"SEOUL FOOD": EDIBLE FOOD PRODUCTION BETWEEN TRADITION, RESISTANCE AND SUSTAINABILITY IN SOUTH KOREA

Author:
NATALIA GERODETTI

Affiliation:
LEEDS BECKETT UNIVERSITY, UK

INTRODUCTION

The paper investigates ties between urban agriculture, cultural food practices and the cityscape in Seoul by offering some insights into how informal food cultivation practices coexist with formal urban farming initiatives. Underpinning the paper is an exploration of tradition, resistance and sustainable practices in a changing urban landscape, which provides a lens for understanding the dynamic human-spatial relationships in the urban environment of Seoul. In taking a close look at how urban food cultivation is intertwined with everyday life, this case study wants to offer an insight into the manifestations and meanings of these practices rather than being an evaluation of the efficacy of urban agriculture policy. In doing so, what is presented is an interpretation of how tradition, forms of resistance and sustainability play out amidst an evolving urban space.

EDIBLE URBAN LANDSCAPES

In the Global North forms of Urban Agriculture (UA) are thought to be less motivated by emergency food subsistence and supply, and more about defending urban green spaces, the creation and strengthening of urban communities, the construction of recreational spaces or proposals of an alternative model to a hitherto hegemonic neoliberal capitalist urban development paradigm.[1] Yet the socio-spatial impact of UA policies and practices remains a subject of intense debate with some scholars focusing on the social justice possibilities contained in UA projects, whilst others are drawing attention to how UA unintentionally fosters revalorization and gentrification processes through an aesthetic and environmental improvement of marginal and working-class neighborhoods and suburbs.[2]

Capturing the Edible Landscape in Seoul

Although definitions of what UA comprises remain contested, this paper points to multiple forms of urban edible food production that exist in Seoul, South Korea, drawing upon UA definitions provided by Seoul Metropolitan Government's UA policy. Alongside other East Asian countries,[3] a sensibility towards food traditions in everyday life which extend from practices of consumption to practices of urban food cultivation is also manifest in South Korea. Vegetables are omnipresent in Korean culture, not just on the table but also in its urban landscape. Whilst Seoul Metropolitan Council also has a formal and extensive support program for increasing urban agriculture (both commercial and non-

commercial) what is striking about the city landscape is the retention of informal food cultivation practices in and above the streets of Seoul.

Edible plants are integral to the landscape in Seoul and to the personal lives of many Koreans. Formally, "urban agriculture" is defined as growing or cultivating crops, trees or flowers as well as raising insects "by utilizing land, buildings or various spaces in an urban area". The term "urban farm" is applied to mean "land, various types of unused land, in-between spaces, parks, green zones, and other spaces in which urban agriculture is practiced".[4] So whilst "urban farming" is a broad semantic term applied to any scale, effort and longevity of engaging in edible plant cultivation or Urban Agriculture (UA),[5] Seoul has placed its policy clearly within narrative of a population (an ageing society and community issues) and an urbanization challenge (a need for more green infrastructure and wellbeing spaces).[6]

Tending to plants is thus framed as something meaningful beyond providing edible food and this is most manifest in the recent recognition of "pet plants". The emotional attachment and care for plants are recognized as akin to having pets, considering them a family member.[7] This is accompanied by health support for pet plants in the form of pet plant clinics which have appeared since 2021 for citizens to access, diagnose and treat health issues with their pet plants. Formal wellbeing programs especially framed around combatting isolation for elderly people are also part of the 3rd iteration of Seoul UA strategy.

Urban food cultivation in Seoul thus contains an emotional human-plant connection in the frequent iterations of "healing plants" or "healing farms". Enabling this emotional connection to plants is manifest in many usual and unusual ways such as "box farms" (meaning a variety of containers, recycled and new) used on rooftops, verandas, or liminal urban spaces. "Box farm" equipment is available through the district office and comes with the provision of compost and seeds to encourage people and/or groups to cultivate. Many of these formal schemes are in the green belt, office rooftops or existing green infrastructure (see Figures 1 and 2).

Figure 1. Box Farm at bottom of Ingwansan Mountain, Seoul.

Figure 2. Box Farm outside Residential Care Home, Seodaemun gu, Seoul.

Formal and Informal Food Cultivation

In addition to government supported schemes informal forms of plant and vegetable growing are also omnipresent (analogous to the formal "box farms" I term them "pot farms"). These are assemblies of non-uniform containers that people have found and re-purposed in the many "in-between spaces" that Seoul offers up (see Figure 3), such as left over, non-concreted ground between paved areas and walls, pavements outside houses, and more.

Figure 3. In-between edible plant growing, Insadong, Seoul.

Also analogous to the difference between the district-supported "box farms" and the informal "pot farms" (see Figure 4), there are district-supported land farms and private land farms. Liminal spaces such as some ground on a parking lot, or a built structure outside multi-family houses, or a mixture of these and pot farms get appropriated for vegetable growing in Seoul.

Figure 4. Pot Farm in Mapo gu, Seoul.

The benefit of these informal growing spaces is that people can use vertical structures (see Figure 5) for growing and trailing plants without impacting passers-by. These are tended to lovingly on a daily basis by residents (women mainly when outside dwellings) or workers (men mainly in the case of car park attendants) who spend substantive time in close proximity to the growing space.

Figure 5. Vertical growing, Sinchondong, Seoul

The overall edible urban landscape in Seoul is therefore constituted by both formal UA policy informed initiatives and traditional informal practices (as observed in 2023 in an ethnographic project on urban food growing entitled "From Seed to Compost"). With regards to urban food cultivation, a concerted policy effort to support UA was launched in 2012 with a "year of urban agriculture" and, since then, support has steadily increased across its 25 districts for individuals, groups, schools and businesses to be able to engage in practices of urban farming.
These formal provisions are supported by dedicated Urban Farm Managers and an extensive online network of Urban Farmers.[8] UA policy in Seoul follows several greening initiatives of the urban landscape (amongst these Cheonggyecheon river regeneration in 2003, Gyeongui Forest Line and Book Line have rightfully acclaimed some fame) and has also been accompanied by the policy and practice shift towards food waste collection and recycling(from 2% in 1995 to 99% in 2023).

Socio-environmental Background of Seoul

Seoul is the capital of South Korea and more than half of South Korea's total population can now be found to reside in the capital city of Seoul and surrounding metropolitan cities. As of December 2023, the registered populations in Seoul, Incheon and Gyeonggi Province recorded up to 26.1 million residents, which made up 50.7 percent of the country's total population. Out of the 26.1 million, 9.39 million were registered in Seoul whose population has peaked in 2010 and has

since been on a slow downward trajectory (mainly because of unaffordable housing) whilst the surrounding cities in the Gyeonggi Province have been growing).

The rapid development of South Korea since the Korean War has led to features of "compressed modernity"[9] and social issues related to continuing urbanisation as well as an ageing society present socio-political issues. The housing stock in Seoul is now atypical of Korean cities in that it still contains 18.8% multi-family housing units in 2021[10] as well as 26.1% of single storey houses/detached dwellings which stands in stark contrast to the prevalent skyline of high-rise apartments blocks often shown.[11]

These account for 43% of housing in Seoul and contribute to the (albeit declining) population density on average of 15,560 in 2022. With land management policies clearly protecting green belt spaces efforts to grow Seoul are now being pursued by growing more housing space vertically (the 35 floor cap has been lifted by the government in 2023) despite the lack of affordability for many people.[12]

With the fertility rate in Seoul being at its lowest ever (0.6 below the national average of 0.78) Seoul is also a major contributor to South Korea becoming a super-aged society. Estimates are that in 2025 the proportion of those aged 65 and older will be 20% of the total population. Currently (2023), people aged 65 or older constitute 18.4% of the population – plus 6% 50-59, forecasting a rise to 46.4 percent in 2070.

Old-age poverty is already a major problem in South Korea, which has the OECD's highest poverty rate among retirement-age individuals, even though this rate has fallen from a high of 45% in 2016 to 43% in 2018. Pensions are small, and most older adults today lack coverage under a national pension system that excluded a large share of the workforce until its expansion in 1999. National pension benefit levels are low (with an average monthly pension of KRW 520,000, equivalent to $440), and furthermore employees in private companies are often pressured to retire long before the legal retirement age of 60.

FOOD CULTIVATION AT INTERSECTIONS OF NECESSITY AND WELLBEING

Urban food cultivation in Seoul is pursued by different demographic groups and for possibly different reasons. Middle-class families who live in desirable apartment block buildings are more likely to be involved in government support formal UA initiatives through weekend and community farms in the green belt, or be recipients of "box farm" equipment[13] which can be located (and moved) in a suitable location. Seoulites who are in more precarious situations ingeniously use different growing places for vegetable cultivation. Stepping behind the front stage image of Seoul and its main transport arteries with tall development reveals older residential and commercial areas where edible plants are being grown in the smallest of spaces in public view or public spaces by people alongside their everyday practices.

Urban Agriculture Support and Policies

In 2022 Seoul published the 3rd update of the revitalization policy since the "initial year of urban agriculture" launched a decisive programme to encourage it citizens to engage with edible food cultivation on various levels. Its aims are to keep spreading the value of urban agriculture and expand its base whilst also visualising the quantitative success story of the expansion of UA in Seoul so far. Aiming at getting 1 mio people involved in urban farming by 2024, the path is well prepared with an increase from 45,000 in 2012 to 660,000 in 2021 (see Figure 5).[14] The policy framing of UA Seoul aims "to give further support to the creation of urban agriculture spaces in each district to activate information, education, and experiences, and contribute to the enhancement of social values through urban agriculture to problems caused by aging and urbanization".[15]

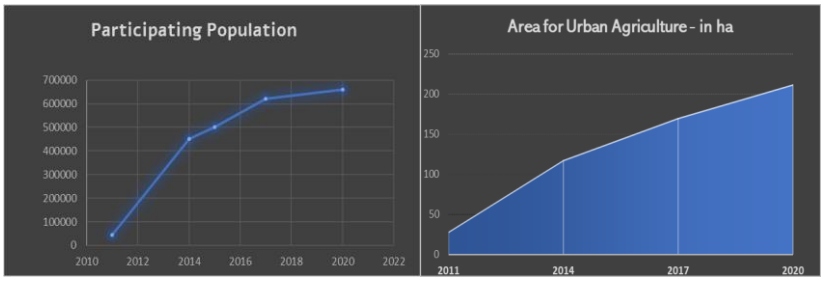
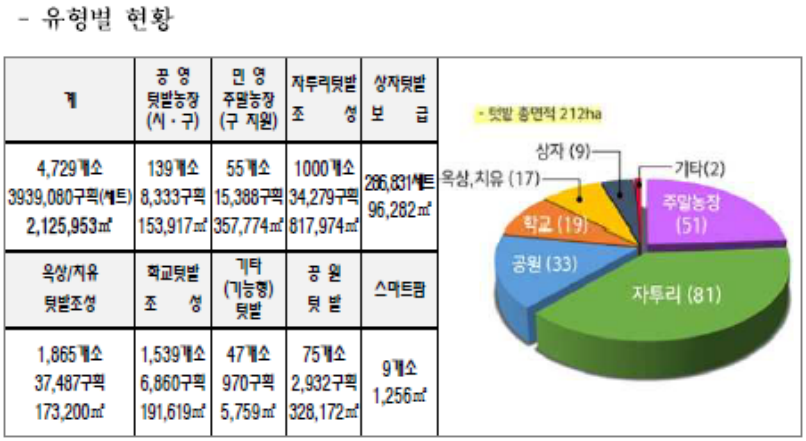


Figure 5. Participating population increase since 2012 (l), growing space increase since 2012 (r).

The current plan is explicit in its background framing of UA policies against the twin backdrop of the demographic challenge of ageing citizens as well as the problems caused by urbanisation. Whilst it is not unusual for urbanites to (re)turn to food cultivation in advancing years, Seoul's UA policy is explicit about this frame of ageing, even though the remainder of the policy document is less explicit how precisely UA is to mitigate against what social problems of ageing.

Indeed, from a reading of the policy paper and its funding scope it would appear that combatting isolation and supporting wellbeing, rather than combatting economic inequality, is the primary focus. For middle-class dwellers, the cultivation practices might be motivated by restorative and "healing" aspects which mitigate against the stresses of daily life, for other growers the harvests of quickly growing plants constitute a strong contribution to their nutrition.[16]

It is thus within this context that urbanisation and the concomitant loss of connection to green and blue spaces present a challenge to individuals, families and communities. The 2021 plan provided 24 bio WON (ca. 18 mio $) for urban agriculture projects for the year 2022, in a bid to further increase the 660,000 Urban Farmers so far involved with formal projects across the 212 ha (see Figure 6).



- 유형별 현황

계	공영 텃밭농장 (시·구)	민영 주말농장 (구 지원)	자투리텃밭 조성	상자텃밭 보급
4,729개소 3939,080구획(세트) 2,125,953㎡	139개소 8,333구획 153,917㎡	55개소 15,388구획 357,774㎡	1000개소 34,279구획 817,974㎡	286,831세트 96,282㎡
옥상/지유 텃밭조성	학교텃밭 조성	기타 (기능형) 텃밭	공원 텃밭	스마트팜
1,865개소 37,487구획 173,200㎡	1,539개소 6,860구획 191,619㎡	47개소 970구획 5,759㎡	75개소 2,932구획 328,172㎡	9개소 1,256㎡

Total	Public garden farm(city/gu) *[5-6 per gu]*	Private weekend farm (gu support) *[2 per gu]*	Lottery distributed small garden *[=our participants]*	Box farm distribution
4,729 locations 3939,080 plots (set) [106,249] 2,125,935m² (212 ha)	139 locations 8,333 plots 153,917 m² (15 ha) *[18 m² per plot]*	55 locations 15,388 plots 357,774 m² (36 ha) *[23 m² per plot]*	1000 locations 34,279 plots 817,974 m² (81 ha) [23 m² per plot]	286,831 boxes *[0.33 m² per box]* 96,282m² (9 ha)
Rooftop/Healing Garden	**Creation of school garden**	**Other functional vegetable gardens**	**Park vegetable garden [3 per gu]**	**Smart farm**
1,865 locations 37,487 plots 173,000m² (17 ha)	1,539 locations 6,860 plots 191,619 m² (19 ha)	47 locations 970 plots 5,759 m²	75 locations 2,932 plots 328,172 m² (33 ha)	9 locations 1,256 m²

Figure 6. Distribution of the 212 ha of formal UA programs into different types.

The highest land use types here are 'Jaturi teosbat' which have been set up as part of an eco-friendly urban agricultural revitalisation (with a mandate for sustainable practices). Further notable is the high number of what is called "box farms" ('sangjateotppat bo geup') which this author has not encountered elsewhere in this format nor extent of use.

Food cultivation beyond policy

The ethnographic research[17] informing this paper has revealed a substantive diversity of food growing practices across the Seoul landscape and I contend that within radius of 200m edible plants can be found in pots, in liminal in-between-spaces and on rooftops (see Figure 7). Thus, UA policy formalises traditions and remnants of what used to be a self-sufficient society with strong food traditions which exists across the landscape. Yet it is notable and part of a self-definition of a modern and modernising discourse that the new UA policies also re-define the meanings of urban food growing in relation to wellbeing, health, green therapy and, application of new agri-technologies (especially in the case of the indoor vertical farms) which distance themselves from the need to self-sufficiency.

To the author both are manifest of a particular Korean sensibility towards food traditions in everyday life which extends from practices of consumption to practices of urban food cultivation. And it is precisely the creativity and diversity that make Seoul such an exciting place for exploring urban food cultivation. Some practices are temporary, others are permanent appropriations of urban space – thereby constituting a form of resistance and counter-hegemonic practices.

Figure 7. "Pot farm" outside a Hanok, Jogno gu, Seoul.

The prevalence of creative repurposing of space for food growing across the backstreets of any Seoul neighbourhood that still contains older housing (pre 1990s and no higher than 5 stories) also challenges, to some extent, the production of urban space in only capitalist terms. There are household or individual based food growing practices that make use of any growing space available in ways that appear unprecedented to the author. Despite its front stage image of the glass towered downtown and the high apartment complexes familiar in any image of Seoul these neighbourhoods still cover large parts of the city.

In these neighbourhoods, edible plants are being grown in the smallest of spaces in public view or public space by people alongside their everyday practices, often based on familial traditions and a relatively close cultural connection to an agricultural past within familial memory: From older women

who tend to large pots outside their houses or roof gardens to male parking assistants who repurpose available ground and space for growing vegetables.
This results in a different typology of Seoul urban agriculture which reconciles the "bottom up" everyday household and individual practices as well as the policy driven municipal initiatives (see Figure 8).

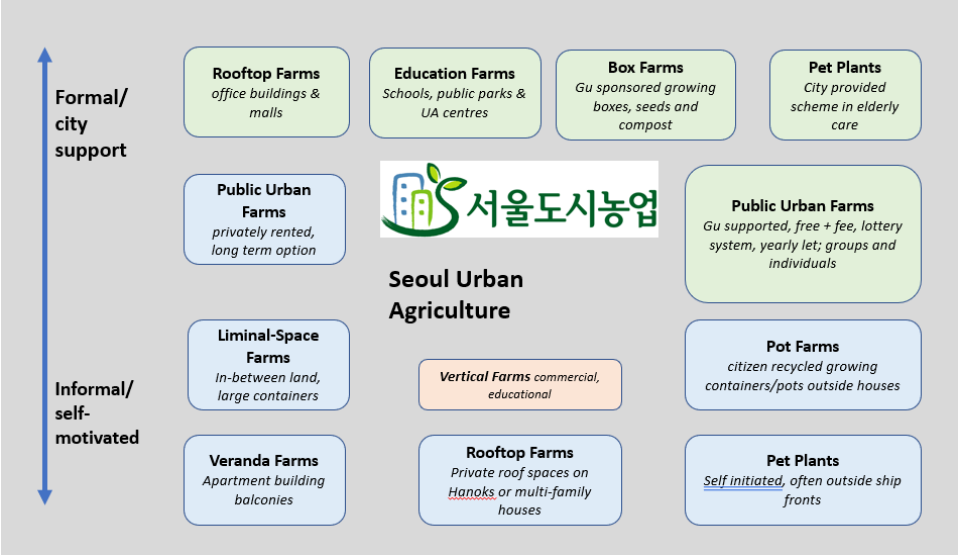


Figure 8. Typology of Seoul Urban Agriculture, by the author.

CONCLUSION

The paper has attempted offer an insight into the rich tapestry of urban food growing practices in Seoul, some which are formally supported, others which are adopting an informal character of traditional, familial and cultural practices that remain woven into the urban landscape. The diversity of manifestations and motivations for urban food growing has been placed at the intersection of cultural traditions, resilience, sustainability (see Figure 9) as well as resistance to neo-liberal co-option of urban space.
In terms of policy recommendations, the most incisive revelation from the Seoul case study is the way in which the smallest of space can be turned into very productive spaces. Further notable is the fact that in Seoul scale of food production is now a deciding factor in being an "urban farmer". This framing allows an integration of food growing into everyday city life and city planning in ways that other cities do not afford. A final commendation to Seoul must be the online farmer's network with its incredibly rich resource and knowledge base and networking aspects.

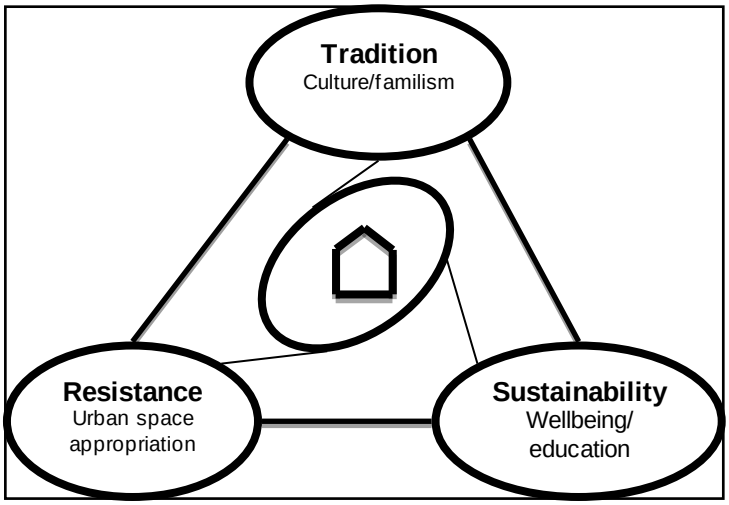


Figure 9. Tradition, resistance and sustainability interrelated.

On the other hand, it should be noted, however, that whilst sustainability is actively sought in relation to the seasonal land management practices, the lottery system jeopardises citizens' effective long-term participation, and thus potentially impacts on the positive assets they derive from growing. Also, whilst formal programmes can be evaluated and their progress quantified, the vast array of informal growing leads to a large hidden figure of citizen-led greening of the built up urban landscape, as well as productivity.

NOTES

[1] Andrea Fantini, "Right to the City or Environmental Gentrification? A Discussion about Risks and Potential of Urban Agriculture" *Urban Geography* 44 (5) (2023), 1003–10, accessed June 20, 2017, https://doi.org/10.1080/02723638.2023.2174351, and Chiara Tornaghi and Michiel Dehaene, *Resourcing an agroecological urbanism: Political, transformational and Territorial Dimensions* (London: Routledge, 2021), and Andres Duany, *Garden Cities: Theory & Practice of Agrarian Urbanism* (U.K.: Duany Plater Zybrek & Co., 2012).

[2] Laura Shillington, "Right to Food, Right to the City: Household Urban Agriculture, and Socionatural Metabolism in Managua, Nicaragua" *Geoforum* 44 (2013): 103–11, accessed June 20, 2017, https://doi.org/10.1016/j.geoforum.2012.02.006, and Erdi-Lelandais Gülçin, *Understanding the City: Henri Lefebvre and Urban Studies* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014).

[3] Wan-Yu Shih et al., "Edible Garden Initiative of Taipei City", April 30, 2022, accessed October 20, 2022, https://e-lib.iclei.org/publications/IFWEN_Taipei_FINAL.pdf.

[4] Seoul Government, 서울시 서울농부포털. "2021 Seoul City Urban Agriculture Promotion Implementation Plan 서울시 서울농부포털." 서울농부포털(도시농업), October 29, 2022, accessed April 20, 2023, https://cityfarmer.seoul.go.kr/brd/list.do?key=1905228803942.

[5] Antoinette M.G.A WinklerPrins. WinklerPrins, Antoinette M G. *Global Urban Agriculture: Convergence of theory and practice between North and South* (Wallingford, Oxfordshire: CABI, 2017), pp.1-11.

[6] KOSIS, "Population Projections and Summary Indicators (Korea) 2022, 2070", October 2, 2020, accessed November 22, 2023, https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1BPA002&conn_path=I2&language=en.

[7] "Seoul City Urban Agriculture Promotion Implementation Plan", Seoul Government.

[8] "Seoul City Urban Agriculture Promotion Implementation Plan", Seoul Government.

[9] Kyung- Sup Chang, *South Korea under Compressed Modernity: Familial Political Economy in Transition*. (London: Routledge, 2010).

[10] The only other administrative districts to have more than 10% multi-family housing stock are Incheon, Gyeonggi-do and Jeju.

[11] According to KOSIS statistics from 2021 this actually puts Seoul into 4th bottom with other administrative districts having up to 66.9% of their housing in high-rise apartments accounting for the national average of 51.5%. KOSIS, ""Housing Type by Administrative District, 2021", October 19, 2023, accessed November 22, 2023, https://kosis.kr/statHtml/statHtml.do?orgId=116&tblId=DT_MLTM_5403&conn_path=I2&language=en.

[12] KOSIS, “Population Density by Population Census”, October 19, 2023, accessed November 22, 2023, https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B08024&conn_path=I2&language=en.
[13] UA policy is administered by the 25 districts which use a lottery system to allocate resources of the varied initiatives. Recipients of all schemes generally get access to tools, some seeds and compost as well as educational and training opportunities.
[14] Minji Lee, “Seoul City Aims to Nurture 1 Mln Urban Farmers by 2024”, *Yonhap News Agency*, October 2, 2020, accessed April 20, 2022, https://en.yna.co.kr/view/AEN20200923004300315.
[15] “Seoul City Urban Agriculture Promotion Implementation Plan”, Seoul Government.
[16] Neither this research nor existing research contains more quantified information on this.
[17] This paper I draw on the 2021 UA policy plan as well as qualitative research from a 3 week stay in Seoul in June 2023 for which 22 participants were interviewed and 160km of walking the streets of Seoul have resulted in an archive of photographs. Almost all the growers observed were 45 years old and above (with the exception of the French growing collective and 3 people involved in education).

BIBLIOGRAPHY

Chang, Kyung-sup. *South Korea under Compressed Modernity: Familial Political Economy in Transition*. London: Routledge, 2010.

Duany, Andres. *Garden Cities: Theory & Practice of Agrarian Urbanism*. U.K.: Duany Plater Zybrek & Co., 2012.

Fantini, Andrea. “Right to the City or Environmental Gentrification? A Discussion about Risks and Potential of Urban Agriculture.” *Urban Geography* 44, no. 5 (February 9, 2023): 1003–10. Accessed June 20, 2017. https://doi.org/10.1080/02723638.2023.2174351.

Gülçin, Erdi-Lelandais. *Understanding the City: Henri Lefebvre and Urban Studies*. Newcastle upon Tyne: Cambridge Scholars Publishing, 2014.

KOSIS. ““Housing Type by Administrative District, 2021.” Kosis, October 19, 2023. Accessed November 22, 2023. https://kosis.kr/statHtml/statHtml.do?orgId=116&tblId=DT_MLTM_5403&conn_path=I2&language=en.

KOSIS. “Population Density by Population Census.” Kosis, October 19, 2023. Accessed November 22, 2023. https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B08024&conn_path=I2&language=en.

KOSIS. “Population Projections and Summary Indicators (Korea) 2022, 2070.” Kosis, October 2, 2020. Accessed November 22, 2023. https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1BPA002&conn_path=I2&language=en.

Lee, Minji. “Seoul City Aims to Nurture 1 Mln Urban Farmers by 2024.” *Yonhap News Agency*, October 2, 2020. Accessed April 20, 2022. https://en.yna.co.kr/view/AEN20200923004300315.

Seoul Government (서울시 서울농부포털). “2021 Seoul City Urban Agriculture Promotion Implementation Plan 서울시 서울농부포털.” 서울농부포털(도시농업), October 29, 2022. Accessed April 20, 2023. https://cityfarmer.seoul.go.kr/brd/list.do?key=1905228803942.

Shih, Wan-Yu, Erich Hellmer and Anina Hartung. “Edible Garden Initiative of Taipei City.” April 30, 2022. Accessed October 20, 2022. https://e-lib.iclei.org/publications/IFWEN_Taipei_FINAL.pdf.

Shillington, Laura J. “Right to Food, Right to the City: Household Urban Agriculture, and Socionatural Metabolism in Managua, Nicaragua.” *Geoforum* 44 (2013): 103–11. Accessed June 20, 2017. https://doi.org/10.1016/j.geoforum.2012.02.006.

Tornaghi, Chiara and Michiel Dehaene. *Resourcing an agroecological urbanism: Political, transformational and Territorial Dimensions*. London: Routledge, 2021.

WinklerPrins, Antoinette M G. *Global Urban Agriculture: Convergence of theory and practice between North and South*. Wallingford, Oxfordshire: CABI, 2017.