

EXAMINING URBAN GOVERNANCE OF SHRINKING CITIES AT THE NATIONAL,  
STATE, AND LOCAL LEVEL: A COMPARATIVE CASE STUDY OF THREE  
SHRINKING CITIES IN SOUTH KOREA

**A Research Paper**

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## ABSTRACT

Depopulation is intensifying in non-metropolitan areas in South Korea with the nation recording a remarkably low fertility rate of 0.78 in 2022 (National Assembly Budget Office, 2023) and a significant migration trend towards metropolitan areas, especially Seoul. This migration, largely attributed to socioeconomic incentives in Seoul, has led to a situation where many describe the nation as the “Republic of Seoul” (SKKUP, 2021). Strikingly, population outflow tends to affect depopulation in non-metropolitan areas more than the birth rate decline (KRIHS, 2022). Since 2020, the population of the metropolitan areas, where it only occupies 11.8% of the total land area, has exceeded the population of the non-metropolitan areas, evidenced by an increase from 48.8% in 2000 to 50.4% in 2021 for metropolitan areas and a decrease from 51.2% in 2000 to 49.6 in 2021 for non-metropolitan areas (KRIHS 2022; KRIHS 2021). As a result, while over half of the country’s population and GDP is housed in the Seoul Metropolitan Area, 49.6% of local municipalities (113 out of 228) are facing drastic population decline (KEIS, 2022). Despite governmental interventions, regional disparities persist. This research seeks to explore sustainable strategies for the shrinking cities in South Korea by delving into three case studies with qualitative analysis of interviews with stakeholders from each municipality.

## BIOGRAPHICAL SKETCH

Su Jeong Jo is pursuing a Master of Regional Planning at Cornell University. She is from Incheon, South Korea and holds a bachelor's and master's degree in Architecture from Hanyang University in South Korea. Throughout her academic career, she has broadened her interest in architecture to regional planning focused on blending social imperatives effectively with urban environments. Post-graduation, she aspires to contribute to sustainable and long-range planning.

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## INTRODUCTION

The Shrinking City Reaction Fund, which was launched by the Korean government in August 2022, is slated to inject 1 billion won (820 million USD) annually over the next decade into metropolitan and local government, 25% and 75% each, showing the central government's continuing commitment to regional development. A significant portion of this fund, as earmarked by municipalities in 2023, will be channeled into tourism, industry and job creation, and housing, 28%, 25%, and 22% respectively (Ministry of the Interior and Safety, 2022), with the encouragement of local regions branding promotion from the central government. Yet, voices from urban planning, architecture, and economic converge, debating the path to successful implementation. Critics argue that this policy, though bolstered by a hefty budget, bears resemblances to past unsuccessful urban regeneration initiatives (Song, 2022). New urban planning initiatives of the Korean government propose sustainable planning, as the Korean pavilion at Venice Biennale 2023 refers to local cities, focusing on coexistence and autonomy. Thus, this implementation requires a considerate approach with empirical research.

Response to shrinking cities is critical as shrinkage is one of the phases in urban life cycle (Haase et al, 2021), given many cities where they have experienced regrowth or continuous shrinkage after past shrinkage. As shrinkage can come from diverse urban issues, shrinking cities require comprehensive strategies that include social, economic, and environmental factors (Haase et al, 2013) at state, local, and regional levels. Since the importance of effective government-led policy interventions has been highlighted through many case studies of eastern European cities (ESPON, 2017), the Korean government response towards shrinking cities may require on-site studies for the next decade of sustainable planning for shrinking cities. Considering that a city keeps evolving and is never

an end state (Németh and Langhorst, 2014), continuous data collection to understand local contexts is needed.

A primary goal of this research is to assess the weakness of current approach from the Korean government towards the shrinking cities and explore how the Korean government could rethink the strategies to sustain local cities. This research focuses on three case studies by closely looking at the current situation, main strategies, and governance structures. By utilizing time series statistic data, I will illustrate how the cities have experienced demographic change. Furthermore, through qualitative analysis using interview results with stakeholders from each municipality I will demonstrate the weakness and hopeful future direction of the urban policy.

## LITERATURE REVIEW

This literature review provides the insights of how the existing research on shrinking cities has formed the framework and to guide the direction of my study. Various researchers have primarily examined the similarities and differences between shrinking cities by analyzing their population change through case studies and exploring the political strategies of cities that have reversed decline (regrowth cities), and ones that continue to decline. As urban shrinkage has become an inevitable phenomenon in some parts of the world, the plight of these cities has been recognized as an important area of research, evidenced by the significantly increased number of published papers since 2017 (Wu et al, 2022). Since the 2000s, shrinking cities research has revealed many causes and impacts of urban shrinkage through diverse case studies mainly in eastern Europe and American ‘Rust Belt’ (European Union, 2022). Then, the direction of research on shrinking cities has shifted to exploring practical strategies for more responsive policies to address the issues of shrinking cities by examining political interventions and their effects.

Representatively, the following work of two research teams Lee et al (2023) and Wu et al (2022) reveals the major research framework of shrinking cities. The shrinking cities research network analysis indicates that the research has to date primarily addressed developed countries, such as the United States, Germany, and United Kingdom, with the exception of China, which is a developing country, and then Japan. Additionally, “demographic change,” “urban policy,” “urban regeneration,” “deindustrialization,” and “land use change (vacant land)” were keywords that appeared the most in research. Interestingly, Lee et al (2023) pointed out that main keywords have shifted from “Detroit,” “eastern Germany,” “deindustrialization,” and “demolition” to “China,” “Japan,” “regeneration,” and “green infrastructure,” showing the research expansion towards Asian countries and strategy-oriented rather than problem-oriented.

Wu et al (2022) analyzed 716 research papers from 2000 to 2017 extracted from the Scopus abstract and citation database and demonstrated that no consensus on the reasons behind the phenomenon of shrinking cities, which leads to highlight of case study as a significant research method. Also, they emphasized exploring future solutions for the urban shrinkage involving new demands on the governance structure. Similarly, Lee et al (2023) argued that more empirical studies across the different countries discussing at the diverse levels of government are needed in the future. Based on the examination of 333 research over twenty years from Scopus, WoS (the Web of Science), and Google Scholar, they highlighted the comparisons on case studies from different nations showing the characteristics of shrinking cities with geographical differences.

One of the most important things to note is that population shrinkage is not a sudden phenomenon. The population loss in the United States in the 1920s and post-World War II tend to show similar decline trend as the recent shrinkage (Beauregard, 2008) likewise that in Germany in the 1990s, which was triggered by German reunification. Thus, understanding how cities have managed the population loss is critical in addition to research revealing the causes of the loss. Moving forward from that, shrinking cities research requires case study frameworks that focus on the impacts of population shrinkage on human life (Bernt, 2014), with consideration of the local context in historical perspective (Bernt, 2009). Similarly, Haase et al (2013) stated that cities that have experienced shrinkage recently need to learn from “*more experienced*” cities, which requires analysis of shrinking cities across the world, comparing policy and governance contexts (Haase et al, 2021). However, comparative case studies are likely to be biased, and still have mainly been focused on large cities rather than local dynamics (Wolff and Wiechmann, 2018). Many discussions through international conferences and workshops have indicated through a trend in research key words on shrinking cities that further research needs to be directed toward urban

inequalities, land consumption, and urban resilience and have highlighted blind spots in the comparisons between cities (Großmann et al, 2013).

Comparative research on shrinking cities has been broadly emerging across different countries, collaboratively observing and addressing problems with the establishment of a network of shrinking cities (Schilling and Logan, 2008). Through much research, the fact that key factors impacting shrinking cities, which are demographic change, economic decline, and suburbanization, and intervening factors that influence each key factor, such as political system and urban form, may vary based on geographic differences, (Bernt et al, 2012) has been proven. As Aurambout et al (2022) stated that cities that have lost population could be expanded in terms of the physical area by leaving city centers and moving to suburbs, looking into the physical factors with socioeconomic dynamics is significant. Additionally, Kabisch and Haase (2013) found that due to smaller household sizes, the areas covered by residential development has increased regardless of population growth and decline. This indicates that population decline does not necessarily correlate to the shrinkage in land consumption. By examining the push and pull factors associated with shrinking cities (Reckien and Martinez-Fernandez, 2010), research has identified diverse factors that impact urban decline.

Recognizing the power structure and governance of shrinking cities tend to appear as one of the main themes in the shrinking city research. Wiechmann and Pallagst (2021) compared political strategies in Germany and the United States to show how planning responses to shrinking cities should be changed from growth to decline or right sizing. Even though urban shrinkage and population loss have appeared in the United States since the 1950s or earlier, the reason why response and discourse emerged comparatively late is due to political growth-oriented planning (Mallch, 2017). Similarly, Joo and Seo (2018) criticized the pro-growth strategies in South Korea by analyzing diverse level of policy

responses on a shrinking city, Daegu. Current shrinking cities responses from the Korean government have been mostly top-down approaches, even though well-structured governance is one of the critical factors. As Bernt (2009) showed how the eastern Germany's policy implement changed the shrinking cities based on public-private partnerships and Hollander and Németh (2011) emphasized participatory planning with engagement of diverse stakeholders for smart decline planning, deconstructing urban governance is essential.

This research investigates local dynamics, political strategies, and governance of three Korean shrinking cities. As Korean shrinking cities research has been focused on the general pattern of shrinking cities at national and metropolitan level, empirical studies more focus on local cities may be required. Although many previous papers have investigated the key causes and impacts, this research will focus on demographic changes, both natural and social, to assess the current depopulation in the selected case study cities. A comparative analysis of three shrinking cities using qualitative methods will offer insights into how each local municipality has addressed urban shrinkage, as well as the weaknesses of three different governmental levels.

## **BACKGROUND**

### **Shrinking Cities in South Korea**

The contemporary landscape of South Korea is one of stark contrast: vibrant megacities juxtaposed against shrinking urban centers. Cities have swelled with people seeking better opportunities, resulting in a spatial concentration of wealth and resources in major metropolitan areas, particularly Seoul. Contrary to that, cities like Pyeongchang, where dwindling populations result in diminished infrastructure access, with the many emerging issues of shrinking cities. The Korean government has responded to population decline by urban regeneration and revitalization projects by establishing the Korea Urban Regeneration Center (KURC) in 2006 and the Special Act on Urban Revitalization in December 2013. The government has focused on not only physical improvement on old urban centers but also urban governance for bottom-up approach. With regime change and the completion of proposed Urban Regeneration New Deal projects, the central government has chosen 89 shrinking cities and 18 concerned areas at county level in October 2021 with the shrinking index<sup>1</sup> and proposed to update the areas every five-year.

### **Case Study City Profile**

I chose three cities considering the following two criterion: 1) each of case study city from low (0.5~1.0), high (0.2~0.5), severe (lower than 0.2) degree of shrinkage and 2) proximity to Seoul. By looking into the areas where they have different degree of shrinkage and proximate to Seoul, I will demonstrate how the Korean government address these shrinking cities in different ways, such as different urban governance, and how the proximity to Seoul impacted depopulation in these areas.

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<sup>1</sup> The shrinking index is calculated using eight indexes; yearly population change rate, population density, youth net migration rate, weekly population, population aging, youth ratio, crude birth rate (birth rate for 1-year / total population \* 1000), and financial independence rate of local government.

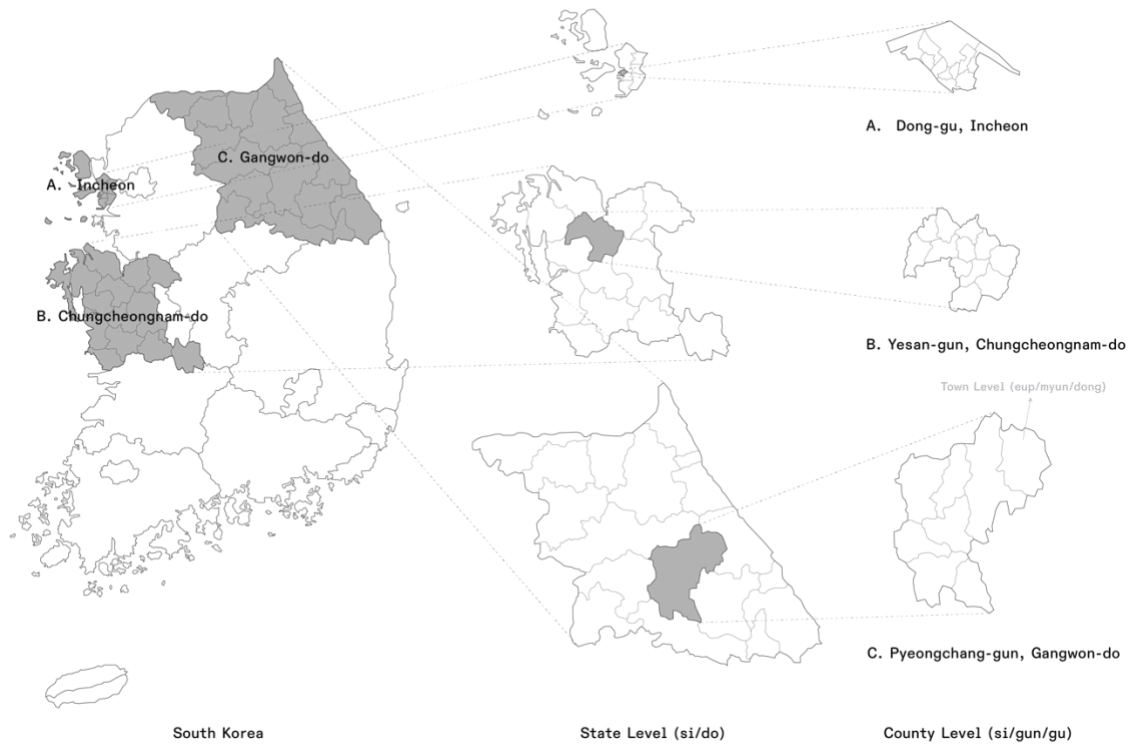





Figure 1: Geographical Levels of Three Case Study Cities

Even though there were multiple cities other than these cities that I chose, the reason why I chose these cities includes the specific characteristic of these cities. Dong-gu is a representative old city center in Incheon with a shrinking index 0.49, which is within Seoul Metropolitan Area, which has been losing significant population due to surrounding new developed cities. Especially, there was a significant event that the local government demolished hundreds of low-density housings to construct an express highway connecting adjacent two new developed cities. Yesan-gun is an agriculture city with broad field areas with a shrinking index 0.28. It is 2 hours away from Seoul by public transportation. This city has been broadcasted nationally regarding successful urban regeneration projects using traditional markets. The city was chosen considering its strong community and media influence. Pyeongchang-gun is also an agriculture city with mountain areas, with a shrinking index 0.14. It is also 2 hours away from Seoul by public transportation. The city was chosen

considering its history of Winter Olympics 2018. Even though it has an international athletic event and got a huge investment due to this event, the city is one of the most severe shrinking cities.

Table 1: Case Study City Profile

Case Study City	Satellite Image (2022)	Area (sq.km)	Population	Primary Economy	Shrinking City Index
Dong-gu, Incheon-si		7.20	61,285	Industrial	0.49
Yesan-gun, Choong chungnam-do		543.38	77,838	Agriculture	0.28
Pyeonggang-gun, Gangwon-do		1462.93	39,258	Agriculture	0.14

These three cities, each with different Shrinking City Index levels and characterized by unique urban profiles, will provide an effective comparison of demographic changes and varied local government approaches to urban shrinkage.

## RESEARCH METHODS

This research will analyze demographic change from 2000s to 2020s by looking into the changes in total population, population by age, mean age, birth rate, net migration, and net migration by age. For this analysis, I will look into three different levels, which are nation, state, and county levels. By comparing the case study city with nation, Seoul, and the average of other cities within the same state, I will be able to identify the interrelationship among these cities. Then, qualitative analysis of 14 stakeholders interviews from three case study cities will delve into the issue at the smallest geographic level (town) which I cannot get from quantitative analysis. Given not much available statistic data for town level from the government, stakeholders interviews will provide in-depth insights on identifying the urban issue within the town level.

Following table demonstrates the resource of data and the units of measurement. Korean Statistical Information Service (KOSIS) is an organization that provides time series statistic data at different government levels from the municipal to the nation. However, since each data is managed by each county, the time range for some of data is slightly different and data at the town level is limited in certain variables.

Table 2: Statistical Analysis Data Resources

Indicators	Sources	The Units of Measurement
Population	KOSIS (Korean Statistical Information Service)	Individual
Birth rate	KOSIS (Korean Statistical Information Service)	Individual / Total population
Migration population	KOSIS (Korean Statistical Information Service)	Individual

For interview, from July 17th to August 11th, 14 stakeholders from each municipal administration (city planning department and demographic policy department) and residents were interviewed in-person. For stakeholders, participants must reside in the study city and have a work history of at least six months in a relevant field. Alternatively, they should have been involved in, or in charge of, at least one project related to urban regeneration or shrinking city. For local communities, participants must be connected to city planning projects such as urban revitalization or projects addressing local decline. This can include individuals who have been actively involved in these projects or have relevant experience or expertise in the field. For approximately 30mins-an hour in average, they were asked their participation to city regeneration projects, how the city planning policy works, the current living situation of the city, and further direction. Following table shows the topics and specific questions that were discussed during the interviews.

Table 3: Questionnaire for Interview

Topics	Questions
Project	How does your organization respond to the shrinking cities and the fund?
	Could you explain the work structure? (Collaboration with different departments, residents, central government, experts, etc.)
	In your opinion, what are the most important factors to consider when participating in urban projects?
	What challenges or conflicts have you experienced during your projects?
	What is the biggest difference between urban regeneration projects and local decline projects?
Local Decline	In your view, what are the causes of local decline in the city?
	What do you consider the biggest factor contributing to the local decline? (Urban policies, disparities in infrastructure, industries, etc.)
Further Direction	What initiatives do you believe the local government should pursue to address the sustainability of local decline?

	What challenges or rethinking would you like to see from the local government, central government, residents, and experts regarding the local decline?
	In terms of spatial and socioeconomic aspects, what changes do you think the local decline should undergo?

Given that the Shrinking City Reaction Fund has been in place for less than a year, I sought to understand how its approaches differ from previous urban regeneration policies. Although the specific questions varied based on the discussion and reflections shared by interviewees, the interviews primarily concentrated on the stakeholders' practical strategies and personal perspectives concerning shrinking cities.

## DEMOGRAPHIC DYNAMICS

Demographic dynamics analysis was conducted not only for Dong-gu, Yesan-gun, and Pyeongchang-gun but also for the broader regions of Incheon-si, Choongcheongnam-do, Gangwon-do, and the entire country to understand the context in which these shrinking cities are situated. Additionally, comparisons were made with Seoul, Gyeonggi-do, and the entire country to benchmark against the Seoul Metropolitan Area and the country as a whole. Each state's data was represented as an average of its cities. While the total population has increased in the country and Seoul Metropolitan Areas, significant decrease in the population under 15 and an increase in the population over 65 indicate an ageing demographic. Furthermore, the three shrinking cities have experienced greater decrease in total population, youth (under 15), and working age (20 to 64), and greater increase in mean age compared to the averages of adjacent cities in the same state. The analysis highlights the expansion of the Seoul Metropolitan Areas.

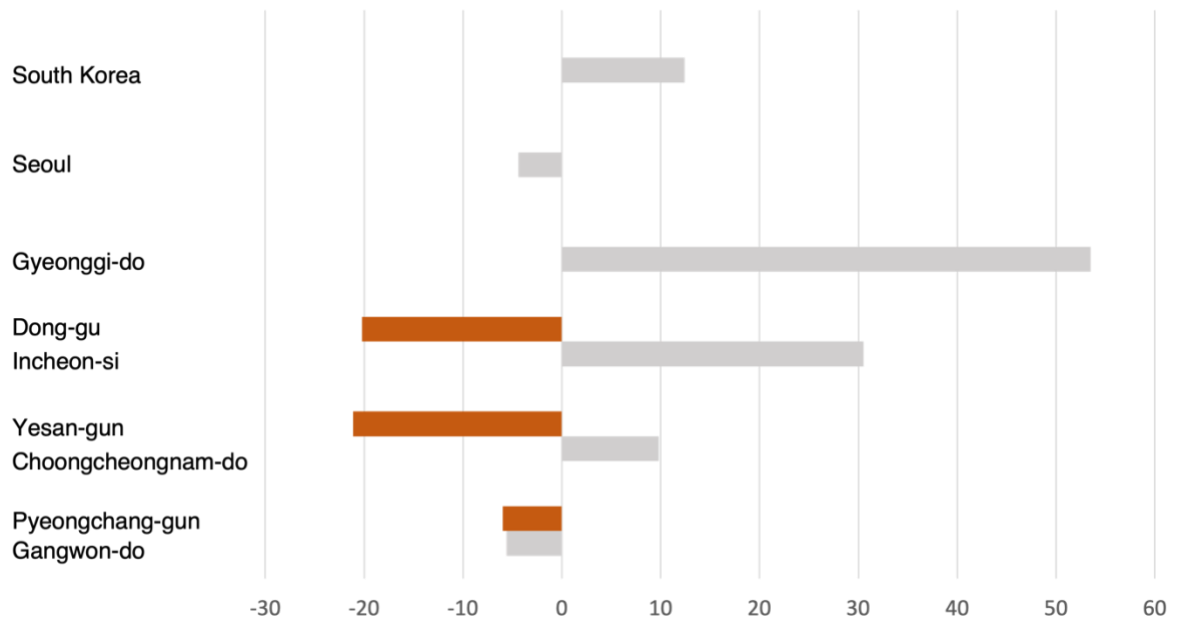


Figure 2: Percent Change in Total Population between 2000 and 2022

While the percentage change in total population has increased in the entire country (12.4%) and states adjacent to Seoul (Gyeonggi-do 53.5%, Incheon-si 30.5%, and Choongcheongnam-do 9.8%), that of Seoul and Gangwon-do have decreased by 4.4% and 5.6% respectively. Notably, Gyeonggi-do and Incheon-si, which are part of the Seoul Metropolitan Areas, have benefited from a population increase driven by the outward migration from Seoul. However, despite the overall population growth of 30.5% in Incheon-si and 9.8% in Choongcheongnam-do over the past twenty years, Dong-gu (in Incheon-si) and Yesan-gun (in Choongcheongnam-do) have experienced significant population losses of approximately 20.5% and 21.1% respectively, indicating a disparity in population distribution at the county level. Furthermore, Pyeongchang-gun has seen a larger percentage decrease in total population (6%) than compared to its state, Gangwon-do (5.6%).

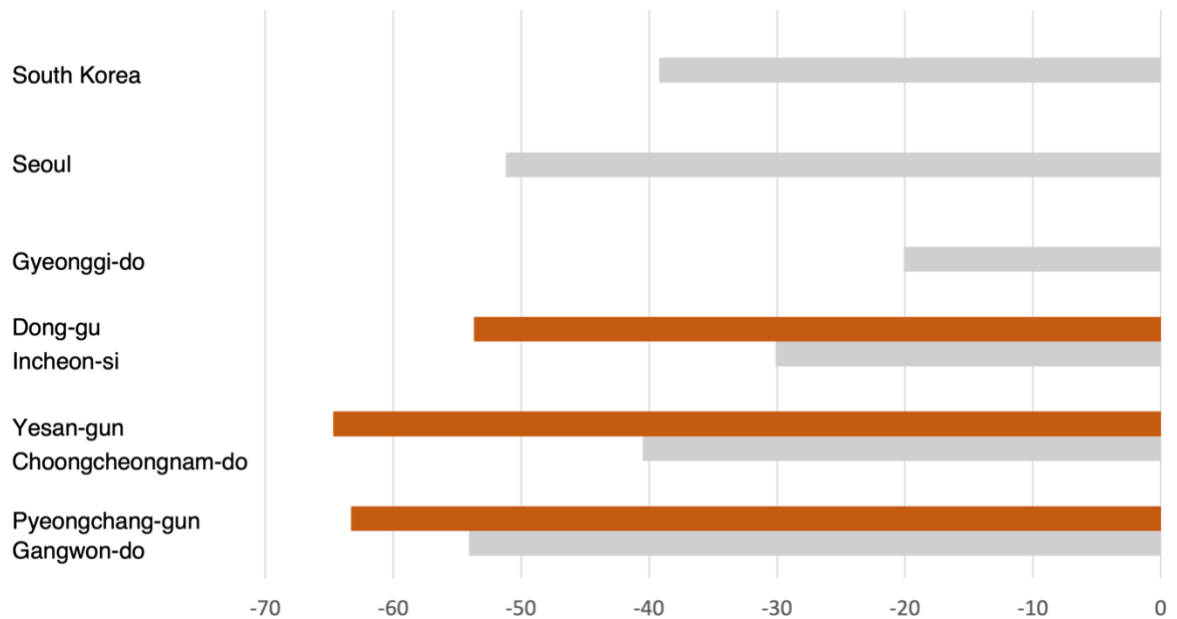


Figure 3: Percent Change in Under 15 Population between 2000 and 2022

Although the total population has increased nationally, the demographic shift towards an ageing society is evident, with a significant decrease in the adolescent population (under 15) and an increase in the elderly population (over 65). This trend is highlighted by a

mean age increase of over ten years across the nation. Specifically, Seoul and Gangwon-do have experienced dramatic declines in their adolescent populations, by 51.2% and 54.1% respectively. The smallest decrease among the examined areas was in Gyeonggi-do, with a 20.1% reduction. The shrinking cities, Dong-gu, Yesan-gun, and Pyeongchang-gun, have all witnessed declines of over 50% in their adolescent populations, at 53.7%, 64.7%, and 63.3% respectively. This suggests that these cities may face further depopulation challenges in the future.

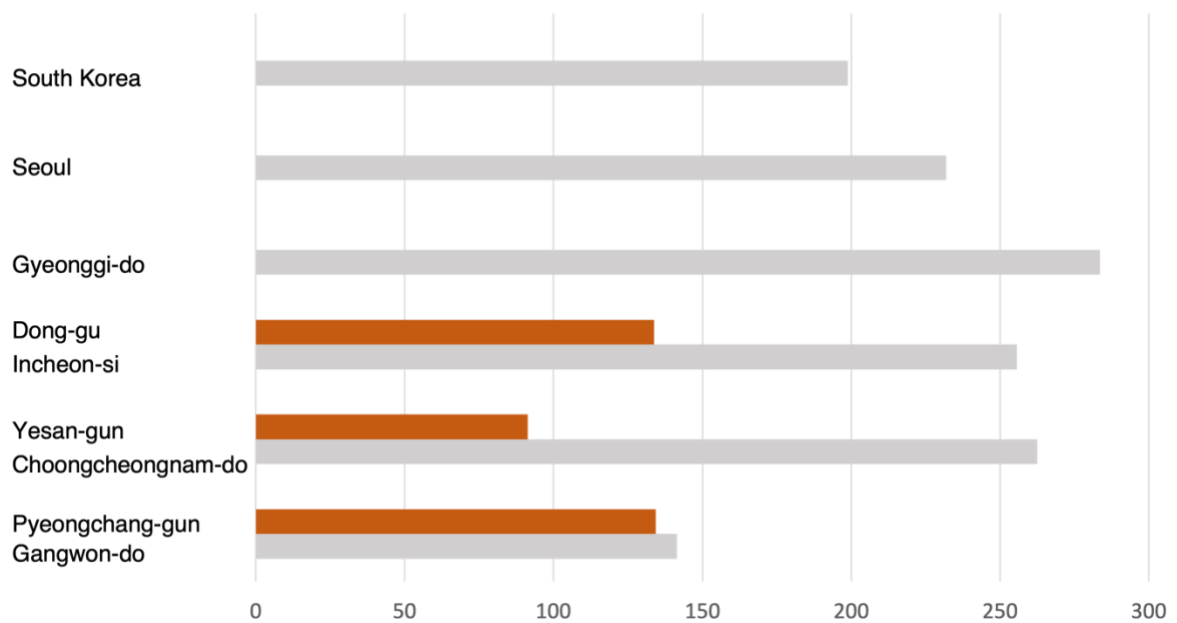


Figure 4: Percent Change in Over 65 Population between 2000 and 2022

Similarly, there has been more than a 150% increase in the population over 65 in all examined areas, except for Gangwon-do and Pyeongchang-gun, indicating a significant rise in the elderly population nationally over the past twenty years. The Seoul Metropolitan Areas (Seoul, Gyeonggi-do, and Incheon-si) along with Choongcheongnam-do have experienced an even greater increase, with surges of 231.8%, 283.5%, 255.6%, and 262.5% respectively. This dramatic growth highlights the pronounced ageing of the society in these regions.

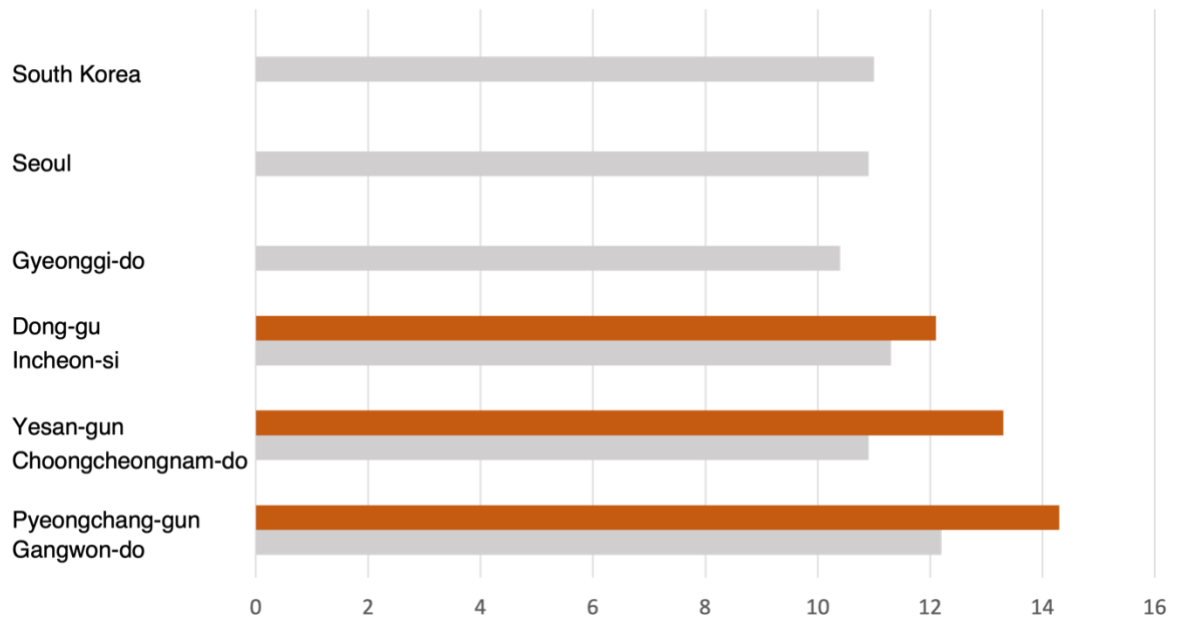


Figure 5: Change in Mean Age between 2000 and 2022

The increase in the mean age by more than 10 years over two decades across all examined areas further highlights the severe ageing issue at the national level. Notably, the three shrinking cities have experienced even greater increases in mean age compared to their respective states, with increases of 12.1 years in Dong-gu, 13.3 years in Yesan-gun, and 14.3 years in Pyeongchang-gun.

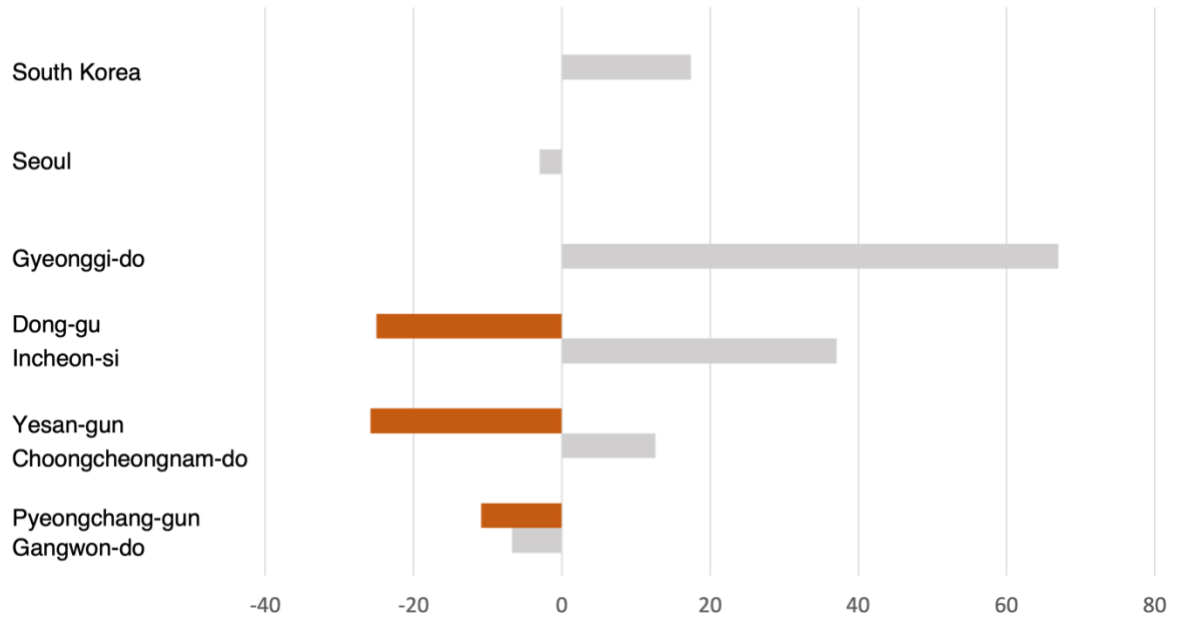


Figure 6: Percent Change in 20 to 64 Population between 2000 and 2022

The percent change in the 20 to 64-year-old population shows a slight decrease of 3.0% in Seoul, while Gyeonggi-do, Incheon-si and Choongcheongnam-do have seen increases of 67%, 37.1% and 12.6% respectively. However, Dong-gu and Yesan-gun have each experienced a 25.0% and 25.8% loss in this age group. Notably, Pyeongchang-gun has seen a greater decline in its total population (10.9%) compared to Gangwon-do (6.7%), indicating that these three shrinking cities have significantly lost their working age population over the past twenty years.

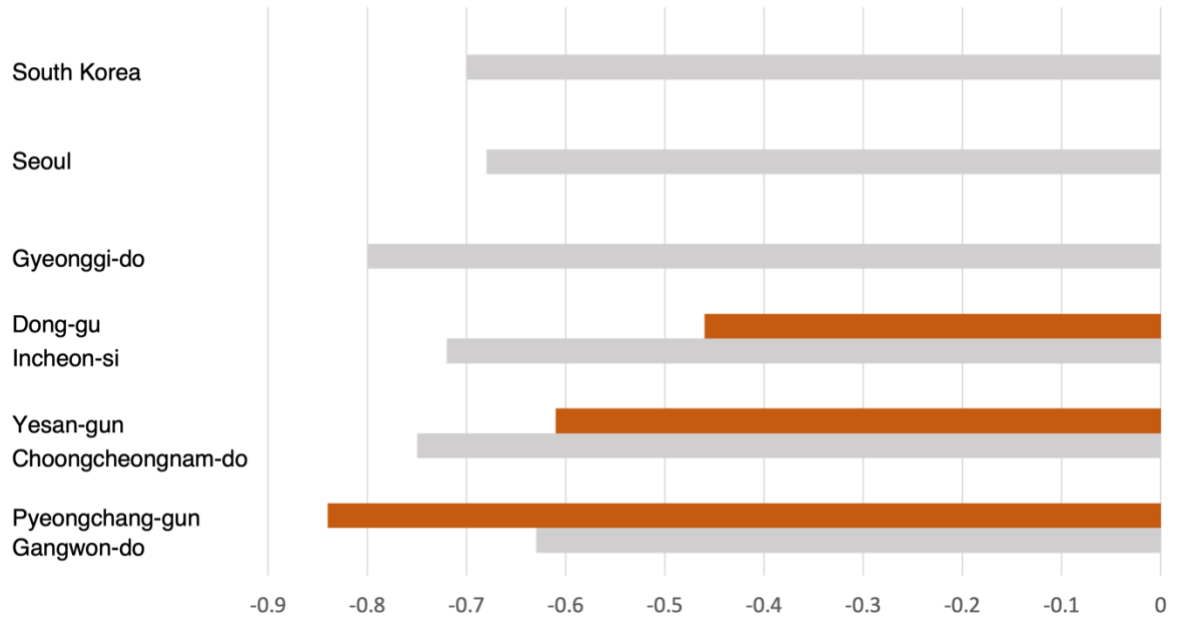


Figure 7: Change in Birth Rate between 2000 and 2022

Additionally, the decrease in the national fertility rate from 1.48 to 0.778 between 2000 and 2022 has contributed to natural population decline. While many studies have indicated that local declines in specific areas are influenced more by migration than fertility rates, the decrease in fertility rates across the examined areas was relatively minor. Unexpectedly, Seoul had the lowest fertility rate in 2022 among the areas studied, at 0.593, demonstrating that a high population does not necessarily correlate with a high fertility rate.

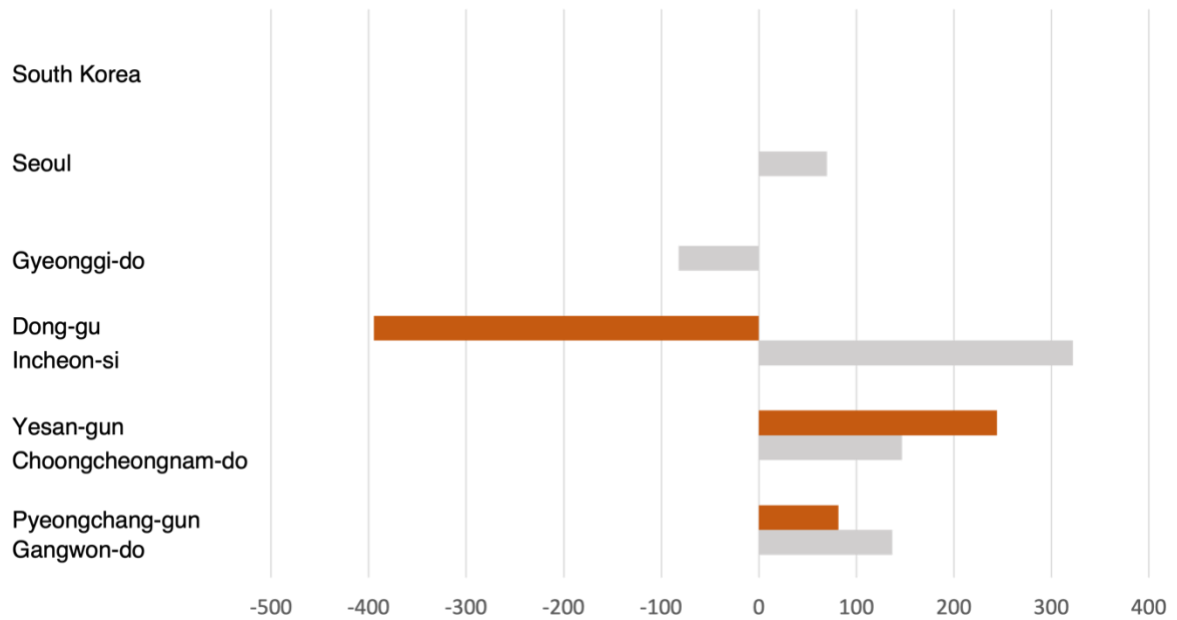


Figure 8: Percent Change in Net Migration between 2001 and 2022

Approximately 25% and 20% of the immigration population moved into Seoul in 2001 and 2022, respectively, resulting in a 70% increase in net migration over twenty years. However, net migration in Seoul has been negative throughout this period, suggesting that suburbanization has been ongoing for the past two decades. In contrast, about 24% and 27% of the immigration population moved into Gyeonggi-do in 2001 and 2022, respectively, yet net migration in Gyeonggi-do decreased by 82.4% over twenty years. Unlike Seoul, net migration in Gyeonggi-do has been consistently positive. Yesan-gun showed a larger increase in net migration population over twenty years (243.9%) compared to the average of adjacent cities within the same state (146.9%), whereas Dong-gu experienced a significant larger decrease (394.6%) than the average of Incheon-si (322.1%).

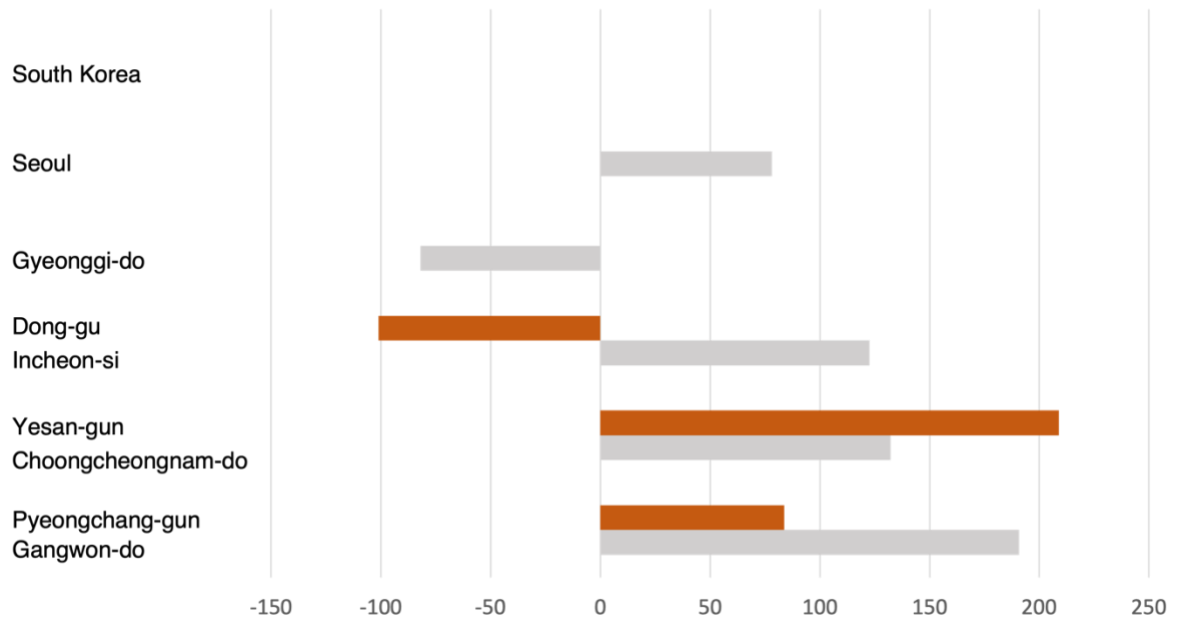


Figure 9: Percent Change in Net Migration (20 to 64) between 2001 and 2022

Additionally, net migration of the 20 to 64 group in Seoul has been negative over the past twenty years, while in Gyeonggi-do, it has consistently been positive. Despite the percent change over the same period showing an opposite outcome, a population outflow from Seoul to Gyeonggi-do has continued. Another area experiencing decrease in net migration among the 20 to 64 age group is Dong-gu, where the proportion of the working age population relocating there has significantly decreased from 71.8% to 59.8% over twenty years. Yesan-gun showed a larger increase in net migration of the working age population over twenty years (209%) compared to the average of adjacent cities within the same state (132.2%), whereas Pyeongchang-gun exhibited almost half the percent change in net migration of the 20 to 64 group (83.8%) compared to Gangwon-do (190.7%).

## **INTERVIEW WITH STAKEHOLDERS**

Discussions through interviews with the stakeholders from Dong-gu, Yesan-gun, and Pyeongchang-gun depicted three main points; overall changes from the central government level, diminish gap between the urban policies and implements from the local government level, and addressing disparities in regional level. Specifically, the needs for smart decline strategies rather than growth-oriented strategies, political power behind urban policies, and restructuring urban governance were mainly raised through discussion.

The 14 interviewees, 7 of which seven are from Dong-gu, four are from Yesan-gun, and four are from Pyeongchange-gun respectively, are workers in each municipal administration (demographic policy department and city planning department), workers in urban governance, and residents who have resided in the study cities or have a work history of at least six months in a relevant field. For the purpose of protecting their privacy, they will remain anonymous. Alternatively, they should have been involved in, or in charge of, at least one project related to urban regeneration or shrinking city. From July 17<sup>th</sup> to August 11<sup>th</sup>, in-person interviews were conducted for approximately 30 minutes to an hour in average, asking about their participation in urban regeneration and urban decline projects, the urban policy structure, current living condition of the cities, and further direction for the shrinking cities.

The findings from these interviews offer the insights into local urban decline from the views of people who are at the lowest level in urban governance, providing actual conditions and impacts associated with local decline, and valuable recommendations or strategies for sustainable development and urban revitalization.

## **Contrasts in Perspectives between the Central and Local Government Level**

Stakeholders across the board recognized depopulation as an ongoing issue, which appears either inside or outside of metropolitan areas, and that is considered inevitable due to low fertility rate. They commonly highlighted sustainable planning for decline in each municipality rather than expecting population growth in the short-term. Rather than the central government simply giving autonomy to local municipalities, the interviewees all stated that overall urban strategies from the central government should be changed.

*In the circumstance of depopulation in the whole country, it is natural for the weakest areas to be shrinking. The fertility rate's stagnation and outmigration to the metropolitan areas signal that, without a shift in the central government policies to encourage childbirth, shrinking cities are unlikely to rebound demographically. This is not a regional issue but an issue for the whole country. (An official from the City Planning Department)*

*The efforts only made by individual local governments would lead to minor population change in the regional level. We need more overall change in the national level. (An official from the Demographic Policy Department)*

With the need for a paradigm shift in urban policies from the central government level, the interviewees highlighted the change in urban planning methodology, urban policies focusing on demographic change/population decline, and structural changes in governance. Gaps between the urban policies and implementation from the local government level showed the contrasts in perspectives between the central and local government level. While the central government still aims to make cities attract new people, the local municipalities has been struggling to change the strategies toward making livable cities for existing residents and sustaining the population in the face of depopulation.

*Current local cities' masterplans and development plans were planned in 1980s and aimed at urban growth. Our population is 4 million, but the Ministry of Land, Infrastructure and Transport gave development plans for 6 million population which does not make sense. The problem is that it is difficult to change the land use after fixing the land use once. (An official from the City Planning Department)*

*Urban policies from the central government are very apart from the implementation actions in the local level. The availability for flexible change based on the characteristics of each local city is needed. ( An official from the Demographic Policy Department)*

*Urban policies must be transformed from attracting new residents to creating sustainable living conditions for existing populations. (An official from the Demographic Policy Department)*

More importantly, there was no major difference in new adapted urban decline projects compared to previous urban regeneration projects in terms of biased investments in hardware infrastructure. The actual urban policy at the national government level implementation approaches have hardly changed, even though the stakeholders at the local level recognize the differences in urban strategies from the central government between two different projects.

*We utilize the Shrinking City Reaction Fund when we are out of the Urban Regeneration Fund. As there is no big difference between two funds in terms of administrative requirement, it is possible to utilize that fund for current urban regeneration projects. (An official from the City Planning Department)*

*Reformation of urban policies, such as development plans, masterplans, and governance, is needed rather than implementing small projects, such as making clean streets, installing parking lots, and reconstructing roads. The issues we face cannot be tackled by piecemeal projects; a structural overhaul is imperative. What's needed is not just project funds, but a concerted effort to address multiple facets of urban decay. (An expert)*

Interestingly, a substantial amount of funding has been invested to local cities for urban projects, such as the Shrinking City Reaction Fund, however, it was likely to hardly manageable unlike (NARS, 2020) stated that fund and investment is in shortage. Especially, the stakeholders working closely with residents criticized the current Shrinking City Reaction Fund, stating that indiscriminate use of funds without careful analysis of each shrinking city has led to less effective investment.

*Too many funds for urban regeneration have been invested in this small area. However, I think that was the reason why it failed. Even though we received 20 billion won (15.15 million USD) in 5 years, there were only many parking*

*lots constructed. These short-term projects cannot change the fundamental issue, which I don't see any future in it. (An official from the City Planning Department)*

*The Ministry of Public Administration and Security invests the Shrinking City Reaction Fund. So far, many governmental departments, such as the agriculture department, urban regeneration department, and culture department, allocate huge budgets to this same region. However, it is not well-handled at the local government level. These budgets have different objectives for different departments, however, actual projects are all the same, such as parking lots and community and sports center. We received approximately 60-70 billion won (45.45 – 53.02 million USD). There must be a large amount of budget spent in the administrative process. (An expert)*

Even though many stakeholders mentioned that biased investments in hardware infrastructure projects, the reason why the structure of investment has barely changed is political power behind the urban policies.

*Restructuring is needed. Every neighborhood/district/region has its sports park, soccer field, and event places, which is useless and not well-maintained. We invest hundreds of millions and use them only once or twice a year. This all becomes votes for the elected officials. That's why the budget mostly goes into hardware infrastructure investments. (An expert)*

*Given that local mayors are elected officials, attracting significant projects for reelection is necessary. Despite the need for a building worth 5 billion won in this area, they apply for the maximum amount to secure the funds first. Investing such funds in Pyeongchang County to improve infrastructure doesn't guarantee that people will come. (An expert)*

Although the new adapted urban decline adaptation projects showed little difference from previous urban projects, one notable difference was that residents' participation was hardly involved in the governance of these projects. The interviewees stated that administrative policies of urban decline projects don't require the residents' participation while the urban regeneration projects have required and aimed to have sustainable urban governance with the involvement of residents. Residents' participation has not been made while they have submitted project proposals for 2023 and have been preparing projects for 2024, which shows top-down approach.

*When we were working on the urban regeneration projects, we had focused on governance to make a sustainable governance structure that would enable residents to manage and monitor their cities by themselves. However, for the Shrinking City Reaction Fund, we are focusing on the hardware infrastructure projects. I don't know about other departments, but when we propose our projects, we mainly focus on hardware infrastructure. (An official from the City Planning Department)*

*Since residents don't have enough expertise experience or knowledge to lead participatory planning, implemented projects are all similar. They are at the level of imitating the American or European projects. It is hard to adapt each city's characteristic. (A resident)*

### **Contrasts in Perspectives within the Local Government Level**

Contrasts in perspectives exist in not only between the central and local government level but also within the local government level itself. Specifically, staffs in the local government and in the urban regeneration support center, which support the projects on-site, showed different perspectives on urban decline projects. This demonstrates the gaps between economic-oriented development and sustainable development. Specifically, the local government of Dong-gu proposed tourism space using the Shrinking City Reaction Fund, while the representatives of residents stated that fundamental infrastructure is much more needed.

*We proposed a coastal walking trail aiming the expansion of leisure space for Dong-gu and we received the funds. (An official from the City Planning Department)*

*Dong-gu had good coastal resources which were infilled by industrial uses. The local government is trying to make something new for Dong-gu, but that doesn't bring population. If you go to newly developed cities which are adjacent Dong-gu, the environment could not be even compared to here. We need fundamental infrastructure. That is the biggest problem. (An expert)*

*The local real estate market is unpredictable, but there's hope that redevelopment projects can lead to population inflows, centered around areas like Songlim Prugio Apartment. (An official from the City Planning Department)*

*They are just building apartments without any changes in roads. We have big traffic jam problem. (A resident)*

Yesan-gun and Pyeongchang-gun with the conservative culture of an agricultural area, had difficulties in communication with community residents. Many elderly residents tend to oppose new development, indicating generational differences in priorities. Even though there are improvements in the typology of agriculture, such as in specialized agriculture like smart farms, many elderly residents tend to be against new development.

*Unlike in Seoul Metropolitan Area, where one can be relatively free from these relationships, here it's quite severe. Externally, it might look like everyone is speaking in unison, but in reality, there is generational conflict. (An expert)*

*There will certainly be opposition from the older generations. For example, if they started charging for the use of a welfare center because local taxes are insufficient to foster illegal immigrants,<sup>2</sup> residents would strongly resist, even though it's a measure for future coexistence and co-prosperity. (An expert)*

*When we do meetings for urban regeneration projects, those in their 30s and 40s, if given the opportunity, will push forward, take the lead, and try to lay roots in the area, striving to make the community a better place for their families to live harmoniously. On the other hand, the older generation might speak but tend not to take actual steps forward, often yielding leadership to the younger generation. Even if rural areas become urbanized, the community remains essentially closed-off due to its village society nature, not easily allowing the younger generation to step up like in the metropolitan areas. The younger generation may feel something isn't right but can't speak out. They tend to follow what has been decided by the older generation. (An expert)*

*Architecturally, there is often a lack of consideration for the socially vulnerable, such as the elderly and children. The city's planning also lacks consideration for socially vulnerable groups. There's hardly any public transportation, no separation of pedestrians and vehicles, and although there was an attempt to make a one-way street near Pyeongchang Elementary School, the local residents opposed it because it would inconvenience parking. The older generations, those in their 50s and 60s, oppose urban planning that could benefit future generations simply because it inconveniences them in the present. (An expert)*

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<sup>2</sup> For more details on illegal immigrants, please refer to the later pages of this study.

## **Addressing Disparities in Regional Level**

As the literature reviews revealed that depopulation and urban shrinkage get severe in smaller geographical boundaries, the three case cities have also faced severe depopulation when it comes to smaller regional boundaries. One of the two biggest problems is the disparity between the older city centers and newly built cities. For example, since the geographical boundary of Yesan-gun includes Sapgyo, a newly developed city, the population of Yesan-gun has not been changed. The problem, however, is that existing population was moving to this new city for better infrastructure and leaving the agricultural villages behind. The second problem is the lack of critical infrastructure, such as education, hospital, and transportation. This is the reason why depopulation needs to be addressed in overall perspectives, making the negative loop for population outflow. For example, housing vacancy is intertwined with the lack of educational facilities.

In Dong-gu, the stakeholders highlighted a pressing need for better living environment in terms of masterplan not just single building investment with equitable distribution of critical amenities.

*Investment disparity between Dong-gu and surrounding newly developed cities has led families to move for better services and environments. This is exacerbating urban vacancy and lowering living standards in Dong-gu. (An expert)*

*Shrinking cities must prioritize investment in educational facilities and healthcare services to stem population outflow. These are concentrated in larger regions, leaving smaller regions deprived and less attractive for both younger and aging populations. (An official from the Demographic Policy Department)*

*We need to be at least bed town with good housing and education, unless we will face the end. (An official from the City Planning Department)*

*Dong-gu has industrial areas too adjacent to the residential areas. I am sure that it was legal for the government to build those industrial facilities right next to the apartments. However, we need at least minimum amount of green space. The city is not just about housing and jobs. We need livable space for*

*current residents. There are too many complaints about the factories. (An official from the Demographic Policy Department)*

*Dong-gu's lack of educational infrastructure, especially schools for girls, is a driving factor for families leaving. Without a competitive educational environment, we cannot retain our youth. (A resident)*

In Yesan-gun, the disparities between urban and rural living experiences are stark, particularly in access to education and healthcare. One of the interviewees emphasized that the biggest issue is education for children, hospitals, and other facilities necessary for urban planning are not supported, which in turn doesn't lead to a real increase in population.

*There are only approximately ten students in the elementary school. Two schools were closed nearby here. (A resident)*

Especially, the interviewees illuminate a region grappling with the intertwined issues of rural depopulation and an ageing populace in the agriculture sector. A demographic downturn, prompted by a low fertility rate and compounded by a substantial exodus of the younger generation, has led to an increased reliance on foreign labor in agriculture; actually most of the agricultural workforce is being replaced by foreigners. Recognizing the severity of the workforce shortage, the reliance on undocumented foreign workers, particularly from Southeast and Central Asia, is seen as a necessary but problematic solution. A labor office boss noted, resulting the labor cost spikes and the urgency of the situation. Even though their wages are higher than those of Koreans due to high productivity, it is difficult for them to have legal workable status. This happened to Pyeongchang-gun as well.

*Many are from Thailand, Vietnam, Central Asia, Uzbekistan, Kyrgyzstan, and it seems like more than 90 percent are illegal stayers. (A resident)*

*I know it's illegal, but there is no other choice. In farmland, they are all 7-80 years old. If they die, the houses will be all vacant and their children will never move here to live in those houses. (A resident)*

*The issue of multiculturalism in rural areas is more serious than in cities. There are more people working illegally than those who are legally registered. It's a necessary evil. When you arrive in Pyeongchang-eup, where*

*the city has active agriculture industry, at 11:30 p.m. and drive around, you can see people picking cabbages in the fields. They load the cabbages onto 15-ton dump trucks to take to the Garak Market in Seoul. They have to work until that time so that they can auction them off at dawn. Would Koreans do that? It's mostly done using foreign labor. Those who do large-scale highland farming here say they sometimes employ up to 30 foreign workers at once. The younger labor force is draining into cities, and while most farming is done with machinery, harvesting cannot be mechanized. Foreign workers are the ones doing this. (An expert)*

*Recently, they were preparing for a local festival, and they managed to find a part-time worker for a drink booth. The part-time worker's parents, both mother and father, are illegal day laborers who have settled down here with four children. The third child among the four siblings is the part-timer. The second child recently got into Yonsei University through a rural admission process, but since they aren't registered as residents, they can't receive welfare benefits. (In Pyeongchang, even just being registered as a resident entitles you to scholarship support from elementary to university) They could get a student loan since a visa for university support was issued. The third child struggled to get an employment visa, which needs to be renewed every year. If they hire part-time workers, they have to attach various documents and submit them to the competent authorities. But they say they would hire the part-timer because they need to renew it. Otherwise, that person will be kicked out. The parents can't get financial support, so they are buried in debt. The father is struggling just to pay the interest with what he earns, and the family of six lives on what the eldest son makes. (An expert)*

In Pyeongchang-gun, not only fundamental infrastructure but also transportation system, which was impacted by geographical characteristics, made people leave the region. Even more, depopulation led to dispersed urban centers, which makes development difficult.

*In regions like Pyeongchang-gun, youths who have settled down in the area usually go to local schools up to middle and high school, and then for university education, they tend to either go to Chuncheon, Wonju, Gangneung, or the metropolitan areas because there are no universities within Pyeongchang-gun. After graduating, they don't return to the area unless they are farming without pursuing higher education. (An expert)*

*Bongnim-myeon is close to Wonju and near Hoengseong KTX station, while Daegwallyeong is close to Gangneung. These are areas within a 30-minute reach of major hospitals. The three main reasons for population outflow are considered to be education, healthcare, and transportation; Bongnim is within the Wonju living sphere, and Daegwallyeong is within the Gangneung living sphere. Because they have a certain level of basic living infrastructure*

*such as large supermarkets, cultural and arts amenities, and transportation networks, people move there. On the contrary, areas like Pyeongchang-eup and Mitán-myeon have inconvenient transportation, so if a child is sick, one has to drive an hour to Wonju or Gangneung. There are no obstetrics and gynecology or pediatric clinics in Pyeongchang. If one is pregnant or has given birth, they need to travel to Gangneung or Wonju for care. There are no facilities for infants, and there are no universities, so one must leave for education. Since there's no significant industrial facilities, there's no reason to return. The cases of returning are either for public service jobs or to take over a family business. Therefore, outflow is inevitable. (An expert)*

*Here, the population is dispersed, making it difficult to build facilities like gymnasiums. With populations scattered in small groups of 3,000 to 4,000, it's hard to build in one place. The nation is focused on smart cities and mobility, but here there are geographical limitations. (An official from the City Planning Department)*

In addition to agriculture industry, tourism industry is an important economic sector in Pyeongchang, which bring many visitors in summer and winter. Especially, Daegwanryung, Banglimmyeon have more young people and children thanks to tourism and its seasonal workers, while Pyeongchangup and Mitánmyun have been facing much more severe shrinking economies and population. Tourism industry in specific geographical areas required different approach of sustainable planning.

*As for tourism, we aim to create an environment that supports tourism (even if they don't settle here) and coexists with nature. (An official from the City Planning Department)*

## DISCUSSION

Unlike the typical phenomenon observed in shrinking cities, the three examined cities have experienced population declines despite their robust economic statuses. This migration of the working age population to Seoul or Seoul Metropolitan Areas may not be solely driven by broader economic opportunities but also by the dense social and cultural networks present there. Furthermore, the increased suburbanization of the Seoul Metropolitan Areas is expanding its geographical boundaries, which could further exacerbate population decline in these shrinking cities. Specifically, Gyeonggi-do and Incheon-si have benefited from this suburbanization trend. Conversely, as highlighted by many interviewees, agricultural areas within these shrinking cities are likely to lose their economic viability within the next decade due to population decline and an ageing society.

*Basically, everything closes by 5 pm because the residents themselves own the buildings. Those who run businesses until late are tenants because they have to pay rent somehow. These days, they rely on subscription services a lot, so even when they bring in customers, there's nothing to sell. They have to send products via delivery to Seoul. (An expert)*

Strategies tailored to the current conditions of each area are needed, which requires a shift from growth-oriented to decline-oriented. The interviews underscore the need for a national discourse and a collaborative approach to tackle the impending rural crisis. Confusion due to changes in the central government leads to massive budgets and hardware infrastructure projects that are not managed and do not fit the local context. The fight for votes among elected officials of local governments shows a lack of consideration for long-term and sustainable planning. The conversations demonstrate the insights reflecting the need for a multifaceted strategy to address the challenges. Population decline and local decline cannot be addressed through a singular lens, but requires an integrated approach, blending sustainable planning, community engagement, and tailored regional policies. These

challenges necessitate long-term, sustainable policy direction, transcending short-term initiatives.

*At night, it's not Pyeongchang, it's more like Pyongyang (North Korea) here.  
(An official from the City Planning Department)*

Moreover, it is critical to note that there was big difference in organization of the Shrinking City Reaction Fund of Dong-gu, Yesan-gun, and Pyeongchang-gun. Since Dong-gu is assigned as a concerned area, there was no specific organization for shrinking city. Instead, urban regeneration team or organization, especially focusing on hardware infrastructure projects, was preparing the fund plan. Compared to that, since Yesan-gun and Pyeongchang-gun are assigned as shrinking cities, there were systemic structure with demographic policy team as a main team based on the state urban policies. Restructuring urban governance to revitalize community engagement is required to shift from top-down approach to bottom-up approach.

Local decline is expected due to the nation's severely low fertility rate, thus, addressing the needs of current residents should take precedence over attempts to spur population growth. This includes implementing inclusive political strategies for foreign laborers in agricultural sectors. Additionally, social mixing is a critical factor that local governments must address responsively to enhance living conditions for all residents, including socially vulnerable groups, in a country that has historically been homogeneous.

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