18, a local government official).

While the UCPM's interim evaluation report indicates an increase in the number of participating farmers, the extent to which they benefit from publicly supported supply chains remains uncertain. Some stakeholders, including farmers and grassroots activists, have raised questions about the effectiveness of the UCPM's place-based strategy in improving the livelihoods of small/mid-scale and family farms. For instance, rural towns may acquire products from neighboring towns or even the entire province when facing shortages. In situations where items are unavailable in rural towns, social enterprises contracted to manage district-level public meal centers in Seoul provide substitutes through private distribution channels, often involving local cooperatives but not exclusively. However, the exact quantity of outsourced goods and their sources are undisclosed. The one-to-one place-based pairing has also faced criticism for its limited range of food options, as urban institutions encounter challenges in obtaining all required agrifood ingredients from a single rural town within the required timeframe. Despite an electronic ordering system that allows rural food hubs to anticipate purchase volumes, geographical and seasonal constraints often necessitate alternative purchasing options that may not prioritize locality or environmental friendliness. Agrifood system experts caution against the potential for large-scale conventional agricultural players to infiltrate the public food procurement system through this gap, particularly in rural towns where the National Agriculture Cooperative Federation[17] serves as a local food hub.

[17] The National Agriculture Cooperative Federation (NACF) was established as a parastatal organisation in the agriculture sector during the 1960s dictatorship in South Korea. Its primary role was to connect individual farmers to national markets for agricultural commodities, agro-inputs, and labor, thereby functioning as an aggregation of farmers (Burmeister, 2012). The NACF has grown significantly over the years through mergers and acquisitions, and it is now a major player in the financial holding industry as well as the agricultural sector.

5.4 Navigating the landscape of environment-friendly certifications: consumer trust and agricultural realities

In recent years, numerous rural municipalities in South Korea have implemented independent local food certification programs to promote local food production and build consumer trust. This approach is preferred as most rural small-scale farmers, even when producing organic crops without chemicals, are unmotivated to obtain costly and time-consuming national certificates. Based on statements made by Interviewee 17, the head manager at a rural local food hub, local food certificates are intended to assist small-scale farmers who cultivate a variety of crops in smaller quantities, often from elderly or family-owned farms. The manager points out that the current sustainability initiatives in agriculture face challenges related to barriers to entry and scalability. The experiences of local farmers demonstrate that conventional wholesale markets often disregard or undervalue non-certified organic produce due to the absence of an effective quality evaluation system and inadequate distribution channels. Moreover, the current national certification systems present difficulties for farmers for farmers who abruptly face predicaments, such as chemical contamination of their land caused by unavoidable natural disasters. These existing systems promptly revoke national certificates without offering a probationary period or technical support, leaving farmers with no choice but to abandon their harvest.

These challenges can be mitigated by streamlining bureaucratic processes and offering technical support to facilitate a gradual transition to organic farming. The overarching aim of implementing local certificates is to facilitate the full transition of small-scale farmers to sustainable agriculture and enable them to achieve a more rigorous national certification. This perspective is reaffirmed by a manager at a district-level public meal center in Seoul:

> In our district, we accept both national and local certificates. About 47% of the entire supplies are nationally approved as environment-friendly, and 40-50% have local certification. We do this because sustainable agriculture in Korea is still developing, and less than 5% meet the national organic standards. We don't have to exclusively rely on organic food when only a few options are truly sustainable. Our goal is to support farming that's free of chemicals, herbicides, and pesticides, and local food certification can help us get there (Interviewee 25).

Still, while the manager agrees on the need for implementing local food certification to encourage the expansion of agriculture practices enhancing more sustainability, but they imply that what "truly sustainable" is equivalent with organic foods in this conversation.

While local food certificates are considered a means to encourage sustainable agriculture, there are concerns among certain urban consumers regarding their reliability and quality. An activist affiliated with a grassroots organization dedicated to improving meal services for children expresses these apprehensions:

> We need to get our act together and set up a food safety regulation system that can handle different certificates. But here's the deal: local food certificates are a bit different. They're not all about promoting environment-friendly food production. It's more about supporting local farmers without diving into the nitty-gritty of the certification system. When we say "environment-friendly," we mean organic, no pesticides, with a national certification, and no antibiotics. Even the stuff they use for making processed food needs to follow these standards. Unfortunately, these rules might not always be followed in the UCPM (Interviewee 27).

Based on feedback received from directors of local preschools, Interviewee 27 mentions concerns that relying excessively on local certifications may lead to a potential decrease in the standards for "environment-friendly" products provided to children. This raises questions about

the reliability and quality of food in public settings, especially when it comes to ensuring sustainable and high-quality options for young children.

On the other hand, one source with connections to a local food hub in a rural town points out problems with the certificate system that places consumer needs as a priority, particularly due to the heavy reliance on national certificates as the sole means of obtaining environment-friendly products:

> The current system creates a big divide among farmers in this industrialized environment-friendly agriculture. Some farmers really want to be part of it, but they can't because of certain restrictions. And it's not just the farmers, us consumers are also affected. There's this distinction based on income levels, like the "bourgeois consumers," which makes it harder for some of us to access healthy food. The problem is the centralized organic certificate system, controlled by the government, which excludes potential initiatives and overlooks important sustainability elements like the ecosystem, cooperation, traditions, communities, and the coexistence of urban consumers and rural farmers (Interviewee 20).

Staff at district-level public meal centers in Seoul have reported that urban consumers frequently express apprehension about the safety of food guaranteed through local certifications and possess limited knowledge of the agricultural system. These conditions make it difficult to convince them of the benefits of local certificates. Rural farmers advocate for raising awareness among urban consumers about the reality faced by smallholders in adopting sustainable agricultural practices, dealing with the root of the problem with the corporate-dominant food system. Some farmers are hopeful that the consumer education and urban-rural exchange programs, like those provided by the UCPM, will enhance urban consumers' understanding of the goals of public food procurement and bridge any perceived gaps in program agendas between urban and rural

stakeholders. As interviewees pointed out, these initiatives play a vital role in fostering dialogue between different actors, ensuring a more inclusive and well-informed approach to public food procurement.

The government officials interviewed also acknowledged customer concerns regarding local food certifications. Despite initial reservations about accepting non-national certifications, the municipal authorities maintain a positive outlook on the growing acceptance of local food initiatives in rural areas by urban residents. Their focus is on increasing the availability of locally certified food within the city, which could potentially inspire other cities to adopt similar sustainable food practices. An employee (Interviewee 21) from a rural local food hub shares this optimistic view, believing that greater acceptance of local food certifications in Seoul can serve as a catalyst for other municipalities to follow suit. Ensuring that consumers understand and support these local certifications, however, is still a challenge. For instance, Interview 6, a district-level public meal center manager, provides insights into how they have navigated consumers need and agricultural realities:

> Consumers are disappointed to find out that products they bought, thinking they were "environment-friendly," did not live up to their expectations. In the past, "environment-friendly" referred to products that were either pesticide-free or had low pesticide levels, but it seems like the government's definition can influence how it's understood. This makes me question whether the government's initial message about the UCPM was misleading. Our main goal isn't just about reinforcing environment-friendliness, but maybe we got carried away by overemphasizing "environment-friendly" and "food safety" to the public. (Interviewee 6).

These findings highlight the significant influence of the government's definitions of "environment-friendly" and "sustainable" on public perceptions. Nevertheless, several interviewees expressed concerns regarding the governance structure and decision-making processes of the UCPM, as they do not adequately facilitate active participation from stakeholders in crucial discussions and negotiations. Constraints concerning time, space, and political dynamics often hinder equal opportunities for engagement. Moreover, while the civic food council is in place, its limited legal authority primarily restricts its role to advisory, thereby restricting its influence in shaping policies.

6. Discussion

This study revealed diverging or often contrasting perspectives among urban and rural stakeholders concerning the core program agendas within the UCPM, particularly in relation to the concepts of "local" and "environment-friendly." The findings illustrate that UCPM embodies a nuanced comprehension of locality that transcends geographical connotations, serving as a counterweight to the corporate-centric traits of global food systems. It offers an alternative outlook to the defensive and one-sided nature of localism, urging a more inclusive and multi-dimensional approach to local food that encompasses social, cultural, and environmental aspects. In addition to a specific geographic definition, stakeholders in this study outline a set of other attributes that should characterize "local" food systems[18], including:

[18] This set of features was extracted from qualitative data collected during interviews. I used Dedoose software to sort out quotes using the keywords "local" and "local food." An inductive analysis of these quotes revealed a set of keywords that indicated some shared characteristics of local food, including community engagement, social capital, local economies, traditions, local knowledge, and food availability. The final list was created by reorganizing the data around this set of novel sub-keywords.

- Fostering community engagement and social capital within the food system
- Increasing economic opportunities and diversifying local economies, specifically for small- and mid-sized producers
- Promoting the preservation and sharing of traditional food cultures
- Encouraging local knowledge and understanding of farming practices and food systems
- Enhancing the quality and availability of fresh, healthy food in rural areas, as well as urban

The concept of "local," often defined by diverse interpretations either confined to municipal boundaries or broadened to encompass wider community-based values, underlines the intricacies of place-based food systems. Adopting a regional perspective can provide an enriched understanding of these systems. Although the term "regional" bears a resemblance to "local" in its multiplicity of interpretations, it typically denotes a larger geographic area and operates on a broader scale than a local food system. According to Ruhf and Clancy (2022), regional food systems comprise an array of functions including volume, variety, supply chains, markets, food needs, land use, governance, and policy. Unlike local food systems, which are centered on specific communities or areas, regional systems comprise multiple local entities and represent more than merely the sum of their parts (ibid). Ruhf and Clancy argue that regional systems accommodate fluid boundaries where regions can overlap and nest within one another, enabling the building of sustainable and resilient food systems that cater to the needs of both producers and consumers within a broader geographic context.

The UCPM adopts a place-based approach to public food procurement, employing one-to-one matching within shortened territorial food supply chains facilitated by multiple public food hubs. This model provides a scalable and reproducible solution for tackling challenges related to the integrated territorial paradigm. However, despite the common belief that direct

sales through shortened food supply chains contribute to localizing regional food systems, stakeholders often express reservations about its effectiveness. While direct sales hold potential to benefit farmers by reducing intermediaries and streamlining the food journey from farm to plate, this alone cannot guarantee a substantial increase in the local food supply or the expansion of sustainable farming practices.

To tackle these concerns, interviewees emphasize the importance of overcoming longstanding systemic barriers to sustainability innovation in the agricultural landscape. These barriers include regulatory constraints associated with organic certifications, challenges related to land acquisition, and unfavorable market conditions influenced by food corporations, which collectively hinders the progress of innovative experiments in the sector. They propose initiatives such as incubating local cooperatives, preserving traditional foods and food cultures, and expanding agritourism programs. By strengthening the soft infrastructures, these efforts aim to enhance social capital and foster a sense of identity. Achieving sustainability in food systems requires the establishment of solidarity networks that connect diverse stakeholders and regions through everyday practices (Schrager, 2018). This comprehensive approach considers both material and non-material factors from food systems infrastructures, recognizing the significance of social connections and cultural values in building resilient and sustainable food systems.

Additionally, the assumption that increasing the consumption of locally sourced food will automatically lead to the revitalization of rural communities needs to be critically examined. It is essential to recognize that not all rural areas are heavily reliant on agricultural industries. Other economic activities and factors, such as tourism, manufacturing, or service sectors, may play a more significant role in shaping the development and prosperity of rural communities. Thus, a more nuanced understanding of the diverse economic dynamics within rural areas is crucial to

avoid oversimplifying the potential impacts of local food consumption on community revitalization. While supporting local agriculture can be beneficial, it should be part of a comprehensive approach that considers all economic/societal sectors and ensures that efforts align with the unique needs and potentials of each rural community.

Stakeholders in urban and rural areas have varying perspectives on what constitutes "environment-friendly" produce, leading to divergent opinions on agricultural priorities. Much of the confusion stems from the concurrent use of the terms "environment-friendly" and "sustainable" without clear definitions or distinctions in the Korean context. Therefore, it is imperative to reflect on whether the pursuit of environment-friendliness necessarily entails sustainability. Although the UCPM has established quality guidelines to promote locally grown sustainable food and build consumer trust, research suggests that solely focusing on a chemical-free diet may not ensure long-term food system sustainability (Béné et al., 2019; Macdiarmid et al., 2011; Tilman & Clark, 2014). A narrow focus on organic farming alone might overlook certain critical aspects that contribute to sustainability as a broader concept beyond environmental preservation, leaving economic, social, and cultural considerations out of the equation. While reducing the use of agricultural chemicals is undoubtedly a positive step towards environmental preservation and human health, other crucial elements of sustainable food systems must also be considered as important agendas, such as fair labor practices, fair trades, and reduced carbon footprints. By acknowledging the multifaceted nature of sustainability, policymakers and stakeholders can develop more comprehensive strategies to promote environmentally conscious and socially responsible food systems.

Within the UCPM framework, consumer preference for "environment-friendly" produce is predominantly centered around nationally certified organic food. However, this exclusive

focus on national certification can discourage small- and mid-scale farmers who are transitioning to or expanding sustainable agriculture through local food certification programs (Howard & Allen, 2010; Tscharntke et al., 2021). Notably, there has been a growing trend away from industrial methods of production in the agricultural scene, and this shift is characterized by a greater maturity in sustainability efforts and the emergence of more nuanced options for food production. In Korea, local food certifications serve as a complement to the time- and cost-intensive national certifications, playing a crucial role in increasing the presence of more sustainably grown produce in the market and providing more sales opportunities for farmers. They act as a transitional phase for organic farming, facilitating the scaling-up of innovative agricultural practices and the diversification of healthy food options. Understanding the interplay between consumer expectations and the practical realities faced by farmers is crucial for these initiatives. Nonetheless, a conflict of interest arises due to the disparity between consumers' perception of the "healthiest" option, often nationally certified organic produce, and the challenges faced by local farmers who cannot afford significant investments in facilities and costly national certifications.

The existence of conflicting interpretations of policy agendas presents significant challenges in establishing strong and effective partnerships, ultimately compromising the long-term viability and success of policies (Janssen, 2014). Within the UCPM, trust-building through social bonding within supply chains is a fundamental aspect of the place-based approach, articulated as the "relationship-based market." In Seoul, various government-driven initiatives, such as stakeholder convenings and a civic food council, have been introduced to foster collaborative decision-making processes. The successful integration of multiple actors' perspectives and insights into decision-making processes is crucial for the effective

implementation of food policies (Cifuentes et al., 2021). To achieve this, it is necessary to implement planning tool sets that promote equilibrium in governance, ensuring that no single entity dominates decision-making. Additionally, a critical aspect lies in empowering farmers with greater control and decision-making authority over their production and sales processes. This empowerment allows them to shape and exercise autonomy in making independent decisions in farming practices, establishing their position as substantial players in the agricultural landscape.

The UCPM case highlights the critical role of direct public investments in building reliable infrastructures as a means to transform the middle of food systems through public food procurement. Government-led initiatives are instrumental in driving this process, going beyond the task of securing anchor institutions in urban areas. These initiatives involve the implementation of innovative policy tools that foster the development of both hard infrastructures (e.g., warehouses, transportation, food processing or packing facilities) and soft infrastructures (e.g., local or regional networks, knowledge sharing, technical support) in the "missing middle" (Morley et al., 2008) of the food system, guided by a long-term vision for change. One crucial aspect of the UCPM is establishing sustainable linkages between local farmers and consumers, often through practices like contract farming or community-supported agriculture, which are observed in various global initiatives (Jia et al., 2014; Sharp et al., 2002). To strengthen partnerships and enhance the long-term capacity of rural communities, it is vital to foster mutual interactions between urban and rural actors, supported by food literacy and a holistic understanding of the local agricultural system (See Figure 10 for visualization).



Figure 10. Consumer education programs enhancing awareness through farm visits
Source: Seoul Metropolitan Government

7. Policy Recommendations and Conclusion

The potential of public food procurement to transform regional food systems through enabling policies and economies of scale is increasingly recognized. Particularly, volume purchasing through institutional food procurement can serve as an effective alternative to large-scale corporate food systems, addressing the limitations of local food systems reliant on small-scale production. Governmental intervention in food procurement can address issues such as shortages of necessary funds or the lack of long-term strategies, often experienced by grassroots or non-profit organizations, by providing institutional and legislative support. Scholars argue that investing in food systems infrastructure, such as food hubs, as public goods is essential for re-localizing food systems, particularly considering that municipal-level initiatives can act as catalysts for regional development. Despite this recognition, there is a dearth of research exploring the specific strategies that governments can employ to develop localized and sustainable food systems through public food procurement. The implementation of the UCPM in Seoul presents a compelling case of a city-level initiative that offers valuable insights into how municipal governments can effectively bring about change in regional food systems. By

establishing robust connections between urban and rural areas through the use of anchor institutions, and by supplying both material and non-material support systems, the UCPM showcases an alternative framework for public food procurement that (re)shapes regional food systems and advances the goals of sustainability and localization.

An examination of the UCPM, which adopts a place-based approach in public food procurement to establish territorial food supply chains, suggests that the ways that keyconcepts like "locality" and "sustainability" are operationalized can undermine the success of such food systems initiatives amid political tensions surrounding diverging food priorities. While some interpret "local" as municipality-based unit, other argue that the notion of "local" extends beyond geographical boundaries and should be understood as a socially constructed concept that serves as a counterpoint to the dominant corporate-driven global food system. To establish a more multi-dimensional approach to local food systems, rural stakeholders suggest planners and practitioners take into account social and cultural aspects of communities, such as social capital, historical heritage, and cultural assets, and prioritize the establishment of robust and sustainable connections across the urban-rural continuum. This local knowledge can help policymakers and stakeholders consider the specific context of each rural region and identify the most appropriate strategies for promoting sustainable development in the region.

This study highlights an important discrepancy between urban consumer preferences for the healthiest food options, which often favor nationally certified organic products, and the realities of agricultural priorities and capacities in the field when it comes to expanding sustainable farming practices. The focus on nationally certified organic products may not always align with the needs and capabilities of small- and mid-scale farmers who may face challenges in meeting stringent organic certification requirements. To address this gap, creative solutions that

leverage local food certifications can play a crucial role in supporting these farmers during their transition to organic farming practices. By providing incentives and assistance, such local certifications can help farmers improve their agricultural practices while also offering consumers increased access to fresh and healthy food options. Campaigns and educational programs can be instrumental in increasing public understanding of sustainable farming practices and the importance of adopting healthy diets, taking into account environmental, economic, and social externalities.

In the similar vein, stakeholders, particularly those from the civic sector, emphasize that the primary goal of the UCPM goes beyond the mere expansion of organic farming. It seeks to address fundamental issues within conventional food systems and drive transformation in regional food operations. However, the persisting confusion and hesitations among the public regarding local certifications highlight the need for collaborative efforts and supportive institutions (such as townhall meetings and decision-making processes with stronger legal implications) to facilitate shared visions among stakeholders from both urban and rural areas. This collaborative approach is crucial for effectively translating key policy concepts into actionable steps and fostering significant change. By unifying their messaging, the government can alleviate public confusion and streamline policy implementation, thereby enhancing the potential for transformative impact within the food system.

Finally, the study's findings underscore the importance of having well-established hard and soft infrastructures in place to facilitate mutual understanding and collaboration between urban and rural stakeholders. A robust infrastructure is essential for ensuring effective communication, coordination, and implementation of public food procurement initiatives. Alongside this, fostering a more democratic decision-making process is crucial to incorporate

diverse perspectives and ensure that policies are inclusive and representative of the needs and interests of all stakeholders. Such an approach can lead to more equitable and sustainable food systems that address the complexities of urban food governance, considering not only political and economic contexts but also spatial dynamics and imaginary elements (Coulson & Sonnino, 2019).

The generalizability of this case study may be limited due to the context-specific characteristics of the UCPM and the Seoul region. However, the insights it provides into the local and sustainable aspects of food systems support existing theoretical arguments in the broader literature, offering empirical evidence for the potential of a place-based and territorial approach to public food procurement and the role of the public sector in developing alternative agrifood chains. Meaningful lessons can be derived from the interim success and barriers revealed through UCPM model, a place-based one-on-one paring strategy, for other global municipalities considering public food procurement to rebuild the middle of the regional food system.

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Chapter 4 Co-operation, Co-optation, and Contestation: Local Food Politics and Grassroots Strategies in Scaling up Alternative Food Initiatives[19]

1. Abstract

This study explores the dynamics of institutionalizing grassroots local food initiatives, focusing on Seoul's Urban-rural Coexistence Public Meal Service Program (UCPM). Amidst environmental and societal challenges, there is a growing need to transition toward sustainable food systems. Public food procurement, leveraging government purchasing power, plays a crucial role in reshaping regional food systems. Understanding the interplay between government entities and grassroots actors is essential for successful partnerships and program implementation. This study examines the governance interplay — cooperation, co-optation, and contestation — between the government and grassroots actors in the UCPM. Major findings highlight grassroots actors' active utilization of government resources to sustain their initiatives and secure institutional longevity. These insights inform planners and practitioners in crafting collaborative food governance models that enhance the transformative potential of local food initiatives. The study contributes to the discourse on politics around sustainable food systems, guiding policymakers and practitioners involved in shaping the future of local food movements.

[19] This chapter is modified based on an article currently under review for publication in Agriculture and Human Values.

2. Introduction

Escalating global concerns over the detrimental implications of industrialized, corporate- and profit-driven food systems, including climate change, the loss of biodiversity, and disparities in access to healthy food (Crippa et al., 2021; Springmann et al., 2018; WHO, 2021), are driving a significant rise in initiatives to change the status quo. These transformative endeavors cover a broad spectrum, extending from long-established grassroots social movements such as the Slow Food Movement, the local food movement, and alternative food networks, to more recent government-driven initiatives, such as the Milan Urban Food Policy Pact and Food Trails (Clancy et al., 2008; den Boer et al., 2023; Schiff, 2008). Despite sharing a common goal of fostering more equitable and sustainable food systems, these initiatives differ in terms of their structure and scope, reflecting diverse perspectives on future visions and methodologies. To render a generalizable understanding, Eakin et al. (2017, p. 759) characterize a sustainable food system in the following manner:

> "… a sustainable food system…[is] one that achieves and maintains food security under uncertain and dynamic social-ecological conditions, through respecting and supporting the context-specific cultural values and decision-processes that give food social meaning, and the integrity of the social-ecological processes necessary for food provisioning today and for future generations."

As concern has grown over an increasing number of food systems crises, more than two decades ago, Pothukuchi and Kaufman (1999) highlighted a prevailing misconception among planners and policymakers in the United States. They drew attention to the misguided belief that the failure of the urban food supply was primarily due to inefficiencies in agricultural *production* and the market, while overlooking the critical issue of equitable food *distribution*. This

misinterpretation, as argued by Sonnino (2009), has led to a lack of publicly-led interventions to address food access and security issues. Consequently, the responsibility for addressing these challenges has largely been left to the private sector, nonprofits, and grassroots social movements.

One novel strategy aimed at establishing alternatives to profit-driven conventional food distribution systems is the development of Alternative Food Networks (AFNs). These networks encompass both tangible and intangible infrastructures, such as direct sales systems and food hubs as well as stakeholder networks for knowledge exchange and co-learning. The Farm to Institution approach is an example of an AFN that seeks to improve access to fresh and healthy food from local farms for schools, universities, hospitals, prisons, and other institutions. This approach aims to shorten supply chains between regional producers and consumers by bypassing or reducing the involvement of commercial intermediaries (Harris et al., 2012).

Building upon the success of the Farm to School initiative, new campaigns have emerged to elevate food standards, specifically for children under the age of five. In the United States, the federally-funded Child and Adult Care Food Program supports Farm to Preschool initiatives, which promote the use of locally and regionally produced foods in early childcare and education settings. One such example is the Farm to Early Care Education Network, including the 10 Cents a Meal, initiated in Michigan (USA). These initiatives incorporate hands-on learning activities such as gardening, farm visits, culinary experiences, and integrate food-related education into the curriculum (USDA, 2017). These efforts essentially aim to improve food quality and relevant education for young children prior to their formal K-12 education.

While these local efforts are often led by non-governmental organizations or private enterprises, school food programs and other government-led public plate initiatives in numerous

global cities have consistently demonstrated the potential of governmental involvement to serve as a transformative force within food systems (Aegerter et al., 1990; Morgan & Sonnino, 2007). By leveraging the purchasing power of the government, public food procurement aims to restructure the middle of regional food systems, utilizing public entities like schools, hospitals, and carceral facilities as anchor institutions that generate stable demand for locally and sustainably produced food (Morgan & Morley, 2002; Stahlbrand, 2017). Such programs allow governments to assume a pivotal role in transforming local food practices, by incubating experimental practices that tackle critical concerns of economic equity and social justice (Sonnino, 2010).

One such initiative – recognized with an award from the Urban Food Policy Pact – is the Urban-rural Coexistence Public Meal Service (UCPM), launched in 2017 in Seoul, South Korea (hereafter Korea). The UCPM represents a government-led effort to create alternative distribution channels between urban consumers and rural communities, using anchor institutions such as daycare centers, preschools, local welfare facilities, and hospitals located within Seoul. The original idea and a smaller-scaled version of the UCPM was inspired by a local grassroots initiative. Yet, while the city government has strived to incorporate various non-governmental organizations as vital collaborators by entrusting them with the operation of local public meal centers, instances of local actors being excluded and exhibiting opposition have emerged during the program's implementation.

I argue that the UCPM case embodies the "paradox of institutionalization" (Stammers 2009) – situations where grassroots or non-governmental actors leading initiatives in alternative food systems often find themselves caught between adherence to opposing dominant practices and securing the institutional support needed to enhance progress. This paper delves into the

impact of institutionalization on grassroots capacity for program execution, aiming to uncover whether it enhances or hampers their potential to drive broader transformative change. Illustrating the governance structure and dynamics in the UCPM provides valuable insights into the possibilities and obstacles involved in scaling-up efforts that often begin as local grassroots innovations.

The rest of this paper will start by detailing governance and institutional aspects of sustainability transitions literature that helps explain the dynamics seen in the UCPM case. Following the methods section, I explain the context in which a local grassroots practice was adopted and institutionalized into a city-level policy program, along with the diverse types of interactions between the government and grassroots organizations that this scaling-up process has engendered. I then highlight the strategies and visions of local food activists in response to the increasing governmental preemption over local resources. The discussion section further elaborates on how power dynamics within an institutionalization process can impact program implementation, goal orientation, and future sustainability transition governance. I conclude with policy implications and suggestions for future research.

3. Theoretical Framework

The theory of sustainability transition is a prominent approach in sustainable development, outlining pathways towards permanent structural change and fostering critical examination of transition processes (Grin et al., 2010). Food systems, with their complex nature, can serve as an useful lens for scrutinizing the empirical mechanisms involved in such transformative processes and for applying its foundational theoretical concepts in practical contexts (Sarabia et al., 2021; Spaargaren et al., 2012). Within this theoretical structure, the

Multi-level Perspective provides insight into transitional dynamics, framing transitions as "regime" shifts that result in significant changes in prevailing institutions or practices (Geels, 2002; Smith et al., 2010). These shifts entail the de-institutionalization of existing configurations that are ineffective or problematic, and the establishment of new and more desirable ones (Fuenfschilling et al., 2019). From an empirical standpoint, sustainability transitions can be seen as processes of institutional change initiated, propelled, and acknowledged by social entities (Fuenfschilling & Binz, 2018; Geels, 2004).

The role of governance and politics as crucial facilitators or inhibitors of sustainability transitions has been underscored in academic literature. For example, the transition management framework — a facet of sustainability transition theory that proposes transitions as controllable and susceptible to planned manipulation (Kemp & Loorbach, 2006) — has been criticized for its perceived neglect of transition politics. Critics argue that its normative bias undermines the indispensable role of human agency and subtle dynamics at a micro level (Shove & Walker, 2007). Moreover, there has been a paucity of academic exploration regarding the relationship between experimental bottom-up niche practices and institutional change within urban environments, particularly the process of institutionalization as a vehicle for advancing transformative initiatives (Fuenfschilling et al., 2019). Institutionalization, a series of administrative and legislative measures to establish and embed new ideas, norms, rules, or practices within the society, may serve as a mechanism to extend the influence and impact of niche actions on the prevailing food regime (Son, 2023). Therefore, understanding political dynamics inherent in the institutionalization process is vital for facilitating an anchoring process, a concept referring to sustained interaction between niches and regimes for deep-rooted structural change (Elzen et al., 2012).

3.1 A Governance perspective in sustainability transitions

Transition scholars, particularly those advocating for strategic transitions and niche management, often face criticisms for overlooking the politics involved in transition governance when they propose the idea of deliberate control over transitions or niches (Kern & Smith, 2008; Meadowcroft, 2007; Shove & Walker, 2007). Counteracting such critiques, Grin (2012) contends that contrary to the prevalent view that politics can unfavorably interfere with transitions, it can potentially aid in transforming power relations and establishing legitimacy throughout a transition process, thereby altering the source of power and legitimacy. This dialectical approach to politics could empower practitioners and planners to harness political dynamics in order to steer and generate sustainable outcomes. Grin and colleagues suggest that a governance perspective can introduce multifaceted advantages into the discourse on sustainability transitions. They state:

> "1) First, it contributes to the historical contextualizing of the transition towards a sustainable society in late modernity. … 2) Second, a governance perspective emphasizes not only the nature of transitions as profound changes in both established patterns of action and the structure in which they are embedded, but also how these changes in practices and structure in a particular domain are influenced by long-term societal trends exogenous to that domain. … 3) It pays attention to dealing with the politics intrinsic to transitions and system innovation." (Grin et al., 2010, p. 224)

To elucidate governing interactions during a period of food regime transition — what Friedmann (2009, p. 335) terms as a phase of "unresolved experimentation and contestation" — Morgan & Sonnino (2010) introduced the term New Food Equation. This term encapsulates the interplay among emerging trends within food systems, such as food price hikes, food insecurity,

national security concerns, and land disputes, which signifies a recognition at the higher political level of the multifaceted nature of agrifood systems by national and international governing bodies. A key takeaway from the New Food Equation is the crucial role of *urban governance* in leading a sustainable transition, as contemporary food issues intertwined with socio-economic and environmental factors often become most apparent at the municipal level due to high population density and concentrated power in cities. Consequently, innovative solutions are primarily being conceived and enacted at this level, underscoring the role of municipal governments as *food chain innovators* wielding both political and economic power, as argued by Morgan and Sonnino. This trend underscores the vital need to scrutinize the evolving dynamic between governmental and local grassroots initiatives in the face of growing governmental involvement in urban sectors.

By drawing on the example of short food supply chains, Le Velly et al. (2021) elaborate a political process of sustainability innovation through *detachment* and *attachment*. Building on the concept of "innovation through withdrawal (Goulet & Vinck, 2012)," which denotes advancements achieved via detachment (e.g., food without preservatives, car-free cities, till-free farming), Le Velly and colleagues expound that detachment from one aspect entails attachment to another. Within short supply chains, for instance, not all market intermediaries — especially traditional corporate marketers and intermediaries — are entirely eliminated, but rather, they are supplanted by different entities such as government actors, public institutions, or grassroots organizations, as evident in the UCPM case. They propose that researchers should concentrate on the process of *new attachment* (with) because *detachment* is not the ultimate objective of an innovation. This attachment/detachment framework offers insights into both theoretical and empirical relationships between key actors within food supply chains, addressing questions on

who spearheads a transition and how power relations are restructured and legitimized during a food system innovation.

3.2 Paradox of institutionalization

The process of institutionalizing grassroots experiments could potentially redirect mainstream practices and instigate regime shifts by expanding the scope of niche-driven innovations. Insights from policy science literature shed light on this institutionalization process, offering practical analysis to bolster such transitions. A significant question that arises in the context of institutionalizing niche practices revolves around how a new policy can secure support from distinctive interest groups across the niche and regime, and how its longevity can be ensured. As Patashnik (2014) suggests, the future path of a policy could be influenced by two factors: 1) the stability or fluidity of the interest group, and 2) the extent of durable investment committed to the reform. The interplay of these factors could either fortify, restructure, revoke, or undermine policies. However, attempts at policy reform may encounter paradoxes, such as the possibility that efforts expediting initial adoption could provoke long-term sustainability issues, and that subsequent corrective measures could rebound negatively in the face of certain political dynamics (ibid). These complexities emphasize the intricate nature of institutionalization as a political maneuver.

Stammers (2009) refers to the "paradox of institutionalization" as a dilemma that social movements face when engaging with institutions might threaten their ability to challenge dominant paradigms. As such, actors who initially develop niche practices are forced to choose between institutionalization and opting out. Stammers (2009) warns that "power to" can easily transition into "power over" through institutionalization, raising concerns about the ways that

power operates within and through institutions and organizations. Consequently, while the institutionalization of local food movements might augment their societal impact, it could simultaneously weaken their agendas and momentum for social equity and sustainability by modifying practices and processes (Allen et al., 2003). As Santo and Moragues-Faus (2019) point out, the challenges associated with connecting and institutionalizing a diverse array of local food policy groups can sometimes result in a focus on actions they believe the government will support, such as easily achievable objectives or symbolic acts, at the expense of tackling more contentious and transformative issues like labor rights, land ownership reform, and dietary transition.

The contradictions emerging during the institutionalization process prompt critical reflection on the efforts to scale up niche practices. If scaling-up is indeed a primary objective, is institutionalization an effective tactic for amplifying these niche experiments? This study seeks to embed power dynamics within the process of institutionalization as part of the discourse on sustainability transitions. To examine the underlying governance mechanisms influencing the scaling up of sustainable food initiatives, this study poses the following research questions rooted in theoretical constructs: 1) Who orchestrates a food system transition, especially in the context of an institutionalization process aimed at scaling up niche practices? 2) What could grassroots and non-governmental niche actors potentially gain or lose through this scaling-up process? 3) What coping strategies can these niche actors deploy to counter escalating governmental intervention? Addressing these queries can provide insights into the power dynamics at play at the grassroots level in food system transitions and can illuminate the roles and strategies of non-governmental actors confronted with institutional pressures and existential dilemmas.

3.3 Typology of government-grassroots partnerships

As counterparts against the state, Uphoff (1993) differentiates between non-governmental organizations and grassroots organizations. This differentiation is predicated on the unique decision-making processes and actions inherent to each of these institution types. Uphoff suggests that the characteristics of both organizations are more influenced by societal expectations rather than material constraints or investments. He conceptualizes non-governmental organizations in the context of sectors — considering them as a middle ground between public and private sector initiatives — while grassroots organizations are conceptualized in terms of levels, namely locality, community, and group levels. For the purposes of this paper, the term "non-governmental organizations" is utilized to denote entities external to government-led initiatives, particularly those characterized by non-profit or minimal-profit motives. The term "grassroots organizations," on the other hand, encompasses a wider range of local initiatives, including those that are community-based and volunteer-driven, with emphasis on their bottom-up approach.

Numerous studies have sought to delineate the relationships between the government and civil society, resulting in frameworks that characterize distinct types of public-civic partnerships (Arnstein, 1969; Coston, 1998). Laforge and the authors (2017) conceived of a recent typology examining interactions between governments and grassroots actors in the context of local sustainable food movements. They studied the dynamics between direct farm marketing to consumers and mainstream institutions (e.g., food safety regulations, government policies), identifying four distinct types of interactions based on levels of agreement between grassroots actors and governments on action strategies, ranging from institution-dominated actions to those

led by grassroots actors. These interactions were categorized as containing, co-opting, contesting, and collaborating (See Figure 11).

In their model, *co-opting* and *containing* interactions are typically subtler, with greater institutional influence that tends to reproduce existing (strong government) power structures and the dominant neoliberal, productivist system. The methods of actions are implicit, operating 'under the radar' by bending the rules furtively, often without drawing attention to themselves. Conversely, *collaborating* and *contesting* interactions are more apparent and explicit, showcasing the influence and agency of grassroots actors. Laforge and the authors argue that co-opting and containing interactions merely reinforce the status quo through mechanisms of governmentality. In contrast, collaborating and contesting interactions present opportunities for transforming the dominant food regime, suggesting potential routes towards a more sustainable and equitable food system.

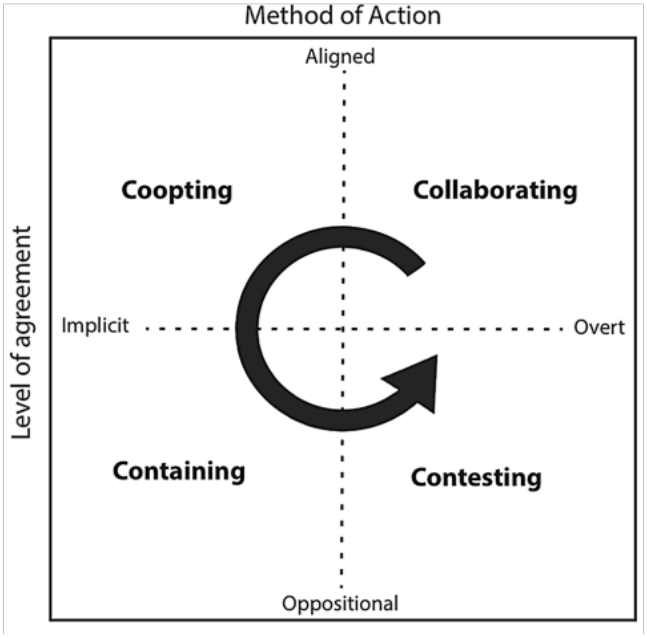


Figure 11. Typology of Governments-Grassroots Actors Interactions
Adapted from Laforge et al. (2017)

While these typologies may not encapsulate all interactions, they serve as insightful tools for discerning distinct features of various types of interactions between stakeholders, and crafting a nuanced framework to detail more complex aspects of partnerships. Using the UCPM case as a foundation, this study extends the framework proposed by Laforge and her team, placing particular emphasis on the roles and strategies that grassroots actors employ during the upscaling and institutionalization of locally-initiated niche practices. A detailed exploration of the facets of the institutionalization process, along with the evolution of local governance, can offer valuable insights to guide public-civic partnerships towards transformative capacities, thereby enabling the establishment of a sustainable food system.

4. Methods

Utilizing a single-case study approach, this study delves into the background, formation, and implementation of the UCPM to investigate the governance processes involved in scaling up local grassroots practices. Single-case studies are acknowledged as effective methodologies for offering rich descriptions and context-specific understanding of intricate phenomena, thereby facilitating theoretical refinements (Dyer Jr & Wilkins, 1991; Siggelkow, 2007). The initial pilot study (See Figure 12 for the entire timeline), conducted in the summer of 2017, was designed to document the Seoul Metropolitan Government's actions to establish urban food policy, including the unveiling of the Seoul Food Master Plan 2020 in June 2017, an umbrella policy for the UCPM. This preliminary investigation involved attending an urban agriculture conference hosted by the Seoul Metropolitan Government, participation in informal seminars and events relating to agricultural policy, rural communities, and food cooperatives in order to identify potential key informants, and the collection of documents and visual materials.

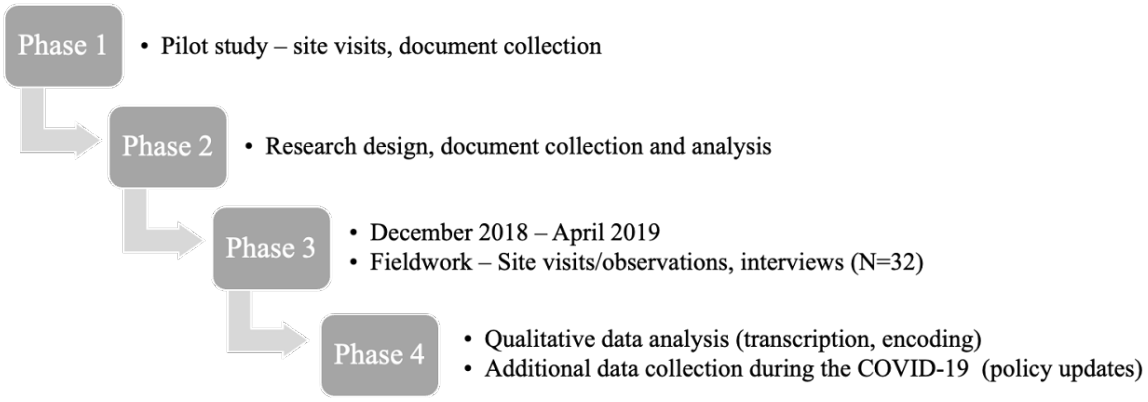


Figure 12. Timeline of data collection

The second phase of data collection commenced in fall 2018 to track initial outcomes one year after the implementation of the UCPM, which was first launched in a district within Seoul in October 2017. This stage was primarily devoted to gathering city- and district-level government documents (e.g., meeting minutes for the past two years, official announcements, government surveys, blueprints for public programs), media coverage, and additional online resources to comprehend the formulation and unfolding process of the UCPM (See Appendix B for the list of documents). Documents not readily accessible to the public were obtained through official information disclosure requests. This data collection served as preparatory work for the ensuing stage of on-site fieldwork in Korea.

The third phase of on-site data collection was carried out over five months, from December 2018 to April 2019, in Korea. Initial efforts focused on identifying key informants, updating the document repository, and scheduling preliminary interviews. A thorough review of these documents and introductory discussions facilitated the selection of four urban-rural pairings for an in-depth exploration of local governance dynamics. The selection was based on

criteria such as the duration of program implementation and the innovation exhibited in district-level practices, including urban agriculture and local food movements. Within these selected urban-rural pairings, the author carried out various observations (See Table 5), including visits to district-level public meal centers in Seoul, local food hubs in rural towns, and informal seminars and meetings, along with farm visits. The research also incorporated semi-structured interviews (N=32) to gather diverse perspectives. Interviewees, selected from across the four urban districts and their partnered rural towns, included government officials (N=12), non-governmental actors from district-level public meal centers in Seoul and local food hubs in rural towns (N=12), participating rural farmers (N=2), representatives from urban institutions utilizing the UCPM (N=3), and scholars with involvement in shaping the UCPM and versed in Korean agricultural affairs (N=3).

Interviews were conducted in-person at the interviewee's office or farming locations, recorded, and subsequently transcribed and coded using qualitative analysis software (Dedoose). Adhering to Saldaña (2021)'s guidelines for qualitative data coding, the author established two branches of coding trees (See Figure 13). The first branch consisted of a thematic analysis carried out both inductively and deductively. The deductive coding centered around primary keywords related to the study, including scaling-up, institutionalization, collaboration, contestation, and co-optation. Inductive coding was performed subsequently to incorporate additional themes that emerged during the analysis. The second branch focused on analyzing stakeholders and their relationships. It employed a set of codes that identified and classified the types of actors involved in the UCPM. Once the coding was complete, I reorganized quotes, excerpts, and memos based on the established codes and structured emerging topics, themes, and arguments accordingly. Document review complemented this process, serving to corroborate the

themes that surfaced from the interview data. This comprehensive approach allowed for a nuanced understanding of the various elements involved in the institutionalization process of the UCPM.

Focus	Engaged actors, on-site activities	Engaged/excluded actors, human interactions, conversations, language in use
Observation sites	a. District public meal centers b. Local food hubs	a. Public hearings held by the government b. Civic conventions of engaged food organizations c. Public meal program workshops by related governmental institutions
Guiding Questions	a. Who manages the locations? b. Who is engaged in the locations? (Types of local facilities, farmers) c. What kinds of food activities take place? (Processing, packaging, distribution)	a. Who participates in the event? b. Who leads discussions? Who has the control over discussions? c. Who is included/excluded in/from discussions? d. What argument is made by whom? e. What kind of networks do participants form (formal, informal)?

Table 5. Focus, sites, and guiding questions of direct observations

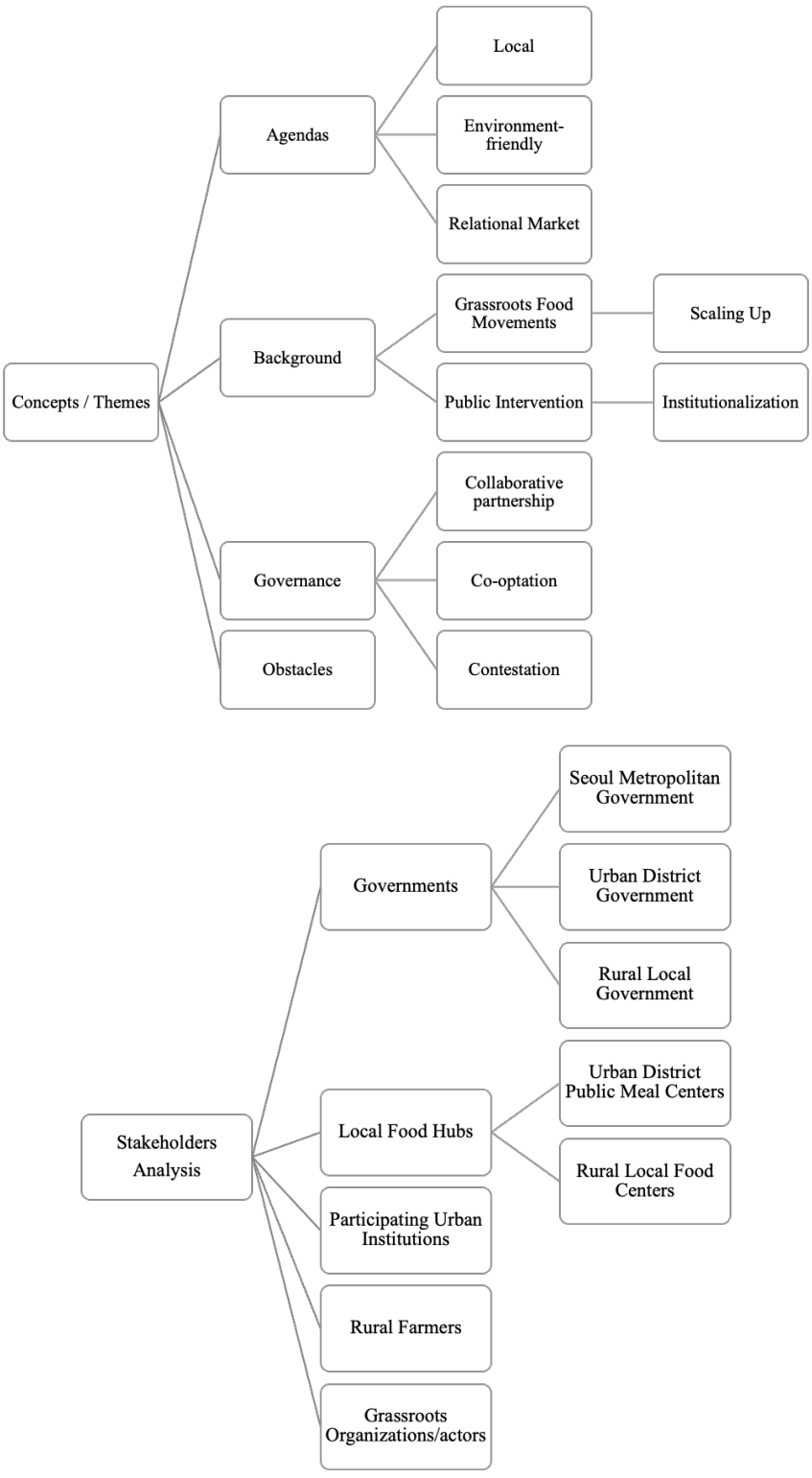


Figure 13. Trees of codes for encoding qualitative data

This study examines the four sub-units of analysis within different contextual levels. Firstly, the metropolis level, the common background shared by all units, encompasses public planning projects and human interactions across the Seoul Metropolitan Government. The district and local-town level focuses on governing actions and individual projects initiated by each district or town government to support the implementation of the UCPM. At the organization level, district public meal centers and local food networks, primarily operated by non-governmental entities, play a key role in connecting urban and rural stakeholders. Participating local facilities, such as daycare centers and welfare centers, also fall within the organization level as they collectively decide whether to join and benefit from UCPM resources. If rural farms form an alliance to collectively supply local food hubs, they are categorized at the organizational level. Small-scale farmers individually linked to local hubs primarily operate at the individual level.

5. Findings

5.1 Niche practices for building alternative food networks

Korea features a history of successfully implementing a public school food system prioritizing the consumption of locally and sustainably grown foods. Grassroots movements that tested innovative food practices, built nationwide networks, and pressured governments at all levels to legislate these novel practices have driven Korea's ongoing policy reforms concerning public school meal services. In the aftermath of Korea's societal democratization in the late 1980s, civic organizations lobbied for a thorough revamp of the country's school food system, to ensure all school-aged children had adequate access to nutritious food through the social welfare system. The *Witak Geubsik* system, which outsourced school cafeteria operation to third parties

like major food corporations, was introduced in 1996 as a result of the fifth revision of the National School Meals Act. However, issues such as contract corruption, prioritizing profit over quality, and food poisoning led nationwide school food movements to call for another legal reform in 2006 that required schools to operate their cafeterias independently (*Jik-yeong Geubsik*). In response to grassroots appeals for more sustainable and accessible healthy diets for students, numerous local governments in Korea have since initiated completely free, eco-friendly school meal programs. As a leading city, Seoul currently provides free school meals, made from scratch with sustainably grown local ingredients, to all students aged 6 to 18.[20]

Conversely, food served to children under the age of six in early childhood education settings has been relatively overlooked. As of 2012, all childcare services in Korea for children aged 0 to 5 became completely free, including meals and snacks. However, the daily unit meal price set in 1997 only saw an increase in 2020 (from 1,745 to 1,900 KRW[21] for children aged 0 to 2, and from 2,000 to 2,500 KRW for children aged 3 to 5), signifying limited public support for the procurement of high-quality food. The Ministry of Food and Drug Safety established the Center for Children's Foodservice Management in 2011, but its focus primarily revolved around safety and nutrition, paying less heed to food sources or quality. Some local governments have provided financial support to childcare facilities meeting specific requirements, such as consuming more than 30% of certified environment-friendly food or sourcing 40% of their food through institutional group purchasing. Otherwise, non-governmental or nonprofit organizations

[20] The ingredients are distributed to each school via *Orbon*, a publicly operated facility serving as a food hub in Seoul. "Environment-friendly" foods should be certified as entirely organic, pesticide-free, or meeting GAP (Good Agricultural Practice) standards.
[21] On average, 1,200 KRW is equivalent to 1 USD (approximately 1,300 KRW = 1 USD as of May 2023).

bridge this gap by forming direct relationships between sustainable farms in rural towns and daycare centers in urban areas.

The Cooperative for Ecosystem and Early Childhood in the Metropolitan Areas (CEE) represents one of these civic organizations that has dedicated itself for decades to the development of alternative food channels for childcare facilities. Constituting a consumers' cooperative and a social enterprise, the CEE is an amalgamation of early childhood educators and citizens who prioritize the welfare of children, rural communities, and the sustenance of a culture that respects life (See Figure 14). The CEE has led numerous campaigns for early childhood education on the ecosystem and the creation of the Children's Table, an independent food supply chain linking rural producers with urban consumers. Through Children's Table, they have facilitated contract farming with regional farmers dedicated to the production of Non-Genetically Modified Organisms (Non-GMO) and foods that are free from antibiotics, pesticides, and herbicides, as well as processed foods derived from sustainably grown ingredients. The CEE ensures transparency in its operations by providing information regarding the origins of its produce and related certification. This data is either made accessible online or directly disseminated to participating institutions. They also used to operate a local store in Seoul, which was taken over by another local cooperative a few years ago due to financial hardships. Currently, the CEE manages seven public daycare centers and preschools[22], integrating its educational philosophies centered on life and ecology into their curriculum.

[22] Daycare centers in Korea feature diverse operational types, ranging from private and home-based to public ones. The actual operation of public daycare centers is often entrusted to non-governmental organizations.



Figure 14. Examples of the CEE Initiatives (public seminars, farm visits for children)
Source: CEE website

5.2 Scaling up a niche: Urban-rural Coexistence Public Meal Service

In May 2017, the Seoul Metropolitan Government initiated the first case of the Urban-Rural Coexistence Public Meal Service (UCPM), an innovative public food procurement program inspired by the grassroots model implemented by the CEE. The following July, a city-level ordinance, named the Ordinance of Support for Urban-Rural Coexistence Public Meal Service, was enacted to provide legal backing. This government-led endeavor aims to enhance the quality of public meal services for children below the age of five, while simultaneously fostering the revitalization of dwindling rural communities. The latter is achieved through encouraging the

consumption of environment-friendly, locally sourced foods, produced primarily by small to medium-sized and family-run farms. Every district[23] in Seoul is expected to participate in the UCPM, establishing a partnership with a rural town at the county or town level. This collaboration involves the enactment of a supportive local ordinance, the formation of a district-level public meal service committee, and the construction of a district-level public meal center operated by each district.

In the initial phase, the Seoul Metropolitan Government allocated 4.3 billion KRW to underwrite financial incentives for targeted institutions, district-level public meal center management, and local transportation to each urban institution from public meal centers. Institutions involved in the program receive an additional 500 KRW (roughly $0.5 USD) per meal from the Seoul Metropolitan Government, in conjunction with the 1,795 KRW supplied by the central government (as of 2017). This additional support is provided when institutions source more than 60% of their monthly food consumption through the UCPM. Should a district already have a similar subsidy program in place (e.g., Seongdong, Seodaemoon), the additional benefit can be merged with district-level subsidies, yielding up to 1,000 KRW subsidies per meal from both the district and city governments.

Candidate rural towns are selected by districts based on factors such as agri-food production capacity, diversity of food items, and experience in local food initiatives. The local food hubs[24] in these rural towns are charged with receiving preorders from urban institutions, gathering items from local producers, and transporting them to district-level public meal centers

[23] Seoul consists of 25 individual districts.
[24] This study identifies three different types of local food centers in participating rural towns: a) those financed, built, and directly managed by local governments, b) those built by the government but outsourced to a local branch of the National Agriculture Cooperative, and c) a co-existence of types a) and b).

in Seoul. As illustrated in Figure 15, the food delivery process is segmented into two main phases. Initially, the food items are transported to designated public meal centers within each district from the rural areas, with deliveries taking place between the hours of 5 p.m. and 10 p.m. Subsequently, these district-level public meal centers undertake the task of delivering these items to each institution, either overnight or early the next morning. In instances where partnered rural food hubs are unable to supply certain items, they are supplemented by the appointed operators of the district-level public meal centers, primarily urban food cooperatives or social enterprises that serve as nonprofit or low-profit food service providers. This framework ensures the regular and reliable provision of food items to each participating institution.

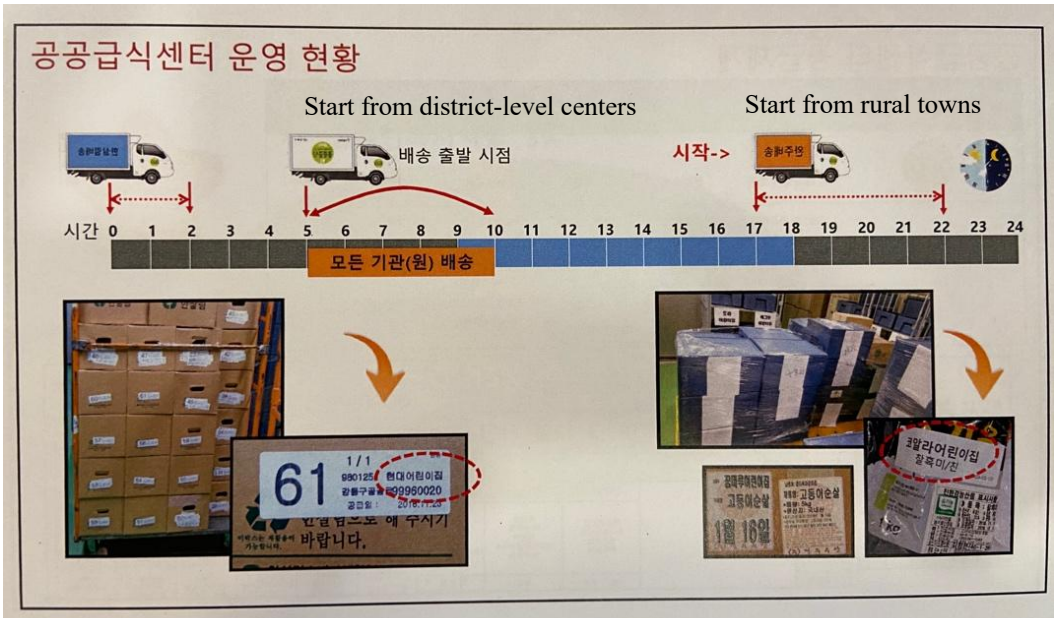


Figure 15. Daily timeline of the UCPM system
Source: Gangdong District-level Public Meal Center

The UCPM, at its core, aims to expand grassroots practices in two dimensions – space and governance – to encourage direct sales between local producers and urban institutions. First, the UCPM augments and builds additional community-based grassroots food networks, similar

to the CEE, by linking multiple urban districts with rural towns through one-to-one pairings. The UCPM, unlike other grassroots food initiatives, has scaled up the overall scheme into a regional-scale food system by grouping farmers in rural areas with urban, public institutions based on administrative units. In terms of governance, the UCPM has expanded upon the foundational grassroots concepts, which usually involve direct channels from individual farmers to institutions through the mediation of civic organizations (See Figure 16 for the governing structure of the UCPM). By incorporating a universal governance model, the UCPM integrates local food facilities, such as public meal centers and local food hubs, along with multi-level governments from town to provincial levels. Lastly, the UCPM extends beyond merely introducing new logistical structures. Instead, it enhances and promotes the core objectives of grassroots food initiatives, which includes encouraging the consumption of regional and sustainably produced food, stimulating the revitalization of rural economies, constructing trust-based alternative markets, and notably, improving the quality of food services provided to vulnerable populations.

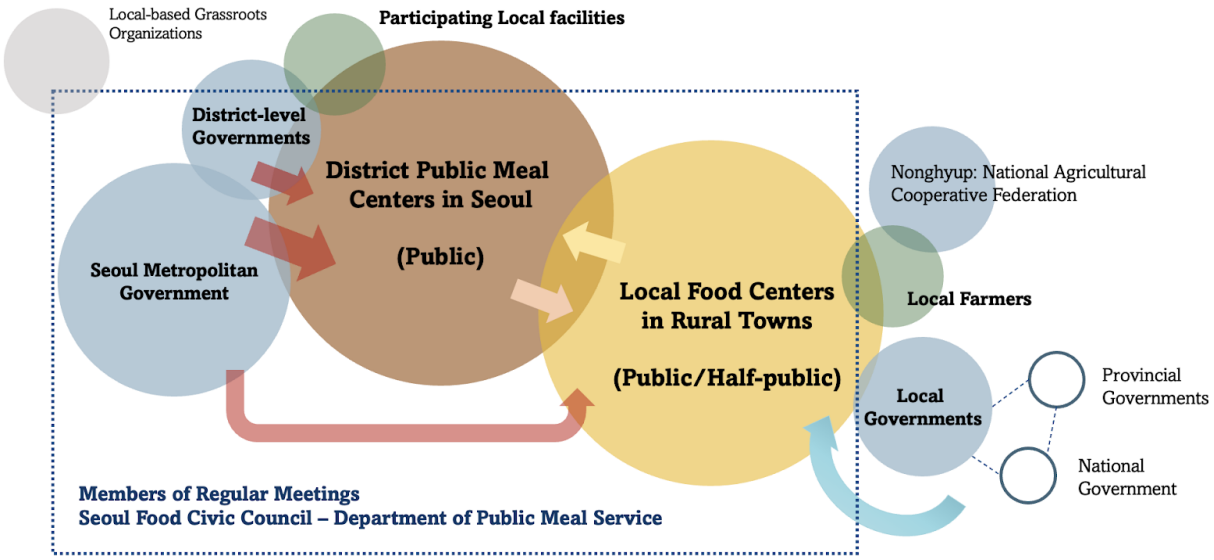


Figure 16. Communication Flow within the Governing Structure of the UCPM

5.3 Co-operation: partnering with the government

District-level public meal centers play a pivotal role within the operations of the UCPM, acting as crucial intermediaries between urban and rural stakeholders. They are tasked with logistics and transportation coordination as well as the provision of educational programs for urban consumers. Ideally, a public meal center would be situated in each district to manage local food systems and plans at the district level, thereby optimizing transportation routes from rural towns to urban institutions. However, practical challenges such as the difficulty of securing appropriate land within Seoul, combined with financial constraints, led to the initial location of all but one of these centers in the remaining space of the Orbon (Seoul Eco-friendly Distribution Center) located in the west of Seoul. Although it was initially anticipated that all the districts would establish independent warehouses and offices with financial support from the Seoul Metropolitan Government in the following year(s), as of May 2023, only three out of the nine pairings have successfully completed this construction.

The Seoul Metropolitan Government has entrusted the operation of these centers to civic organizations to leverage pre-existing local expertise and infrastructure, most of which were initiated by civic bodies, and to stimulate grassroots participation. The district governments select these external service providers based on specific criteria which include existing resources and experience in agrifood distribution, established distribution networks in the district, nonprofit status, ability to supplement goods unavailable in paired rural towns, robust financial standing, and capacity to provide long-term agrifood distribution services. Furthermore, social enterprises, cooperatives, women-owned businesses, and businesses operated by people with disabilities may be given additional consideration during the selection process. Currently, seven non-governmental organizations, including a non-profit corporation, a social enterprise, a

religious grassroots organization[25], and consumer cooperatives, operate nine locations that serve as district-level public meal centers (See Table 5). The subsidies provided by the Seoul Metropolitan Government to these organizations cover various expenses such as office rent, labor costs, operating costs, temperature-controlled warehouses, routine food inspection, and transportation.

Organization	District(s)
Korea Organic Association (non-profit corporation)	• Geumcheon • Eunpyeong • Yeongdeungpo
Hansalim (cooperative)	• Dongbuk Four Districts* • Gangdong
Happy Coop (cooperative)	• Dongbuk Four Districts*
Poomachi Village (cooperative)	• Seodaemoon
Well Union (social enterprise)	▪ Dongjak ▪ Joongrang
Happy Bridge Coop (cooperative)	• Dongdaemoon
Headquarter for Saving Rural Communities Movement (sub-organization under Catholic Archdiocese of Seoul)	• Songpa

Table 6. List of Delegated Organizations Operating District-level Public Meal Centers
(* Dongbuk Four Districts is a combined unit of Nowon, Gangbuk, Seongbuk,and Dobong)

Interviews with UCPM stakeholders highlight the influential role of grassroots organizations in shaping the program's blueprint. Many stakeholders underscore the importance

[25] The Saving Rural Communities Movement was founded in 1994 as part of larger peasant movements opposing globalization and the liberalization of the food system, including the formation of the World Trade Organization and the General Agreement on Tariffs and Trade-Uruguay Round. As a grassroots initiative rooted in Catholic values, the organization has focused on improving peasants' rights, revitalizing struggling rural communities, and establishing alternative distribution channels.

of civic engagement, emphasizing how grassroots school food movements and cooperatives have set the stage for innovative food plans such as the UCPM. Interviewee 22, a government official who previously participated in parents-led school food movements, stated:

> Alternative food initiatives in Korea stand on two legs – cooperatives and school food movements. These school food movements started back in the 90s as local, grassroots projects with a lot of community spirit. They had two main goals: one was to directly run school cafeterias, and the other was to get food sourced from local producers. It's actually these grassroots initiatives that have been at the forefront, pushing for change. They've done everything from proposing new laws to putting pressure on for legal reforms. This whole journey has acted like a roadmap, leading us to the food plans we're seeing today.

Organizations such as Hansalim and the ECC have shared their expertise and data with the city government and have actively participated in the development and implementation of the UCPM to broaden their organizational capacity and influence. These grassroots bodies perceive the UCPM not merely as a "food enterprise" but an integral component of a more comprehensive food movement. They identify themselves as intermediaries harmonizing state-guided business and alternative approaches, thus upholding the essence of grassroots principles within the UCPM. Interviewee 6, a manager of a district-level public meal center showed such cognition:

> The idea behind setting up a consortium — basically a group to run a public meal center — with multiple cooperatives was to create opportunities for a wide range of cooperatives and, in the end, give a boost to grassroots initiatives. The values and philosophies that the UCPM stands for, well, they're pretty much in line with what cooperatives are aiming for. To me, the UCPM is not just a food business; it carries the spirit of social movements. I see myself as a sort of go-between, balancing business needs and social goals. I specifically want to make sure the program doesn't just focus on making a profit.

Despite this, some concerns persist that the current selection system may not completely exclude profit-driven food corporations from participating in the UCPM, or that some civic entities might join the UCPM primarily for financial gains. While there are expectations for the government to set boundaries and prevent private appropriation of public resources through ongoing dialogue with civic actors, shifts within the government and political landscape could potentially hinder the establishment of long-term, sustainable public-grassroots partnerships.

5.4 Co-optation: appropriation of grassroots capacities

The delegation of district-level public meal centers' management duties to civic organizations exemplifies the government's acknowledgment of grassroots capabilities in program execution. However, a detailed exploration of UCPM's operational framework indicates that such "inclusion" does not necessarily guarantee full, democratic participation from grassroots actors as autonomous entities. Foremost, these outsourced organizations are financially reliant on the city government, and regular monitoring and evaluations by district governments for contract renewals may deter these organizations from expressing concerns or providing candid feedback.

> We've been thinking – if we grouped more than one district and town together, it might really amp up the transaction volume. It could also get districts more invested if they saw the benefits of pooling their administrative efforts. Because without longevity, all this work could just... fall flat. But then again, what do I know? I'm just a regular guy, relying on my monthly paycheck (Interviewee 12, staff member at a district-level public meal center).

Although the UCPM is broadly recognized for its aim to foster cooperative ties with the civic sector, local stakeholders retain doubts about the democratic nature of this partnership,

which is primarily contract-based, and its ability to assure unbiased participation as an equivalent partner. Certain interviewees acknowledge that when attempting to establish a collaborative partnership from a top-down initiative, a power imbalance may be somewhat unavoidable. This reality becomes particularly apparent given the complexities inherent in the government-grassroots governance framework, which involves multilateral engagements (such as interactions with the private sector, district-level governments, and local councils) as opposed to one-to-one exchanges. A manager of a local food hub (Interviewee 20) used the metaphor of an aggregated structure, resembling a ground granule composed of multiple particles infused with oxygen and water, to illustrate an ideal form of governance devoid of any dominating entity. Meanwhile, Interviewee 2, an expert specializing in agrifood systems from a civic standpoint, drew attention to the challenges inherent in cultivating collaborative initiatives within the Korean context.

> It seems like the concept of '(collaborative) governance' hasn't fully taken root in Korean society yet. You look at the civic council and they've got a chairperson from the city government, another one from the private sector, a few more reps from each side[26]... and they think just having that structure in place means they've got governance sorted. But, to me, real governance isn't just about structure. It's about being there, being involved when policies are being made and decisions are being hashed out. That's the only way to make sure we're really listening to, and including, the voices of people at the grassroots.

Delegated organizations can primarily find a potential opportunity to earn revenue, beyond government subsidies, by supplying items that are not available from paired rural towns.

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[26] This quote addresses a stereotyped structure of 'collaborative governance' in Korean context, which involves convening representatives from each sector, particularly those from the civic sector, as a tokenistic engagement in certain cases.

These items are procured through their distribution networks or local outlets, with a focus on achieving minimal profit margins, thus ensuring low consumer prices. While the Seoul Metropolitan Government ostensibly encourages grassroots organizations' involvement in bolstering their continuous operations, the role of a public meal center operator rarely results in substantial financial benefits. For example, financial data from District A during the initial years showed that approximately 70% of the food came from the partnered rural town. The remaining 30% was supplied by the designated grassroots operator[27], whose additional labor and transportation costs to fill this void generally nullified any gross profit from sales. Moreover, not all civic organizations, particularly small-scale or community-based ones, have an equal opportunity to join the UCPM due to their inability to operate large-scale facilities. One local organization, which eventually withdrew from the UCPM and had to cease operations altogether, referred to market changes triggered by increased government intervention as "natural selection." In a brief phone interview, a staff member openly shared their regret, acknowledging the difficulties they encountered in keeping pace with the ever-changing policy landscape: "*to be honest, we just couldn't keep up with the policy changes, and being a small operation, we didn't have the capacity to take on large-scale government projects. That, sadly, was the nail in the coffin for our business.*"

Consequently, if non-governmental actors are not granted equal access to political resources and opportunities in the government-grassroots partnership, their engagement in the UCPM will likely continue to be restricted. Simply vesting responsibilities in civic organizations

[27] Food items that are not available through either rural food hubs or grassroots operators are procured from the private sector, including local stores or franchised supermarkets. This accounts for approximately 1% of the total food supply.

under the nominal banner of "co-operation" might induce inconsistent policy results. The execution of policies at the district level is profoundly swayed by the individual ethos and guiding tenets of grassroots organizations that operate public meal centers, especially regarding their dedication to transformative initiatives. To illustrate, certain district-level public meal centers adopt a more avant-garde stance, considering their role as pivotal mediators crucial for shaping the future of local food systems and plans, while others primarily assume conventional distributor roles. Despite the Seoul Metropolitan Government's attempts to stabilize the program by providing standardized implementation guidelines and conferring limited autonomy to districts, the degree to which the program's fundamental agendas are understood also largely hinges on the aptitude and preparedness of district government officials tasked with local-level implementation and coordination. An interviewee expressed "*since the city's the one footing like 75% of the bill, the district doesn't really take full ownership of this initiative and has less intention to make investments*."

The concept of civic participation as framed within the UCPM runs the risk of becoming a mere tokenistic policy mechanism, as indicated by Interviewee 2, without the formulation of robust strategies and the dedication of necessary resources to nurture enduring grassroots capabilities. Currently, the government's approach is seen as offering a superficial opportunity for grassroots participation in policy governance, but without providing substantial support or guidance to assist grassroots players in navigating the challenges they face. Interviewee 4 underscores the importance for grassroots groups to evaluate how they can enhance their capacities to implement and leverage government-led initiatives.

> If grassroots groups fail to align themselves with these new government-led food schemes, they run the risk of merely opposing the policies and falling behind in progress. In scenarios where the civic sector lacks the necessary maturity in terms

of capacity and mindset to embrace innovative food plans, the government may resort to the traditional top-down approach.

5.5 Contestation: resistance as an "outsider"

The contract-based delegation model employed by the UCPM to form partnerships with the non-governmental sector has generated a schism among civic actors. While some organizations have embraced the UCPM, actively partaking in its execution, others have remained detached and expressed concerns about the program's conception and implementation. One notable example is the Cooperative for Ecosystem and Early Childhood Education in the Metropolitan Areas (CEE). Despite its significant contributions to improving food service environments in early childhood education centers, establishing itself as a key supplier of eco-friendly food and consultant for these facilities, the CEE found itself marginalized as an outsider with the implementation of the UCPM.

One of the districts selected for this study served as a vital operational hub for the CEE, accounting for approximately 17 to 19% of the organization's total sales. The success of their local practices inspired the district government to enact district-level subsidies, even before the UCPM came into effect, encouraging local childcare centers to purchase sustainably produced food. Nevertheless, the initiation of the UCPM marked a turning point, triggering a considerable departure of partner institutions from the CEE. These institutions sought to benefit from both district-level and city-level incentives, which were offered to those that procured over 60% of their total food expenditure from the district-level public meal center within the UCPM system. In response, the CEE appealed to the city government, requesting equivalent financial incentives for institutions engaging with their own, previously established supply chains. This plea was declined, citing potential inequality among grassroots organizations. Furthermore, due to

resource constraints, the CEE was unable to accept the offer to operate a district-level public meal center provided by the Seoul Metropolitan Government. As an alternative, the CEE joined forces with Hansalim and Happy Coop to form a consortium — an approach to enable smaller cooperatives' participation by pooling resources — and jointly assumed the management of a single public meal center that serves four neighboring districts in northeast Seoul.[28]

The UCPM has also faced criticism from the Solidarity for Sustainable Food Systems, a coalition comprising the CEE and more than 20 other local grassroots cooperatives. The coalition has raised several key objections, focusing on four main areas: a) inefficient management of financial resources, b) lack of transparency in supplier demographics, c) potential decline in food quality, and d) limited accommodation of diverse local practices. One specific concern is the potential discrimination against childcare facilities in regions without additional district-level subsidies. In these cases, these facilities might miss out on the opportunity for "double-dipping," where they could benefit from both city and district governments, creating an arguably inequitable situation. This means that childcare institutions located in districts where the district-level government provides extra subsidies for purchasing sustainably-grown foods can benefit from double-layered financial incentives from both district-level and metropolitan governments, while others are fundamentally deprived of these financial opportunities.

Furthermore, while the UCPM guidelines allow for the use of up to 20% of financial assistance for food purchases to cover labor costs, such as hiring a cook or teacher salaries, there is limited disclosure of detailed expenditure reports from individual institutions. This lack of transparency raises concerns about the potential for misuse or abuse of governmental subsidies.

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[28] According to the most recent data, the CEE has completely withdrawn from the UCPM.

There is also a contention that excessive funds are directed towards the construction of new public meal centers instead of making use of existing infrastructure, such as grassroots or private warehouses. The coalition proposes reallocating the budget to subsidize various types of alternative food purchases, not necessarily through grassroots, local supply chains, ensuring more universal access to healthy and nutritious food for all children, irrespective of their participation in the UCPM.

Secondly, there is an absence of readily available data on the demographic characteristics of the rural suppliers participating in the UCPM, including the precise proportion of family-owned or small-to-medium scale farms. This dearth of information and practical measures impedes the ability to exclude industrial farms or large-scale commercial suppliers from UCPM supply chains.[29] Thirdly, certain grassroots activists express concerns about a perceived decline in food quality served to children. In their perspective, this decline stems from the UCPM's acceptance of local-level food certifications, which are often less rigorous than national ones. Lastly, the current model, primarily focused on distribution, fails to accommodate the diversity of local practices such as community-supported agriculture, community-based direct sales, or urban agriculture. Advocates argue that ensuring public interests within food systems should be a shared responsibility of various stakeholders, not solely the government, as suggested in an

[29] During an interview, a stakeholder expressed cautious concerns about an organization that recently joined the UCPM, noting that it may have a profit-oriented focus like a conventional distributor, compared to other participating civic organizations.

initial research report on the UCPM's formulation.[30] A grassroots activist (Interviewee 27) stated:

> Does 'public' automatically equate to 'government-driven'? I mean, if our goals align with public interests, similar to those of the government, wouldn't that place us within the public sector too? Profits aren't what drive us. Then, where does that leave social enterprises in this spectrum? The thing is … the UCPM only offers subsidies if you're using a government institution – and by that, I mean district-level public meal centers – which doesn't leave much room for flexibility, does it?

Although numerous interviewees lament the unintended negative impact the UCPM has inflicted on the CEE, they cautiously suggest that the CEE should adapt to the shifting landscape of food governance. The expansion of government-led food programs and the dynamic market transitions present similar challenges not only to the CEE but also to other grassroots entities. They propose that the CEE seek opportunities to strengthen their capabilities by broadening their engagement in public-led initiatives and resources, instead of adhering to confrontations with the government. As grassroots principles sometimes face pressure to compromise for short-term, easily achievable outcomes due to bureaucratic influence, there is a call for civic actors to critically reassess the contemporary cooperative-led food initiatives, which have become largely consumer-oriented lacking the best interest of local farmers in mind, as highlighted by multiple informants. They advocate for a reorientation towards the fundamental principles of grassroots food movements, adopting a more comprehensive perspective on food systems. In this context,

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[30] The report showcases different global models of government intervention in public food procurement, which include: 1) direct government operation, 2) delegation to state-owned enterprises, 3) direct operation through cooperatives, 4) support for new producer/consumer organizations, 5) incubation of intermediary organizations, and 6) enhancement of nutrition standards to drive market changes.

the role of the government is emphasized in guiding grassroots organizations to prevent them from being co-opted or stifled within the emerging government-grassroots partnership framework.

6. Discussion

The progression of public meal service in Korea underscores that the expansion of niche practices can materialize in three distinct contexts: a) when a niche model attracts the attention of the government, leading to the formulation of policies that replicate its elements; b) when grassroots initiatives have matured enough to influence governmental policy, facilitating the upscaling of bottom-up practices through legislation or public policy; and c) when both a) and b) occur concurrently, notably when civic actors effectively seize a window of political opportunity. Morgan (2014) highlights the adoption of new strategies by civil society organizations in their interactions with local authorities as a significant factor in the transformation of school food politics, marking a departure from their prior strategy of simply opposing and combating the local government. The UCPM case exhibits a range of these new political tactics that can be deployed by grassroots groups, especially in response to the expansion of government-led initiatives.

A number of sustainability transition scholars, such as Grin et al. (2010), advocate for the role of reflexive governance in addressing the noticeable absence of political elements within the sustainability transition literature. Reflexive governance is a modality of steering that encourages actors to scrutinize and reassess their foundational assumptions, institutional arrangements, and practices. It emphasizes the acknowledgement of the political context intrinsic to reflexive processes, as well as the politics that they invariably produce (Voß & Bornemann, 2011).

Complementary to this, the theory of collaborative planning can bridge the political discourse gap within the sustainability transitions literature. In line with the Multi-Level Perspective (MLP) framework (elaborated in Chapter 2), collective experimentation and learning at the niche-regime level, where grassroots and incumbent actors are interacting, are pivotal to create a window of opportunity for scaling up of local practices. Paying attention to power dynamics – those influencing participation in decision-making, agenda setting, and the framing of perceived needs – provides researchers with a tangible understanding of strategies to foster desirable outcomes and outline the future pathways of niche innovations (McCullum et al., 2004).

Upon analysis of the UCPM's structure, the following categories of key relationships emerged: a) partnerships between the government and civic organizations, b) interactions between urban and rural actors, and c) confrontations between the government-led initiative and excluded local grassroots stakeholders (e.g., urban farmers, cooperatives, small-business owners). As demonstrated in Figure 16, earlier in this paper, the interactions between the Seoul Metropolitan Government, district-level governments, district-level public meal centers, and rural local food centers constitute the backbone of the UCPM's governance structure. This organizational structure suggests that the UCPM predominantly relies on urban stakeholders, employing a distribution-focused agrifood model underpinned by two pillars: urban public meal centers and rural local food centers. The UCPM, instead of promoting inclusive governance and incorporating all actors influencing regional food systems across urban and rural areas, appears to unintentionally marginalize certain groups. Specifically, local producers in rural towns without direct avenues to participate in UCPM operations, as well as urban grassroots organizations that do not operate public meal centers, face challenges in accessing crucial

information and resources. This limited access hinders their involvement and potential contributions to the UCPM.

Within the context of government-civic partnerships, the UCPM exhibits three different types of interactions at the implementation level: co-operation, co-optation, and contestation (See Figure 17 for a graphic representation of the UCPM version). Cooperation manifests when both parties – the government and civic organizations participating in the UCPM as operators of public meal centers – align their visions, share resources, and form collaborative partnerships. Co-optation arises when the government and civic organizations share common visions, but implicit opposition emerges from the civic sector. This is evident in the case of a local organization that withdrew from the UCPM (See page 140), allowing the government to appropriate grassroots resources. Contestation presents itself when the government and civic groups hold fundamentally divergent policy agendas and tools, leading to the exclusion of certain grassroots actors, such as CEE, from the core policy initiative. These actors may intentionally opt to remain as an "outsider", preserving a confrontational stance against government-led leadership, and serving as vigilant "watchdogs." The observed government-civic sector interactions in the UCPM demonstrate the mechanisms of *detachment* and *attachment* during the planning implementation process. In the UCPM, detachment from market-driven actors does not represent the final destination; instead, processes of attachment with new agents (e.g., governmental entities, different grassroots organizations) continuously unfold.

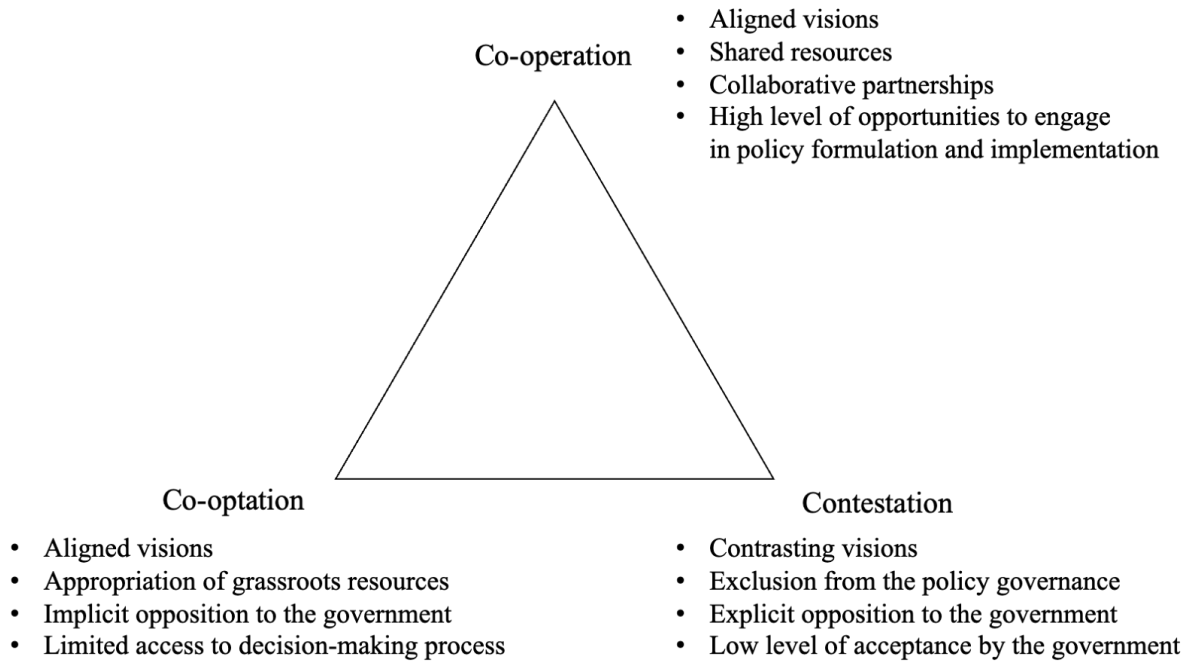


Figure 17. Different types of partnerships between the government and civic actors in the UCPM

However, the UCPM case serves as a cautionary example that co-operation based on contractual agreements does not necessarily culminate in a democratic partnership. Initially, participation in the UCPM was limited to a select group of institutions with a proven track record and capacity in food distribution. This cooperation mechanism, although effective for a three-year period with the potential for contract extension, lacks long-term plans or alternative business models to support the independence and growth of grassroots organizations beyond the contract duration. Without concrete visions and strategies to nurture and empower niche practices beyond short-term operational relationships, there is a risk of the government co-opting grassroots resources. To foster sustainable and participatory civic engagement, establishing criteria for assessing the quality of cooperation is essential. These criteria could include: 1)

ensuring the financial independence of grassroots participants, 2) providing political and legislative avenues to represent and reflect grassroots perspectives, and 3) demonstrating flexibility and reflexivity in governance structure through continual monitoring. Employing these benchmarks can help gauge whether cooperation will remain an isolated occurrence or evolve into a more democratic and inclusive public-grassroots governance model.

Contrary to Laforge et al. (2017) who posit that contestation tends to facilitate the transformation of prevailing food practices, the UCPM presents a contrasting scenario, where contestation may actually inhibit the development and sustainability of grassroots organizations by compromising their competencies, as seen with the CEE. The persistent presence of contestation and resistance can impede the empowerment of grassroots players, thereby limiting their ability to inspire governmental actions and stifling the growth of their voices as credible alternatives. Furthermore, co-optation does not necessarily perpetuate the status quo, as suggested by Laforge and colleagues. Rather, grassroots stakeholders see the UCPM as a *process* rather than a fixed outcome, aiming to achieve long-term agendas by leveraging the shifting dynamics to amplify the influence of grassroots-initiated goals and practices. Grassroots activists unanimously acknowledge the need for adaptive strategies in the face of evolving local food governance, prompting a forward-looking assessment of long-term benefits from the UCPM. As Misleh (2022) contends, “alternatives” need not be considered as “others” or be seen as co-opted by the neoliberal paradigm. Instead, grassroots entities can strategically leverage seemingly co-opted relationships, as seen in the contract-based partnerships between civic organizations and the government, to ensure sustained progress and traction by capitalizing on governmental subsidies and infrastructure.

In conclusion, the UCPM case demonstrates how escalating government involvement in alternative food distribution systems is opening avenues for various grassroots initiatives to align and reorient their goals. As several interviewees articulated, the school food movement and cooperatives have served as catalysts for the expansion of innovative food initiatives within the Korean context. The UCPM is seen as a critical bridge linking two pivotal aspects of Korean food movements – the production-centric school food movement and the consumption-oriented cooperative initiatives – merging them into a singular policy program. This suggests the potential of the UCPM to function as an "intermediary planning" mechanism. In the context of sustainability transitions, Grin (2010, p. 274) explains that "beyond mere brokering, intermediary planning helps actors from a variety of practices to join insights and resources, so as to voice their wishes concerning the regime, benefiting from opportunities and pressures associated with the proximity to the regime." Both grassroots stakeholders and government officials share the optimism that the UCPM will set the foundation for future sustainable transitions in food systems by paving the way for food systems innovations in the public sector, more expansively, forging wider connections with other facets of urban planning, such as urban regeneration and community development.

7. Conclusion

Over the years, policy reforms in Korea have focused on improving public school lunch programs, while public meal services for children under five years old, prior to their K-12 education, have been largely overlooked. The UCPM, a city-led initiative, aims to transform regional food systems by creating direct supply chains between urban districts and rural towns. This is primarily achieved through anchor institutions in urban areas, such as childcare centers

(daycare centers and preschools) and welfare facilities, with plans to expand to hospitals and government buildings. These urban institutions play a crucial role in generating consistent demand for locally and sustainably grown food, which in turn supports small to medium-scale or family-owned farmers committed to sustainable agriculture in rural areas through contract farming.

The UCPM drew inspiration from a grassroots model that sought to establish alternative food distribution systems for early childhood education facilities in the metropolitan region. In order to foster innovation and inclusivity within the grassroots sector, the Seoul Metropolitan Government entrusted non-governmental food organizations with the operation of newly constructed district-level public meal centers, which serve as food hubs responsible for the overall procurement and distribution system. The UCPM's approach to government-grassroots partnerships is based on contractual arrangements, giving rise to three distinct types of relationships: cooperation, co-optation, and contestation. These relationships are shaped by factors such as shared policy visions, available political opportunities, and access to resources for grassroots players to participate in decision-making processes. As the local food system experiences an increase in government-led initiatives, it becomes imperative to analyze how efforts to scale up niche practices emerging from the alternative food movement impact the practices and actors involved in those movements.

The analysis of the UCPM's governance structure supports the importance of four key elements in transforming food systems, as identified by Weber et al. (2020). These elements include: 1) *Political actions* that promote inclusive and participatory governance structures, 2) *close collaboration* among stakeholders in the food system facilitated by new networks and platforms, 3) *education* for consumers, farmers, and policymakers, and 4) *a fundamental shift* in

values related to food and food systems. Intermediary planning mechanisms like the UCPM can amplify these factors by allowing stakeholders to combine their knowledge and resources, leading to the "power to convene" (Clark et al., 2021). This innovative framework of food governance can facilitate the transition towards sustainable food systems by strategically utilizing political pressure and capitalizing on opportunities. The UCPM case highlights such transformative potential of city-led urban food planning, especially when niche practices are magnified through institutionalization.

The lessons learned from the UCPM hold significant implications for global municipalities seeking to employ public food procurement as a means to reshape regional food systems and address the shortcomings of conventional and unsustainable food practices. The UCPM's pioneering approach to public food procurement via one-to-one pairing can serve as a model for other cities looking to build effective government-civic partnership towards food systems transformation through urban-led initiatives. In light of the COVID-19 pandemic's impact on local food systems, including disruptions to institutional food procurement due to national shutdowns, further research is warranted. Exploring government responses and the subsequent changes in governance within the context of public food procurement can provide valuable insights and inform future policies and practices. This research could shed light on the resilience of regional food governance, the effectiveness of government interventions, and the adaptability of public-grassroots partnerships in times of crisis.

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Chapter 5
Conclusion

1. Review of Objectives

The mounting global challenges tied to food practices, encompassing climate change, biodiversity loss, persistent hunger in certain areas, and the escalation of chronic non-communicable diseases such as diabetes and obesity, mandate collaborative efforts to fundamentally transform the principles governing food production, processing, distribution, and consumption. The 2000s global food crisis, followed by the ongoing crisis since 2022 characterized by soaring food prices and shortages in specific regions (WFP, 2023), highlight the dysfunction and volatility inherent in market-embedded food systems.

In response to these challenges, there has been a growing recognition of city government-led food initiatives. These efforts, showcased globally, are viewed as pivotal in driving sustainability transition in food systems, especially by leveraging the purchasing power of cities with dense populations into the force of creating more sustainable local food chains. The Urban-rural Coexistence Public Meal Service Program (UCPM), initiated by the Seoul Metropolitan Government, stands as an outstanding example of this approach, creating a place-based public food procurement program that connects urban institutions with rural farms via publicly subsidized food supply chains. Through the analysis of the UCPM case, this dissertation examines the pivotal role that municipal governments can play in spearheading innovation in

food systems through public food procurement strategies, thereby enhancing sustainability in regional food systems. The study revolves around an interconnected set of questions:

1. How have policy paradigm shifts in public food procurement over time influenced the development of innovative city-level food initiatives?
2. How are the notions of "local" and "sustainable" defined and challenged in the context of place-based public food procurement? What are the trade-offs resulting from various interpretations of these concepts in practice?
3. What relationships are formed between the government and civic organizations in light of the growing institutionalization of grassroots practices? What roles do these entities play in instigating policy transitions?

The first question delves into the historical evolution of public food procurement, highlighting how it has set the stage for contemporary sustainable procurement initiatives. The second question scrutinizes the practical hurdles associated with the principles of locality and sustainability in the implementation of place-based food procurement programs. The third question unravels the dynamics between principal stakeholders – the government and civic organizations – as they confront escalating government intervention in grassroots food initiatives through the institutionalization of local, bottom-up practices.

In the subsequent section, I will present the main findings and contributions of this dissertation, followed by policy recommendations. The dissertation will conclude with a discussion of potential directions for future research.

2. Key Findings and Contributions

This dissertation underscores the integral role of food systems as catalysts for wide-ranging societal transformations, extending beyond mere alterations in food practices. The term "food systems" suggests its comprehensive and complex nature, encapsulating a diverse array of actors, operations, and institutions spanning the entire spectrum from food production to distribution, consumption, and disposal. Therefore, shifts in these food systems can trigger far-reaching implications for various societal sectors. Consider, for instance, the development of supply chains dedicated to sourcing local and sustainably grown produce, which serve as alternatives to market-driven, profit-oriented distribution channels. The expansion of these alternative channels not only promote sustainable farming practices but also enhance communities' access to healthy, locally-produced food (Chapter 3). As such, innovative initiatives in food distribution, which constitute the middle of the food system, exemplify how transformations in food systems can drive positive societal changes in terms of economic, environmental, social, and health outcomes. This feature illustrates the broader influence of food systems that extends beyond the confines of the food industry alone.

Cities, both as geographic and social entities, possess the potential to act as innovators in food systems, leveraging their concentrated urban populations' purchasing power. Public food procurement serves as a promising government intervention strategy within food supply chains, aiming to foster sustainability in regional food systems. This approach utilizes urban facilities as anchor institutions, directly connecting urban consumers with rural farmers, thus creating a reliable demand for locally and sustainably grown food. The UCPM exemplifies this place-based approach to public food procurement, establishing an exclusive mechanism of food supplies between paired urban districts in Seoul and rural towns. Targeting small- and mid-scale farmers

in rural areas, the UCPM seeks to enhance the livelihoods of those committed to sustainable farming and improve access to healthy, local food for a broader population, irrespective of income limitations. The effectiveness of public food procurement is particularly significant in cities where dense populations, institutions, and infrastructure converge, resulting in substantial consumption levels capable of triggering transformative changes within regional food systems.

Compared to similar global examples of public food procurement programs, the UCPM exhibits two distinctive features. Firstly, it distinguishes itself by serving as a direct government investment in food system infrastructure, encompassing both hard aspects such as local warehouses and transportation, and soft elements like technical support, networking, and education programs. These investments are further reinforced by financial subsidies and institutional support, making the UCPM a comprehensive and strategic initiative in promoting sustainable food practices throughout the entire production and consumption chain. Secondly, the UCPM's development has been significantly influenced by grassroots food movements, with a powerful combination of consumers' and farmers' initiatives at its core (as detailed in Chapter 2). This unique characteristic arises from Korea-specific cultural norms in the food systems, where rice holds great significance as a staple and is expected to be included in every meal, leading to rice production accounting for over half of the entire crop production. In the face of an incremental opening of the domestic agricultural market, especially concerning rice, farmers' organizations have voiced their concerns about livelihoods and food sovereignty, while parents have expressed deep worries about the quality and operation of school meals.

To delve into the historical context of policy evolution in Korean public food procurement programs, Chapter 2 employs the Multi-level Perspective (MLP), a framework developed to elucidate the mechanisms of sustainability transitions. The MLP, with its

conceptualization of different levels based on societal functionality (niche, niche-regime, regime, landscape) and its ability to visually depict transitional processes, helps researchers in understanding the origins, structure, and development of innovations. Diverging from the traditional MLP, which often overlooks the political nuances surrounding societal transitions, the application of MLP in this Korean context aims to unveil the political dynamics that underpin a sequence of policy innovations in public food procurement. Instead of viewing each innovation in isolation, the theoretical approach adopted in this study recognizes them as interconnected events within a comprehensive process aimed at achieving sustainable food systems, highlighting that niche-driven innovations can continuously inform adaptations and additional shifts in policy paradigm. This dissertation emphasizes the pivotal role of the niche-regime interface – a space where significant political interactions occur between grassroots actors and governmental players – as an essential component of societal transitions.

The politics surrounding food systems innovations become prominently visible when integrating "local" and "sustainable" principles into policy and balancing various priorities tied to food policy agendas (Chapter 3). While conceptual fuzziness is common in planning practices, this dissertation argues that a meticulous assessment of trade-offs between conflicting priorities is vital during the formulation and implementation of planning. For instance, a narrow definition of locality based solely on municipal or geographical borders could underestimate the potential influence of urban food initiatives on wider areas. Conversely, a broader interpretation of "local" based on community-based values, such as traditions and cultures, might lack specific strategies and criteria to effectively implement those values into practices. This issue can be partly addressed through a regional perspective, which denotes a larger geographic area and operates on a broader scale than a local food system. Unlike local systems, regional systems are not anchored

in particular communities or areas. Instead, they encompass multiple local entities, extending beyond the sum of their individual components and featuring adaptable boundaries that allow regions to overlap and coexist. These systems foster the establishment of sustainable and resilient food systems, serving both producers and consumers across a broader geographic scope.

Similarly, focusing heavily on sustainability concerning organic farming and chemical control can improve food quality for consumers but may create challenges for small-scale farmers looking to transition to sustainable practices, neglecting the economic, social, and cultural dimensions of sustainability. The findings of this study shed light on a thought-provoking aspect of the food system, revealing that the healthiest food options for consumers may not necessarily align with prevailing agricultural priorities. The ongoing debate over the acceptance of local food certification versus national environment-friendly certification only provides an explicit example of these conflicting priorities. This divergence in priorities serves as a clear indication of the contrasting perspectives held by consumers and producers, with each group advocating for certifications that best align with their individual preferences and objectives.

Maintaining a strong focus on the political dynamics that underpin innovative food initiatives, Chapter 4 closely examines the local politics and partnerships between governments and civic groups, particularly as increasing governmental efforts are made to institutionalize grassroots food practices. The findings reveal four distinct types of partnerships between civic actors, who have been dedicated to driving food system changes, and the government: cooperation, co-optation, and contestation. One significant finding is that, in contrast to the argument put forth by Laforge and colleagus (2017) suggesting that contestation usually facilitates the transformation of food practices, it can actually impede the growth and

sustainability of grassroots organizations by undermining their capabilities. Continued contestation and resistance can limit the empowerment of grassroots initiatives, thereby restricting their ability to impact governmental decisions and impeding the strengthening of their positions as viable alternatives. Moreover, co-optation does not necessarily perpetuate the status quo; rather, grassroots stakeholders perceive the UCPM as an evolving *process*, aiming to pursue long-term objectives by utilizing changing circumstances to enhance the influence of grassroots-driven goals and practices.

A central theme echoed throughout this dissertation is the significance of power dynamics in policy initiatives, which exert significant influence on the processes and outcomes of planning practices. Nevertheless, the traditional MLP, as previously discussed, does not adequately incorporate a political perspective. To address this limitation, some sustainability scholars advocate for reflexive governance, encouraging actors to critically evaluate their assumptions, institutional arrangements, and practices by recognizing the inherent political context in societal transitions. Complementing the existing literature on sustainability transitions, collaborative planning theory provides valuable insights into collective experimentation, learning, and networking at the niche-regime interface, facilitating the breakthrough and scaling up of grassroots innovations as envisioned by the MLP. By incorporating power dynamics that shape decision-making, agenda-setting, and perceived needs into niche-regime interactions, the theory of collaborative planning approach enriches the understanding of transitional processes and enables the formulation of concrete strategies to achieve desired outcomes and map future trajectories for niche innovations.

3. Impacts of the COVID-19 Pandemic on Food Procurement[31]

During the fourth year of UCPM implementation, with approximately half of the urban districts already participated in the program, the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic on Mar 11, 2020. Earlier than this, with the first confirmed case reported in late January 2020, the coronavirus drastically hit Korea in the following months, causing thousands of infections and shutdowns of public and commercial facilities to contain community transmission. Educational institutions, including schools, kindergartens, and daycare centers, also closed in February. Schools delayed the start of the new academic year, which is usually the first week of March, by one month. They resumed the semester through the remote teaching system on April 9, with school buildings still closed. As the physical shutdown of schools extended for the following two years, farmers supplying environmentally friendly agrifood to public school-lunch programs have been experiencing difficulties in looking for alternatives to sell their products. International travel restrictions exacerbated the situation by limiting the availability of immigrant farmworkers, mainly from Southeast Asia.

To help out the farmers who rely on volume purchases by schools, the Ministry of Agriculture, Food, and Rural Affairs (MAFRA) launched support programs in early March. First, in cooperation with local governments, private food distributors, and consumers' cooperatives, the national government led online/onsite campaigns to promote the consumption of the food previously reserved for school lunch programs at local markets, food stands, and online markets.

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[31] This section was modified based on an article published in Gastronomica on November 3, 2020, which is accessible via https://doi.org/10.1525/gfc.2020.20.3.74.

Second, MAFRA fostered group purchasing by government entities and the public facilities. The "Food Box" program initiated by several local governments (See Figure 19) is a successful example of group purchasing, which encouraged nationwide participation. Not only groups but also individuals can buy a food box consisting of perishable items, such as vegetables and fruits, in support of farmers in dire circumstances. Lastly, MAFRA sourced food from farmers for other relevant programs—free food boxes for people under self-quarantine due to COVID-19 and pregnant women.



Figure 18. An example of the "Food Box" Program (Photos by author)

A report on April 12 by MAFRA indicated that 96% of the targeted food had been consumed for the past six weeks (1,164 out of 1,218 tons). As the shutdown of school buildings was in effect, the national government added new programs to subsidize wrapping/shipping costs for "Food Box" and group purchasing for public meal service. Amid the unprecedented pandemic, farmers in many countries, as well as South Korea, have been suffering from abrupt disruption across food supply chains. The case of South Korea shows that the government and

local community can play a significant role in alleviating the dire impacts of COVID-19 on our food systems, and in particular, small-scale farmers.

As such, the UCPM experienced significant disruptions, most notably within local food systems, throughout the course of the COVID-19 pandemic and subsequent shutdowns. The prolonged closure of schools disrupted contract farming, resulting in considerable cutbacks and delays in program implementation across urban districts. These challenges were further intensified by the political transition resulting from the change in Seoul's mayoral office, which added pressure to the public meal service system. Additionally, a notable setback occurred in 2021 when one district opted to withdraw its participation. The sequence of events following the onset of the COVID-19 pandemic highlighted the vulnerabilities associated with the institutional public food procurement system, which relies on the presence of institutions. This underscores the urgent requirement for strategies capable of acting as a "buffer" during crises, resilient enough to withstand external shocks to the food system.

4. Policy Recommendations

This dissertation provides several strategic policy recommendations for decision-makers in the UCPM, grounded in its analytical findings: 1) the first recommendation underscores the crucial role of collaboration and institutional support. Specifically, to counter the uncertainty and apprehension linked to the acceptance of local certifications for "environment-friendliness," decision-makers need to prioritize opportunities for collaboration and networking among stakeholders across urban and rural territories to promote the in-depth understanding of technical and institutional challenges that farmers are facing when converting into organic farming, a type of sustainable agriculture. The organization of townhall meetings and the institution of decision-

making processes involving local actors, such as practitioners or farmers, with legally binding implications can foster shared vision and consensus on key policy tenets. Such collaborative measures are indispensable for translating policies into practical actions, thereby catalyzing transformative changes within the food system. 2) Additionally, this dissertation highlights the necessity for unified messaging about primary principles of the UCPM. The government need to make a commitment to clear and consistent communication to dissipate public confusion, particularly around the notions of local and sustainable. Transparent articulation of the UCPM's aims and advantages can augment public comprehension and elicit civic support for the initiative, culminating in enhanced policy execution and a more significant transformative impact within the regional food system.

The findings of this study also hold valuable insights for global initiatives seeking to establish similar farm-to-institution programs in diverse contexts: 1) with limited precedents of place-based institutional public food procurement, the UCPM offers lived experiences of both opportunities and challenges, particularly when implementing a location-specific model of food procurement that binds regions together for exclusive food supplies. Policymakers and practitioners worldwide can draw practical lessons from both the successes and challenges encountered in the UCPM, specifically in addressing the delicate balance of competing food system priorities and developing comprehensive strategies that encompass not only environmental aspects but also economic, social, and cultural considerations. These insights will empower them to craft contextually appropriate and effective policies that advance sustainable and locally-rooted food systems in their respective regions. 2) Moreover, this dissertation underscores the crucial role of public investment in robust infrastructures in the middle of the food system, supply chains connecting local producers and consumers. The well-defined hard

and soft infrastructures facilitate efficient distribution, communication, coordination, and collaboration between urban and rural stakeholders, thereby reducing reliance on profit-oriented food system infrastructures.

Finally, this dissertation provides policy implications that extend beyond food systems, holding relevance for urban planners committed to enhancing the sustainability of cities or city-regions across various domains, including housing, transportation, and environmental planning. 1) To ensure effective transformative efforts, urban planners should implement a well-defined set of evaluation methodologies, enabling them to accurately assess the impact of their initiatives. For instance, there should be a consensus on the criteria that signify evidence of improved sustainability and how to measure both tangible aspects (e.g., time, space, temperature) and intangible factors (e.g., social cohesion, cultural heritage). 2) Effective long-term planning is imperative for upholding policy continuity and momentum amid transitional processes, given that such interventions usually necessitate sustained efforts over an extended duration. The inclusion of far-sighted perspectives becomes essential, particularly in the face of potential shifts in political leadership that hold the capacity to disrupt institutional reforms, especially those that have been scaled up by non-governmental actors. 3) Acknowledging the complexity and tensions inherent in divergent values and priorities is equally essential. Planners must carefully navigate the trade-offs between disparate objectives, such as public health, environmental preservation, and support for local economies in policy terms, as demonstrated in the UCPM case. Emphasizing transparent decision-making processes that consider these complexities will contribute to formulating more balanced and sustainable policies. Lastly, 4) recognizing the intricate interplay between food systems and a diverse array of urban and regional infrastructures, it is recommended to investigate the repercussions of sustainable food initiatives

(e.g., shortened supply chains, agroecological farming practices) on innovations promoting sustainability in other sectors (e.g., transportation, ecological systems). Such research initiatives are essential to furnish policymakers and practitioners with evidence-driven insights and cross-disciplinary methodologies, cultivating a holistic approach to confronting complex urban and regional challenges that necessitate multi-disciplinary solutions.

5. Future Research Directions

The policy recommendations presented in this dissertation offer valuable insights for those seeking similar initiatives to enhance sustainability in urban and regional food systems. However, an in-depth exploration of distinct challenges and flexible strategies across diverse global contexts could substantially boost their practicality and applicability. To be more specific, conducting further investigations into the cultural, economic, and political context variations across different regions with distinguished social and geographical characteristics, and their potential influence on the functionality of public food procurement, would add richness to the policy insights presented in this study. Accumulating knowledge from more cases could better prepare policymakers and practitioners with context-specific strategies for advancing sustainable and locally-rooted food systems globally, by upscaling public food procurement initiatives from the regional to the global level.

Future research can also build upon the concept of "localism," which is currently gaining traction as a potential solution to address population decline in Korean rural areas (Jeon, 2023). With more than half of the population concentrated in the Metropolitan area, occupying only 12% of the country's total area, localism offers a promising approach to incubate and develop local-specific economic models, revitalizing shrinking communities and fostering more balanced

growth between urban and rural regions (ibid). A critical aspect of localism initiatives is enhancing urban-rural linkages. A study of public food procurement centered around the concept of "localism," which emphasizes territorial resources and place-based knowledge, can delve into specific strategies to translate sustainable public food procurement principles into practical actions for those rural communities at the fence of existence, confronting unprecedented challenges of declining populations and tax revenues.

Finally, this dissertation raises an important point for future investigation: the impacts of publicly driven food supply chains on the existing market. While evidence suggests that "market failures" or a profit-driven mechanism in the food system have caused a number of food-related issues (Chapter 1), public intervention through policy and planning has emerged as a potential solution. However, a critical reflection on whether governmental intervention is the ultimate answer is necessary, considering the longstanding "market versus state" debate in various fields. Moreover, it is critical to thoroughly examine whether nonprofit organizations can effectively function as a model for an alternative food system or if their involvement in public food procurement is essential. This examination is particularly important in light of the escalating demand for civic participation in food governance. As such, finding effective and sustainable models to complement market failures in the food system remains a significant challenge and research agenda. Future research, accordingly, should focus on developing a comprehensive set of measurements to evaluate the capacity and upper limit of public food procurement, as a unit of planning programs. This evaluation is crucial to assess their ability to efficiently handle an influx of agricultural produce from rural areas with flexibility and resilience.

Lastly, it would be consequential to examine the operating mechanisms of global public food procurement programs from a "right to food" perspective, as a fundamental human right to

be safeguarded by public authorities. Given that most global cities today host citizens from various nations, an understanding of inclusion and exclusion in public food procurement is pivotal as these opportunities are primarily granted through the use of public institutions. An investigation into the participants and those left out can help policymakers, practitioners, and scholars contemplate the entitlement process for public food programs (e.g., emergency food aids, food banks, subsidies targeting eligible citizens) from both theoretical and practical standpoints. This analysis will lead to a more equitable and inclusive food system, respecting and upholding the universal right to food.

6. References

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Appendices

Appendix A: Structure of the Seoul Food Civic Council (Initial Version)

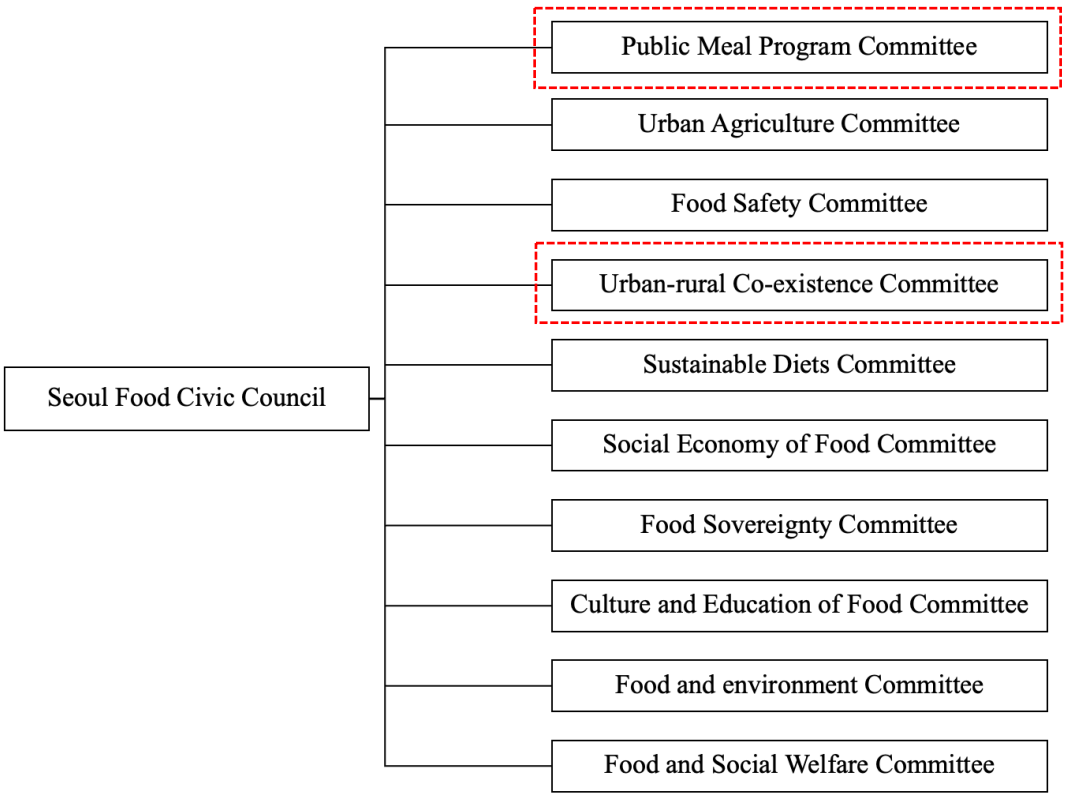


Figure 19. Structure of the Seoul Food Civic Council

* Highlighted subdivisions are involved in UCPM.

- September 2017: Enactment of the Food Ordinance, establishing the civic council.
- November 2017: Launching of the first civic council (2017~2019) with ten divisions.
- March 2020: Launching of the second civic council (2020~2023) with seven divisions.
- March 2023: Restructure of the council into three divisions: Food Policy, Food and Health, and Food and Environment.

Appendix B: List of Data Analyzed

Archival data collected from:

- National Archives of Korea (https://archives.go.kr)
- National Institute of Korean History (https://www.history.go.kr)
- The National Library of Korea (https://www.nl.go.kr)

  (Search keywords: school food, food procurement, public food procurement, food aid)

National and Municipal Government Documents

- Press releases from the government (available on each local government website)
- Meeting minutes of Seoul Public Meal Service Committee since from 2015 to early 2019
- Blueprints about relevant local food plans
- White papers about local food systems
- Policy evaluation reports (unofficial)

Press materials: newspapers and news clips collected from online newspaper webpages

Secondary Literature: references in this dissertation

National and Local Regulations from Korean Law Information Center (https://www.law.go.kr)

Appendix C: A Comparison of Geographical Scale between Korea and the US

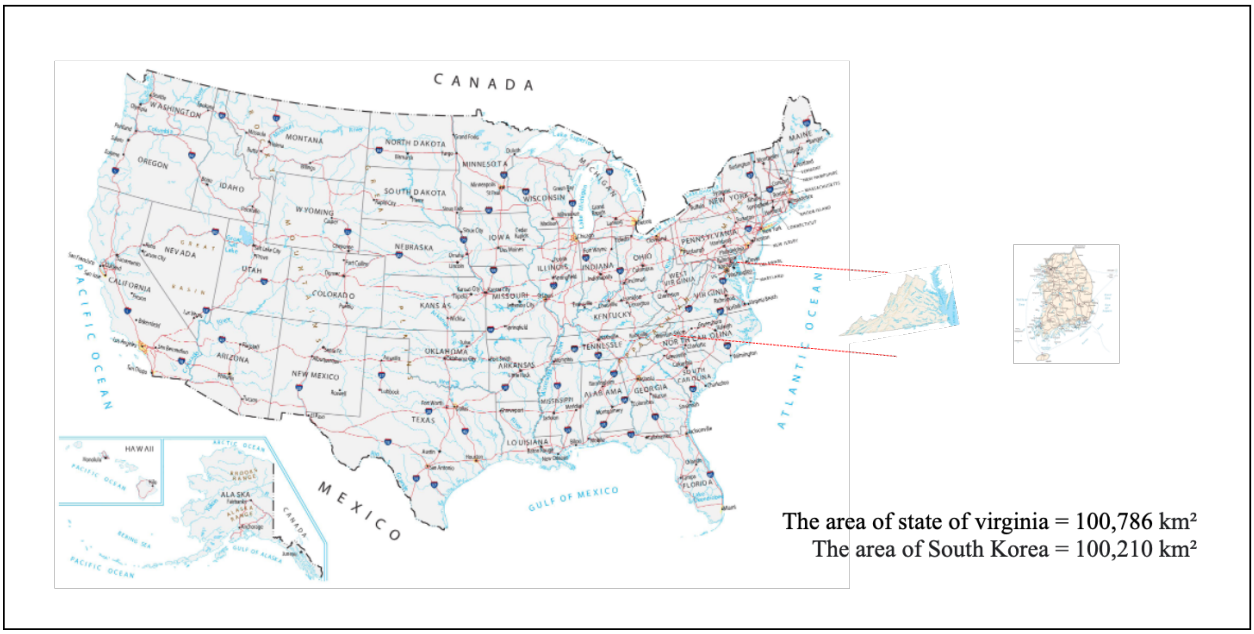


Figure 20. A comparison of geographical scale of Korea and the US

- The total of area of South Korea (100,339 km² = 38,741 mi^2) is comparable to that of the state of Virginia in the US (110,786 km² = 42,774 mi^2).
- The average driving time for a trip from Seoul, the capital city of South Korea located in the northern region, to Busan, the second-largest city located on the southeastern coast, is approximately 4.5 hours.

(Map source: GISGeography, https://gisgeography.com/, accessed on July 20, 2023)

Appendix D: List of Semi-structure Interview Questions

Principal Investigator:	Seulgi Son, Ph.D. student, Department of Urban and Regional Planning, University of Michigan
Faculty Advisor:	Lesli Hoey, Assistant Professor, Department of Urban and Regional Planning, University of Michigan

Date: __/__/__ Time: __:__ - __:__

Location of Interview:

Wants to remain Anonymous (Yes / No); Recorded (Yes / No); Data retention (Yes/No)

Interview Goals:

- Learn about engaged food actors' general experience and interpretation of the Urban-rural Coexistence Public Meal Program (UCPM)
- Learn about the grounded practices of UCPM enhancing the infrastructure of the middle – shortening food supply chains, supporting small-size farmers, increasing consumer access to healthy ingredients, and providing affordable prices.
- Gain a better understanding of how each actor interacts with the Seoul Metropolitan Government/district-level governments/rural governments and establish networks in proceeding with the UCPM system
- Unveil dynamics between local civic actors and district-level governments, and if any, a potential tension which might hinder collaborative governance building
- Obtain primary data for policy implications based on the lived experience of participants in UCPM: successes and challenges encountered

Questions:

0) <u>Consent Process</u>

a) Do you still want to participate in the study as an interviewee? (Yes / No)
b) Do you have any questions about the study?
c) Would you like this to be anonymous? (Yes / No)
d) Can I record? (Yes / No)
e) Do you want to retain data after the end of this study (with the completion of the researcher's Ph.D. dissertation expected in 2020) for future work? (Yes / No)
f) Would you mind signing on the informed consent document?

1) <u>Introduction of yourself and study</u>

a) This research is part of my Ph.D. dissertation in Urban and Regional Planning at the University of Michigan.
b) I've come to this project because… I am interested in learning how food actors are engaged in UCPM governance and they contribute to rebuilding the middle of our food systems. That is why I am here to learn more from you as a significant actor.
c) Thank you for participating and sharing your expertise and life experiences. Your work, thoughts and opinions are really valuable to future policy improvements and especially informative to my research examining city-level efforts to build sustainable local food supply chains and exploring an effective model of public procurement.
d) Can I ask basic demographic information: names, ages, addresses, professions, if any, affiliated organization(s)? This information will be only used to record and analyze our discussion in the study. Unless you agree to be identified, these will be encoded and de-identified.

2) <u>General questions</u>

a) What do you do as a ____ (job title)____?
   - What brought you to your current work as a__(job title)____?
   - How long have you been working at _____?
   - What brings you back to work every day?
b) Could you describe your role at ____ (workplace)___?
c) Whom do you usually work with?
d) Where does your role/business fit in the UCPM system?
   - What makes your role/business important in the UCPM supply chain?

3) <u>UCPM Implementation Questions</u>

a) How did you get involved in UCPM?
   - Could you walk me through that?

b) On what terms do you agree with UCPM agendas?
- How does your philosophy as an individual come across UCPM?

c) What "shortened food supply chains" in UCPM would mean?
- To consumers, producers, and intermediaries?

d) How would you define small-size farmers targeted in UCPM?
- Do you think the policy definition of small-size farmers is appropriate?

d) Why do you think supporting small-size farmers in rural towns is important?

e) How is public food procurement different from other alternative distribution channels?
- For example, farmers market, community supported agriculture, and direct sales?

f) What is your biggest challenge working as _____ at _____?
- Whom do you usually discuss the challenge with?

4) <u>UCPM Committee Activities Questions</u>

a) Have you participated in any of UCPM-related board or committee?
- Where did you mostly obtain information on the board/committee?
- What was your role/position there?
- How long do you participate in the board/committee?

b) Tell me about your experience of participating in a board/committee meeting.
- Was it a metropolis-, district-, or local-level meeting?
- What brought you to participate in the meeting?
- What was the main agenda of the meeting?
- Who else were there? Who led the meeting?

c) How do you know your input is reflected on improvements of UCPM?
- Whom do you contact to gain information on policy participation?
- Tell me more about successes/challenges about being engaged in this process.

5) <u>Interview Reflections and critiques</u>

a) Is there anything else you think I should know?

b) What questions do you have for me?

c) If you have another minute, I would love to know how I was as an interviewer. Your constructive criticisms are welcome