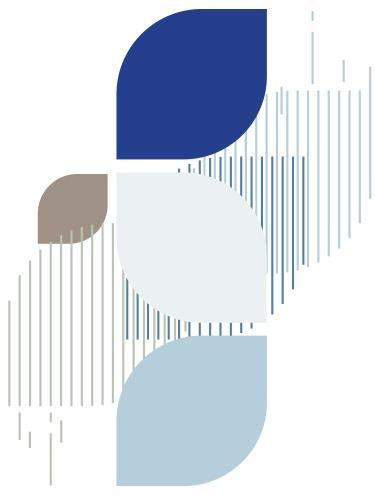
## National Report on the Implementation of the New Urban Agenda

Republic of Korea

2024





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#### Administrative Regions in South Korea



- ① Seoul
- ② Busan
- ③ Daegu
- 4 Incheon
- ⑤ Gwangju
- ⑥ Daejeon
- 7 Ulsan
- ® Sejong

- 9 Gyeonggi-do (Gyeonggi Province, Gyeonggi)
- (Gangwon Province, Gangwon)
- ① Chungcheongbuk-do (North Chungcheong Province, Chungbuk)
- @ Chungcheongnam-do (South Chungcheong Province, Chungnam)
- 3 Jeollabuk-do (North Jeolla Province, Jeonbuk)
- (4) Jeollanam-do (South Jeolla Province, Jeonnam)
- $\slash\hspace{-0.6em}$  Gyeongsangbuk-do (North Gyeongsang Province, Gyeongbuk)
- ⓑ Gyeongsangnam-do (South Gyeongsang Province, Gyeongnam)
- Deju Special Self-Governing Province (Jeju)

Source: National Geographic Information Institute (2023)

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# Introduction

- Context and Framework for NUA
   Implementation in South Korea
- 2. Methodology
- 3. Stakeholder Partnership

## Context and Framework for NUA Implementation 01 in South Korea

PART I

#### 1. Background and purpose of preparing the report on NUA implementation



#### Adoption of the NUA

- At the 70th session of the United Nations (UN) General Assembly in 2015, 193 member states unanimously adopted the Sustainable Development Goals (SDGs), which consist of 17 goals set by the UN, as common objectives for the international community to achieve sustainable development.
- The NUA was adopted as the urban policy paradigm of the international community for sustainable urban development at HABITAT III, which was held in Quito, Ecuador, in 2016.
- The NUA consists of 175 items from the "Quito Declaration on Sustainable Cities and Human Settlements for All" and the "Quito Implementation Plan for the New Urban Agenda," which call for action to achieve the goal of making cities and human settlements sustainable (SDG 11).

#### Text Box 1 | Core dimensions of the NUA

The "Quito Declaration on Sustainable Cities and Human Settlements for All" includes the following three sectors, along with a declaration that states the background and purpose of the NUA.

① Our shared vision

② Our principles and commitments

③ Call for action

The implementation plan for the NUA calls for transformative efforts for sustainable urban development in social, economic, and environmental aspects and emphasizes effective implementation, follow-up actions, and evaluation.

- 1) Social inclusion and poverty reduction
- 2 Sustainable and inclusive urban prosperity and opportunities for all
- 3 Environmentally sustainable and resilient urban development

Five implementation measures to achieve the NUA

① National urban policies: Establishing mid- to long-term visions through the establishment of National

- Urban Policy (NUP) surveys and cooperation with related entities
- ② Urban legislation and regulations: Promoting governance cooperation in the implementation process by establishing urban legislations and regulations
- 3 Urban planning and design: Providing guidelines to ensure multi-disciplinary connectivity and inclusion
- 4 Local economy and municipal finance: Establishing sustainable financial reserves for local governments to implement policies and plans
- (§) Local implementation: Requesting cooperation at various levels (i.e., local, central governments)

#### The international community's efforts to implement the NUA and request for submission of national reports

- UN-Habitat recommended that each country submit a voluntary national report quadrennially to review NUA implementation and established the NUA platform for this purpose (https://www.urbanagendaplatform.org/nua).
- The NUA is a document calling for action in the urban sector to contribute to the localization and realization of the 2030 Agenda for Sustainable Development. It states that, to promote the implementation of the NUA, it is necessary to inspect NUA implementation at the global level, based on quantitative and qualitative analysis results voluntarily submitted by countries and regions.
- However, as of April 2023, only 40 out of 194 countries have submitted national reports on NUA implementation. South Korea is one of the countries that has yet to submit its report<sup>1)</sup>.
- Among the countries that have submitted implementation reports, only Finland, Germany, the Czech Republic, and Spain are members of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC), and countries such as Colombia, Peru, and Kenya submitted national reports that recorded various national and regional activities to achieve the NUA.

<sup>1)</sup> See the UN NUA website to check the submission status of NUA national reports in the international community. (https://www.urbanagendaplatform.org/member-states). Accessed on Apr. 3, 2023.

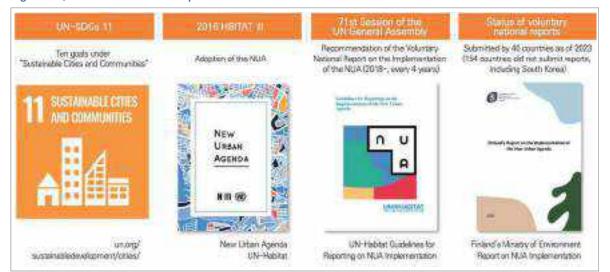


Figure 1 | Status of the NUA by UN-Habitat

#### Monitoring NUA implementation in South Korea

- South Korea is pursuing sustainable development through the Korean Sustainable Development Goals (hereinafter referred to as K-SDGs), which localize UN SDGs, and has established 236 indicators for monitoring. Among these, sustainability assessment was conducted on 155 indicators that could be quantitatively assessed using nationally approved statistics.
- Government agencies, local governments, civic and stakeholder groups, and experts are collaborating under the leadership of the Office for Government Policy Coordination to jointly inspect the implementation of the K-SDGs, and the results of these goals' achievements are published in the "National Sustainability Report" (Commission on Sustainable Development, 2022).
- National sustainability is assessed and the sustainability report is prepared on the basis of sustainable development indicators every 2 years according to the Framework Act on Sustainable Development. This report includes SDG11 as one of the indicators for an inclusive society; however, the national report on NUA has not been submitted yet.



Figure 2 | Data platform for the inspection of implementation of Sustainable Development Goals (SDGs)

- Statistics Korea and Statistics Research Institute are responsible for South Korea's SDG data and are in charge of collecting and analyzing data for each related indicator. A total of 195 indicators are currently available on Statistics Korea's SDG portal<sup>2)</sup>, and data are being collected for 52 indicators. SDG data managed by Statistics Korea are also used in various international organizations' SDG monitoring processes, including that of the UN.
- Various indicators established and evaluated through the K-SDG system can also be employed for monitoring the NUA.
- However, these K-SDG indicators cover only a part of the content that should be included in the national report on NUA implementation. Thus, a more extensive database and related policies and programs must be reviewed to assess NUA implementation.
- Meanwhile, the Ministry of Land, Infrastructure, and Transport is endeavoring to link the central government and local government plans through consistent local government evaluations of sustainable development. It also assesses urban sustainability and living infrastructure on an annual basis to support sustainable development by monitoring the sustainable development of local governments. Data are collected from lower-level local governments, such as si (city), gun (county), and gu (district), based on which local governments are assessed. However, the raw data are not disclosed, and statistics are not constructed in a form that enables time-series comparison.

<sup>2)</sup> Statistics Korea's SDG portal: kostat-sdg-kor.github.io/sdg-indicators/reporting-status. Accessed on July 7, 2023

## 1-2 Purpose of tasks

#### Necessity and purpose of South Korea's national report on NUA implementation

- This report's primary objective is to inspect, via quantitative indicators and qualitative assessments, the efforts made by South Korean urban policies toward the creation of sustainable cities and human developments from the perspective of inclusivity by reviewing NUA implementation in South Korea and to provide national data to inspect NUA implementation at the global level.
- The secondary objective is to contribute to promoting regional awareness and competencies regarding the NUA implementation plan for sustainable development by reviewing how each goal is attained at the local government level and to encourage local governments to participate in the monitoring process beyond inspecting the implementation of SDGs at the national level.
- The third objective is to evaluate NUA implementation at the regional level by reviewing key policies implemented at the local government level to create sustainable cities and human settlements and discover cases of local government projects that effectively contribute to creating sustainable regions through an innovative approach.
- The national report introduces the efforts of South Korea's urban policy sector toward global society in achieving the 2030 SDGs and provides sources for UN-Habitat and various partner countries to understand South Korea's experience and achievements in implementing the NUA.
- It also fulfills South Korea's role as an Executive Board member of UN-Habitat and as a donor country of middle standing, contributing to ultimately achieving the SDGs that the international community is striving for, and strengthening South Korea's role in urban development within the international community.

### 02 Methodology

PART I

#### 1. Key points of tasks



#### Temporal scope

• This report is the first national report prepared by South Korea since 2016, when the NUA was adopted as a result of Habitat III, and thus uses the latest data available up to the present since the adoption of the NUA for the most recent 10-year period (2010-2020) to monitor changes.

#### Contextual scope

- Research and analysis of major urban policy issues considering domestic and international environmental changes
- The overall policies in each sector presented in the monitoring guidelines on NUA implementation are subject to review, with the urban policies managed by the Ministry of Land, Infrastructure, and Transport as the main focus when preparing the national report.
- Review of the status and key points of voluntary national reports of major countries
- National reports already submitted by other countries are reviewed to meet the report's purpose, which is to inspect NUA implementation at the international level; in particular, national reports from advanced donor countries that are OECD DAC members are reviewed and examined in detail.
- The guidelines and indicators for preparing a voluntary national report on NUA implementation are reviewed, and indicators suitable for the domestic situation are selected to analyze the implementation status in South Korea based on the available data.

- Analyzing guidelines for preparing the NUA, which is an official UN document
- Reviewing the UN's NUA indicators and selecting the ones suitable for domestic situations
- Analyzing the status and report of indicators related to K-SDGs
- Deriving improvement measures and sector-specific tasks for South Korea's urban policies to achieve the goals of NUA implementation
- Providing follow-up suggestions to continuously inspect the country's implementation status

Table 1 | Key points and outputs of tasks

Details of tasks	Performance plans (key points)	Output			
Basic survey to review domestic NUA implementation status					
Studying and analyzing trends related to urban policies considering domestic and international environmental changes	Selecting major urban policies according to national policy tasks and analysis Gathering opinions from experts in urban policies				
Examining the necessity and significance of preparing a national report to review NUA implementation	Analyzing NUA guidelines, framework, and indicators Forming an advisory and participatory network for the NUA report Gathering opinions from SDG experts	Launch briefing session and materials for report			
Analyzing national reports prepared by major countries and the status of submission to international organizations	Reviewing implementation in major countries and generally surveying governance Analyzing the composition of the detailed table of contents under parts and special chapters (e.g., appendices) of the report				
Preparing a national report	on domestic NUA implementation				
Establishing the basic direction and analytical framework for South Korea's national report based on UN-Habitat guidelines for monitoring NUA implementation	Selecting details suggested in the guidelines based on the South Korean government's key policies and classifying the indicators used (Reviewing UN-Habitat NUA indicators and related domestic statistical databases)	Basic direction and analytical framework for the national report			
Summarizing and evaluating South Korea's NUA implementation status according to the analytical framework	Examining the outcomes of selected key policies (geographic information system [GIS], statistical data survey) Collecting statistical data and expert opinions	Interim report briefing session and materials for the report			

Details of tasks	Performance plans (key points)	Output
Deriving improvement plans and future tasks of urban policies in South Korea for implementation of the NUA	Selecting indicators that can be connected to the South Korean government's key policies among NUA monitoring indicators Gathering opinions from urban policy and NUA experts	Gathering stakeholders from each central government department and sector and reflecting their opinions on the draft of the national report
Preparing an English report for submission to international organizations	Translating the Korean draft of the national report into English, and proofreading it	English report
Suggesting plans to utilize	the national report on NUA implementation	
Strengthening cooperation with UN-Habitat using the national report	Submitting the voluntary national report to UN-Habitat	
Supporting attendance at the second session of the UN-Habitat Assembly and analyzing the trend in discussing the agendas	Reviewing major UN General Assembly agendas and discussion results	Reviewing General Assembly agendas and reporting the results
Sharing and disseminating the results of NUA implementation with the international community	Selecting international seminars in or topics through which South Korea's NUA implementation results can be shared	Plans to hold seminars

#### 2. Research method



#### Review of NUA monitoring and reporting guidelines

#### Guidelines for Reporting on UN-Habitat NUA Implementation

- UN-Habitat has established the Guidelines for Reporting on the Implementation of the New Urban Agenda (2016), which provide the principles for preparation and submission of national reports, and shares them with member states.
- These guidelines present the direction and method of preparing and submitting national reports on NUA implementation, such as the roles and responsibilities of stakeholders involved in preparing the national report; the reporting methodology, such as data collection and writing of the report; and report submission timeline.
- The guidelines particularly emphasize the need for various stakeholders to participate in the reporting team, suggest that the government form a team with local governments

- and civil society to prepare and submit the national report, and recommend creating a platform that can promote mutual learning and exchange between relevant stakeholders for submission and sustainable updating of the report.
- Regarding key points, the guidelines suggest using all of the contents of the qualitative and quantitative analyses, including relevant information in subcategories.
- The reporting and submission scheme for the reports presented by the guidelines is as follows.



Figure 3 | Inclusive NUA implementation reporting procedure by UN-Habitat

Source. UN-Habitat (2016) 5. Figure 1.

- The NUA is an international agreement that outlines the SDG implementation plan at the urban level to contribute to the achievement of the 2030 Agenda for Sustainable Development by planning, developing, and operating cities in a sustainable manner. It calls for the implementation of a more expanded and integrated SDG 11.
- The key is to adopt a spatial dimension for the implementation of the SDGs by emphasizing localization and focusing on implementation at the regional level. The NUA emphasizes the participation and capacity building of local governments and stakeholders in other regions, which are subsequently reflected in the recommendations on the composition of the reporting team and reporting methods.

- (Assembling the team) The preparation of the NUA national report should be led by the relevant ministry or a clearly defined consortium of ministries related to the NUA.
- Member states should prepare the report through an open, inclusive, multilevel, and transparent process that reflects the role and contributions of the national, subnational, and local levels of government and regional and sub-regional organizations.
- Various stakeholders should participate in preparing the report, including the national government, local governments, civil society and the private sector, and universities and academic institutions.
- (Reporting methodology) Although each member state will have different processes for completing the report, all reports should highlight linkages between national, subnational, and local governments; stakeholders; and the public.
- Reporting should encompass the relevant information in each subcategory and respond with quantitative and qualitative inputs whenever possible.
- (Reporting timeline) NUA national reports should be sustainable and prepared in such a manner that they promote mutual learning and exchange through partnerships among all relevant stakeholders.
- UN-Habitat has created a platform to review NUA implementation at the global level and encourage participation of each member state. The voluntary national reports submitted by the member states are also posted on its platform.

#### NUA Monitoring Framework

- In 2018, the NUA Monitoring Framework was established according to the Guidelines for Reporting on the Implementation of the New Urban Agenda.
- The NUA Monitoring Framework divides efforts to implement NUA into transformative commitments and effective implementation and presents 77 indicators for measuring performance by subcategory.
- Each indicator was established by considering connectivity with the Guidelines for Reporting on the Implementation of the New Urban Agenda and the indicators for each SDG 11 "Sustainable cities and communities" target.
- The transformative commitments section comprises three categories: 1) social inclusion and ending of poverty, 2) sustainable and inclusive cities, and 3) environmentally sustainable and resilient urban development. Most indicators that

- belong to transformative commitments are consistent with SDG indicators.
- Effective implementation presents indicators for each category in terms of 1) building governance, 2) planning and managing urban spatial development, and 3) means of implementation.
- The framework also emphasizes the need to consider linkage with SDGs to ensure consistency with the global development agenda.
- Countries may define some indicators (e.g., basic service) differently. Additionally, no information could be obtained in some cases; thus, there is a need to review whether appropriate indicators are used depending on the circumstances of each country.

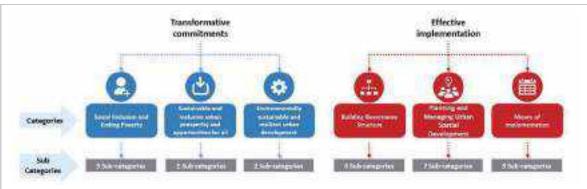


Figure 4 | NUA Monitoring Framework



#### South Korea's strategies in preparing the report on the implementation of the NUA

#### Strategies in preparing the national report on NUA implementation

- The following strategies are to be used to prepare the national report based on the inspection of NUA implementation and establishment of basic data to create platforms.
- (Strategy 1) Apply the Guidelines for Reporting on the Implementation of the New Urban Agenda and analyze the existing national reports
- Promote connectivity and continuity for global monitoring of the entire flow by applying the guidelines as in the national reports on the implementation of the NUA submitted thus far
- (Strategy 2) Build an industry-academia-research-government network related to the NUA
- Review NUA implementation agencies such as central and local governments, civic groups, private enterprises, and academia
- Build a network comprising related agencies and expert groups that can provide advice and participate directly or indirectly in preparing the national implementation report
- Build a network to jointly respond to revision of the report by maintaining continuous reviews and consensus formation on the national implementation report even after the project ends
- (Strategy 3) Compose specific items in line with South Korea's sustainable development and the priorities for the implementation of the NUA. Identify the priorities of government urban policies from the declaration of the NUA until the present
- Actively achieve implementation based on NUA monitoring indicators\* or select appropriate policies to compose details (\*NUA Monitoring Framework and Related Indicators, UN-Habitat, 2020)
- (Strategy 4) Obtain and select policy data that can be used and suggest building a platform out of that data
- Select and use data that are consistent with the SDGs among domestic data generated from the declaration of the NUA until the present

- Present data guidelines that can be uploaded as metadata for SDG indicators in the future by analyzing the data path, authorities having jurisdiction, and update status
- Data used in the Assessment of Sustainability of Cities and Level of Living Infrastructure by the Ministry of Land, Infrastructure, and Transport can be utilized to review NUA implementation in terms of regional-level urban planning and governance distinguished from K-SDGs

Table 2 | Comparison of data related to monitoring of NUA implementation in South Korea

Indicator system	Purpose	Data scope	Key sector
K-SDGs	K-SDGs were established to contribute to achieving the UN's 17 SDGs, which are shared goals of the international community	The 17 SDGs comprise a total of 236 indicators; the spatial scope of data is at the national level (since 2000)	② Improved quality of life through
Indicators for the Assessment of Sustainability of Cities and Level of Living Infrastructure	Induce sustainable development of local governments, promote urban administration and management for citizens, and encourage participation	The scope of assessment encompasses lower-level local governments at the si (city), gun (county), and gu (district) level targeting a total of 229 local governments, including administrative cities (2016–2022)	contents on social, economic, and environmental sustainability, which constitute the concept of sustainability and administrative, organizational, and

Refer to the National Sustainable Development portal and internal data of the Ministry of Land, Infrastructure, and Transport

#### Establishing the principles for preparing the national report on NUA implementation

- This report is the first voluntary national report submitted by the Republic of Korea, and the table of contents of the report is organized in compliance with the international community's framework for monitoring the UN's SDGs and the NUA.
- UN-Habitat recommends that each country continuously update its reports on NUA implementation by 2030 and submit quadrennial national reports, thereby applying an indicator system that ensures consistent and sustainable data acquisition.
- The South Korean government contributes to the NUA and improves the level of data provision by preparing a national report that can aid in monitoring at the global level.

 By selecting and including the best practices of South Korea's urban policies and local governments that cannot be included in the review results through national-level indicators, we aim to share and spread the best practices of implementation in our cities on a global platform.

#### English Table of Contents for the National Report

- I. Introduction
- 1.1. Context and Framework for NAU Implementation in South Korea
- 1.2 Methodology
- 1.3. Stakeholder Partnership
- II. NUA Implementation
- 2.1 Transformative Commitments for Sustainable Urban Development
- 2.2 Effective Implementation
- III. Conclusions
- 3.1 Follow-up and Review Appendix. Best Practices

### 03 Stakeholder Partnership

PART I

#### 1. Research scheme

Research scheme for preparing a national report on NUA implementation

Ministry of Land, Infrestructure, UN-Habitat and Transport Service ordering organizations Use and diffusion of national reports to support imprementation by cooperating institutions Korea Research Institute for Network for the NUA report Expert advisory group **Human Settlements** Industry and academia inseason is · Research on NUA implementation · Orban policy arquitis government networks related to SDGs th South Konsa In South Keeps · Expects in SDS and development. . Centrol Actal governments . Propagation of the radional report on the MUA cooperation (e.g., expert meinbers of the · Asadomia lo.g., resseron instrutes) · Support for cooperation between Connittee of Busickeite Development) Cvic groups and private emergrane the Minory of Lood, infrastructure and . Transport and UN-Habital

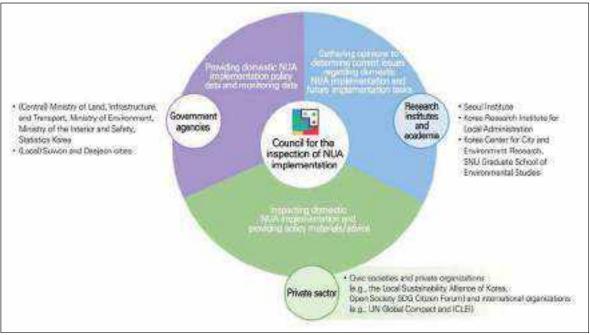
Figure 5 | Research scheme for preparing a national report on NUA implementation

- The research team of urban policy experts from the Korea Research Institute for Human Settlements defined the scope and method of preparing the national report on NUA implementation and created the national report based on data analysis.
- The opinions from relevant central government departments, local governments, stakeholder groups, and civil society were reflected in the process, and ways to participate in preparing the report were reviewed from various angles.
- Advisory meetings were held multiple times. The Local Sustainability Alliance of Korea and relevant organizations created an expert advisory group comprising experts in urban policies and international cooperation to reflect the opinions from local

governments and civic groups.

- The draft of the report completed through this process underwent a separate process of gathering opinions from South Korea's central government departments, central committee, and Local Sustainability Alliance of Korea branches nationwide, which are reflected in the report, thereby complying with the reporting guidelines by UN-Habitat that various stakeholders be involved in the process of preparing the report at the national level.
- However, because of budget and time constraints, it was difficult to fulfill the
  recommendation to establish a platform on which to submit data and participate
  in preparing the report, which would enable collection of a wide range of opinions.
  Improvements in this area are expected to be achieved in the process of preparing
  the second national report.
- Operating a public-private consultative body to prepare the national report on NUA implementation

Figure 6 | The role of the public-private-academic-research institutes in preparing the national report on the NUA



• Since the NUA emphasizes the participation of various stakeholders (e.g., local governments, civil society, the private sector) it is necessary to form a consultative body to inspect NUA implementation and support continuous operations through assistance from relevant government departments. Accordingly, an advisory group was formed with experts from various fields.

Table 3 | Advisory experts by field

Name	Affiliation	Position	Field
I. Park	Seoul National University	Professor, Graduate School of Environmental Studies	Inclusive city
M. Kang	University of Seoul	Professor, Graduate School of Urban Sciences	International cooperation
G. Kim	Seoul Institute	Research Fellow	Localization of Sustainable Development Agenda
H. Kim	Dankook University	Professor	Urban policy
K. Yoon	Open Society SDG Citizen Forum	Head of Policy Team	Sustainable development/environment
H. Yun	Local Sustainability Alliance of Korea	Head of Policy Research Group	Sustainable development/cities
E. Choi	Korea Center for City and Environment Research	President	Urban housing problems
E. Lee	UN Global Compact	Director	Environmental, social, governance (ESG), urban economy
D. Jeon	Decentralization Research Center, Korea Research Institute for Local Administration	Head	Local finance, balanced regional development
J. Won	Korea International Cooperation Agency	Manager, SDG Management Team	Sustainable development/international cooperation
G. Shin	Local Energy Lab	CEO	Environment, sustainable energy
H. Shim	ICLEI	Expert Member	Decentralization

<sup>\*</sup> Interest groups and experts in each sector who provided various opinions and advice in the process of preparing the report

## Implementation of the New Urban Agenda

- 1. Transformative Commitments for Sustainable Urban Development
- 2. Effective Implementation

## Transformative Commitments for Sustainable O1 Urban Development

PART I

#### 1.1 Sustainable urban development for social inclusion and ending of poverty

1.1.1

Social inclusion and ending of poverty

Poverty is one of the major obstacles to sustainable development at local and national levels. The NUA aims to end poverty in all its forms by providing all citizens with access to economic opportunities through inclusive and sustainable urban growth. According to the international poverty standard, which generally considers households living on less than USD \$1.90 per day (2011 PPP) as poor, the poverty rate in South Korea is less than 1%. However, the economic recession and labor market instability following the COVID-19 pandemic are increasing the vulnerability of social groups that have difficulty handling the sudden income decline, such as the elderly and individuals with disabilities. In particular, South Korea shows a substantial gap in poverty rates by age group. In 2021, while the relative poverty rates of the child and working-age populations were below the national average, the relative poverty rates of the elderly and retirement-age populations were 37.6% and 39.3%, respectively. Considering that South Korea is an aging society with an elderly population of over 18%, more active measures must be established to address poverty in this population demographic. The gender gap in poverty rate was also significant, with women generally being more vulnerable to poverty than men. The gender gap in relative poverty rate was even greater in the elderly population.

The South Korean government has been implementing various social welfare policies, including the national basic livelihood security system, to ensure a minimum standard of living and support self-reliance for vulnerable groups. Owing to several projects, the number of national basic livelihood security recipients and the social welfare budget of local governments have increased continuously over the past 10 years. Regarding projects to assist the elderly, efforts to offer jobs and assist in social activities that support self-sufficiency are being made, in addition to providing basic pensions. Local governments are also actively participating in projects to promote elderly welfare.

#### Eradicate poverty in all its forms

• (Indicator) Proportion of population below the international poverty line, by sex, age, at national urban level

The proportion of South Korea's population below the international poverty line<sup>3)</sup> as of 2016 was 0.2%, indicating that the proportion of poor households is very low. The proportion of the population below the international poverty line in South Korea remained 0.2% in 2006–2008 and increased slightly to 0.5% in 2010, after which it returned to the 0.2% level.

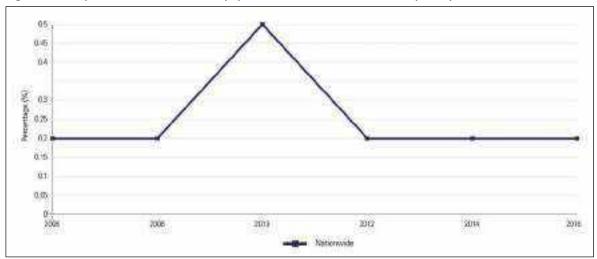


Figure 7 | Proportion of South Korea's population below the international poverty line (2006-2016)

Source: SDG Data Platform for the Republic of Korea https://kostat-sdg-kor.github.io/sdg-indicators/1-1-1/ (searched on Jul. 23, 2023))

#### • (Proxy indicator) Relative poverty rate by age

Considering South Korea's overall income level, applying the international poverty line may not be appropriate for accurately identifying the poverty status. The relative poverty rate is the main indicator of poverty used by Statistics Korea, which refers to the proportion of the population belonging to households whose disposable income equalizing the number of household members is less than 50% of the median income. Based on this calculation, South Korea's relative poverty rate was 15.1% in 2021 (Figure 3), showing an approximately 3.5% decrease from 18.6% in 2011. The relative poverty rates of the elderly population aged 65 and over and the retirement-age population aged 66 and over are higher than those of other age groups. In 2021, the relative

<sup>3)</sup> Percentage of the population living on less than \$1.90 a day (2011 PPP)

poverty rates of the elderly and retirement-age populations were 37.6% and 39.3%, respectively, exhibiting an 8.5% and 8.9% decrease, respectively, compared with 2011. However, this is still considered a high level. South Korea's elderly poverty rate is considerably higher compared with that of global society and the highest among the OECD countries (Figure 8).

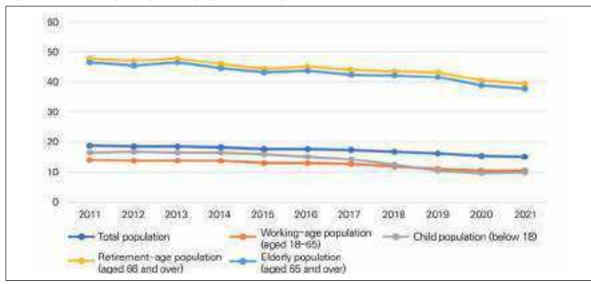


Figure 8 | Relative poverty rate by age in the Republic of Korea (2011-2021, unit: %)

Source: Statistics Korea; raw data from the Survey of Household Finances and Living Conditions by year.

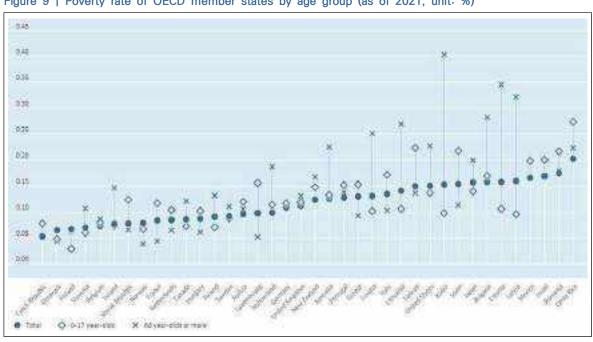


Figure 9 | Poverty rate of OECD member states by age group (as of 2021, unit: %)

Source: https://data.oecd.org/inequality/poverty-rate.htm

#### • (Proxy indicator) Relative poverty rate by sex

The relative poverty rate of the male population was 16.8% in 2011, which is 3.5% lower than that of the female population. The poverty rates of both male and female populations decreased for ten years until 2021, and the gap also narrowed; however, the relative poverty rate of the female population was still 16.6%. The gender gap in the relative poverty rate is even more apparent among the elderly population. In 2021, the relative poverty rate of the elderly male population was 31.3%, whereas that of the elderly female population was 42.6%, which is 11.3% higher. This implies that elderly women are more vulnerable to poverty than elderly men.

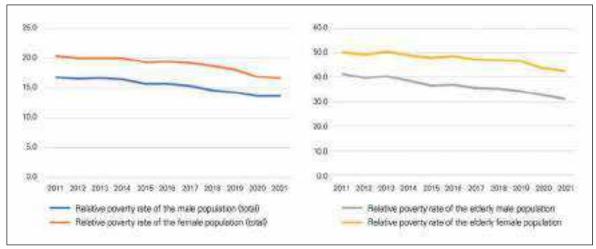


Figure 10 | Relative poverty rate by gender in the Republic of Korea (2011-2021, unit: %)

Source: Statistics Korea; raw data from the Survey of Household Finances and Living Conditions by year.

#### • (Policy measures) Social welfare support policies

The South Korean government ensures a minimum standard of living for the economically deprived and helps them support themselves by providing them with the required benefits according to the National Basic Living Security Act (Act No. 19646 National Basic Living Security Act). Citizens who wish to receive basic livelihood security benefits can apply through community service centers, and once the benefits are determined through an investigation process, applicants can receive livelihood, medical, housing, education, childbirth, funeral, and self-sufficiency benefits (Ministry of Health and Welfare website). The government also operates an emergency welfare support program that provides temporary and prompt support for low-income households during periods of crisis, who have difficulty maintaining their livelihoods. In the event of a

crisis due to domestic violence, loss of main income earner, natural disaster, etc., recipients can receive necessary support, including livelihood, medical, and housing assistance. The government has continuously expanded the scope of basic livelihood security recipients, and the number of recipients has nearly doubled from approximately 1.35 million in 2013 (receipt rate: 2.6%) to approximately 2.45 million in 2022 (receipt rate: 4.8%).

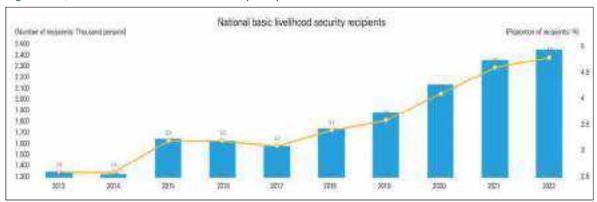


Figure 11 | National basic livelihood security recipients

Source: e-National Index https://www.index.go.kr/unity/potal/main/EachDtlPageDetail.do?idx\_cd=2760 (searched on October 27, 2023)

Text Box 2 | Cases of senior employment and social activity support projects by the Ministry of Health and Welfare

The South Korean government is implementing policies that support the elderly to address the growing elderly poverty rate. One of the major efforts is the Ministry of Health and Welfare's senior employment and social activity support projects. The main purpose of these projects is to support various social activities (e.g., public interest activities, jobs, and talent sharing) to improve the welfare of the elderly. The senior welfare department of each si (city), gun (county), and gu (district) and local senior community centers, senior clubs, and senior welfare centers are in charge of selecting participants and implementing projects (Ministry of Health and Welfare website). The senior employment and social activity support projects can be classified into two types: public and social. The former focuses on increasing public interest in the community to foster a sense of achievement among the elderly, while the latter focuses on providing services to the community by using the elderly's experience and activity competence to create senior jobs in the market. The table below summarizes the best practices of senior employment and social activity support projects.

Best Practices of Senior Employment and Social Activity Support Projects

Region Type Project Overview Effect

Creating a synergy between the café and bakery by operating in association with

Producing and selling a silver café under the motto "Living in Sokcho-si, Market Eco-friendly eco-friendly baked Sokcho" goods to be sold at Organizing funding for the project, and Gangwon-do type silver bakery the silver café procuring the business site and equipment with support from the local government

D	т	D	0	
Region	Туре	Project	Overview	Effect Continuing specialized training with
				project managers for capacity
				development
Wonju -si, Gangwon-do	Market type	The CU Convenience Store Health Insurance Review and Assessment Service Branch	· Operating a convenience store branch that hires elderly employees in a public institution (Health Insurance Review and Assessment Service)	· Creating new jobs through a three-party agreement between Wonju-si, the Health Insurance Review and Assessment Service, and the Wonju Senior Club · Using most of the profits to pay incentives to the participants, with the Health Insurance Review and Assessment Service renting out the site for free and covering the management costs · Discovering a market-type project model in which highly educated or male senior citizens can participate
Ansan -si, Gyeonggi -do	Public interest activity	Hope (Heemang) Electric Vehicle (EV) Charging Station	· Employing the elderly to provide guidance on using EV charging stations in Ansan, cleaning up the surroundings, and educating citizens about illegal parking	Reducing complaints related to charging stations (foul smell, illegal parking, etc.) Increasing user convenience Compensating for insufficient management staff at charging stations Creating senior jobs
Changwon -si, Gyeongsangnam -do	Market type	Café-ae Oda, Gyeongsangnam -do Assembly Branch	Operating a silver café in the lobby of the South Gyeongsangnam-do Assembly building	<ul> <li>Securing initial sales by analyzing the commercial district</li> <li>Creating a win-win welfare system for the elderly and individuals with disabilities by using coffee beans from companies run by persons with disabilities</li> <li>Finding jobs that can integrate different generations by hiring young managers</li> </ul>
Daegu -si	Public interest activity	Crackdown on illegal use of hidden cameras	Regularly and randomly inspecting public facilities for illegal filming using an elderly workforce	Reassuring the public of safe spaces and increasing interest in illegal filming Increasing the confidence and self-esteem of the elderly participating in new jobs
Eunpyeong-gu, Seoul	Market type	Senior resource recycling project "The Doul"	· Upcycling business producing and selling masks, eco bags, etc. from used clothing	<ul> <li>Maintaining stable operations through a three-party agreement between the public sector, private sector, and academia</li> <li>Providing job training and obtaining the brand patent by signing a memorandum of understanding (MOU) with Sangmyung University</li> <li>Improving awareness of senior jobs by promoting citizen participation</li> <li>by the author based on the 2019 Best Practices</li> </ul>

Source: Korea Labor Force Development Institute for the Aged (2019). Created by the author based on the 2019 Best Practices of Senior Employment and Social Activity Support Projects.

#### • (Policy measures) Local government social welfare support

Continuous efforts are also being made at the local government level to reduce poverty. Local governments in South Korea have continuously increased their social welfare budgets, which grew from 21.6% of the total local government budget in 2011 to 33.3% in 2023. In terms of size, the budget has more than tripled from approximately KRW 30 trillion in 2011 to KRW 102 trillion in 2023.

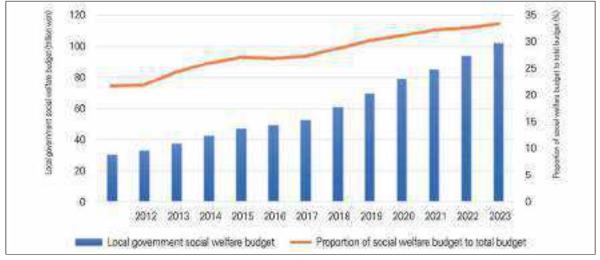


Figure 12 | Proportion of local government social welfare budget to total budget

Source: e-National Index https://www.index.go.kr/unity/potal/main/EachDtlPageDetail.do?idx\_cd=2860 (searched on October 27, 2023)

#### Text Box 3 | Case of Suwon's shared refrigerator project

In South Korea, local governments are making diverse efforts to improve the living environment of local populations living in poverty. A typical example is Suwon's shared refrigerator project. Suwon has set Goal 4 of the city's own sustainable development goals (S-SDGs) as "healthy and sustainable food" and is striving to eliminate welfare blind spots and create a welfare food scheme for local residents. The shared refrigerator project is the first implementation project carried forward to achieve this goal and was initiated through a public-private meeting comprising the city government, citizens, enterprises, and the Suwon Local Sustainability Alliance of Korea. The table below shows the direction of operation of Suwon's shared refrigerator project.

Direction of opera	ition of Suwon's s	shared refrigerator project
Category		Basic princip

Category	basic principle
Location	· Installing refrigerators in areas with high concentrations of low-income, vulnerable, elderly, and multicultural households (can be expanded depending on the case, such as schools and rental apartment areas) · Considering accessibility, management stability, and location, where stigmatization effects can be avoided

Cotogon	Pagia principlo
Category	Basic principle
Manager	· Selecting responsible citizen resource operators through in-depth interviews
Support system	Establish neighborhood administrative welfare centers, community security councils, affiliated intermediate support organizations     Establish civic groups (e.g., urban agriculture and dietary education networks)     Support stores, restaurants, individuals, and households in each village on an ongoing basis
Food	· Supply of fresh food obtained directly from local food stores through farmer donations · Resource managers in each village determine and share food processing and raw material supply
User monitoring	· Monitoring village user satisfaction with shared refrigerators
Operator meeting	· Conduct regular meetings between operators, civic groups, social welfare centers, food suppliers, etc.
Support system meeting	Conduct regular meetings to inspect the support system between private and public sectors     Constant monitoring of Goal 4 Committee as an implementation project for SDGs

Source: Suwon/Suwon Local Sustainability Alliance of Korea (2021). Suwon's shared refrigerator project, which brings the village and citizens together

The early stages of the project faced several issues, such as exclusive use by some users and conflict with operators, but through regular monitoring, sharing of pending issues, and operator training, a total of 19 shared refrigerators were successfully installed and are currently in operation in the community. Suwon's shared refrigerator project involves the participation of multiple stakeholders in the region. Various support organizations, including volunteer centers, school meal support centers, councils of social enterprises, and local small business owners and women's associations in Suwon are participating to ensure stable food security and supply. Suwon's case is meaningful in terms of improving the welfare of the local populations living in poverty, restoring the community, and practicing shared social values.

# 💹 Reduce inequality in urban areas by promoting equal opportunities and benefits

#### (Proxy indicator) Unemployment rate by stakeholder group

South Korea's unemployment rate was 3.1% in 2022, indicating a 0.7% decrease from the previous year. The unemployment rate, which was also 3.1% in 2013, maintained a gradual upward trend but began to decline in 2020. The gender gap in unemployment rates in 2013–2022 was 0.1% on average, with women generally showing higher unemployment rates than men. However, the men's unemployment rate surpassed that of women after 2020 (Figure 13). In 2022, the unemployment rate for persons with disabilities (7.1%) was 3.4% higher than the overall unemployment rate. The average gap between the unemployment rate for persons with disabilities and the overall unemployment rate in the period 2013–2022 was 2.8%. Among persons with disabilities, women showed higher unemployment rates than men in all years except 2015. By region, the unemployment rates for persons with disabilities in Seoul and Gyeonggi were higher

than those of other metropolitan cities and provinces. In 2021, the unemployment rates for persons with disabilities in Seoul and Gyeonggi Province were 7.0% and 9.4%, respectively.

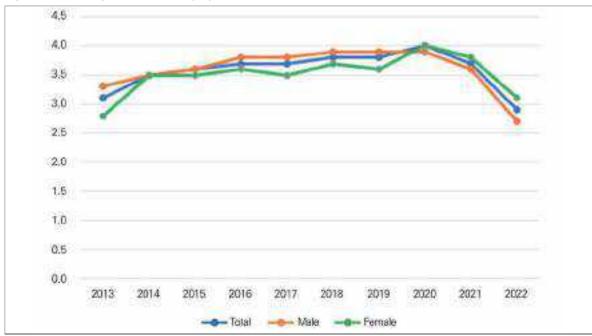


Figure 13 | Changes in the unemployment rate in Korea (2013-2022, unit: %)

Source: Statistics Korea; raw data from Economically Active Population Survey by year.

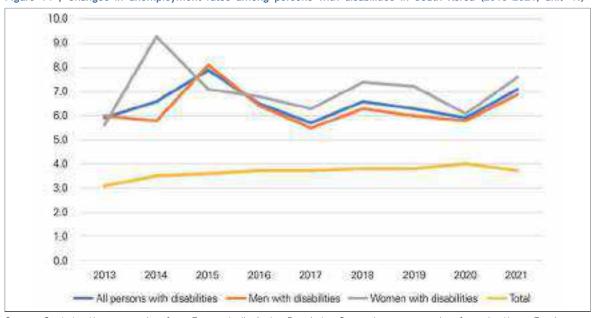


Figure 14 | Changes in unemployment rates among persons with disabilities in South Korea (2013-2021, unit: %)

Source: Statistics Korea; raw data from Economically Active Population Survey by year; raw data from the Korea Employment Agency for Persons with Disabilities Survey on Economic Activity Status of Persons with Disabilities by year.

Table 4 | Unemployment rates among persons with disabilities by region (2020-2021)

Region	2020	2021
Total	5.9%	7.1%
Seoul	7.9%	7.0%
Gyeonggi Province	6.8%	9.4%
Metropolitan cities and provinces	7.7%	6.4%
Other cities and provinces	3.8%	6.3%

Source: Statistics Korea; raw data from Economically Active Population Survey by year; raw data from the Korea Employment Agency for Persons with Disabilities Survey on Economic Activity Status of Persons with Disabilities by year.

#### • (Proxy indicator) Unemployment rates by city and province

By city and province, the region with the highest unemployment rate in 2022 was Seoul at 3.4%, which is 1.4% higher than Sejong City, which had the lowest unemployment rate in the same year.

Table 5 | Changes in unemployment rates by city and province

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Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Nationwide	3.1	3.5	3.6	3.7	3.7	3.8	3.8	4	3.7	2.9
Seoul Special City	3.9	4.4	4.2	4.2	4.5	4.8	4.4	4.6	4.8	3.4
Busan Metropolitan City	3.8	3.8	4.1	3.9	4.6	4.1	3.7	4.2	3.4	3
Daegu Metropolitan City	3.3	3.8	3.5	4.1	4	4.4	3.7	3.9	3.7	2.9
Incheon Metropolitan City	4.1	4.7	5	4.9	4.6	4.3	4.4	4.6	4	3.3
Gwangju Metropolitan City	2.8	2.8	2.9	3.1	2.9	3.8	3.7	3.9	3.6	2.9
Daejeon Metropolitan City	3	3.4	3.4	3.2	3.4	4.2	4.2	4.4	3.3	2.4
Ulsan Metropolitan City	2.1	2.7	2.9	3.8	3.5	4.6	4.2	4.2	3.6	3.2
Sejong Special Self-Governing City		_	_	_	2.3	2.3	2.7	2.8	2.1	2
Gyeonggi -do	3	3.3	3.9	3.9	3.9	3.8	3.8	4	3.7	2.7
Gangwon -do	2.3	3.1	3.2	2.8	2.6	2.9	3.6	3.9	3.6	3.2
Chungcheongbuk-do	2	3	2.6	2.6	2.2	2.4	3.1	3.2	2.5	2.5
Chungcheongnam-do	2.8	3.3	3.5	3.2	2.8	3.1	2.9	3.5	2.3	2.3
Jeollabuk-do	2	2.5	1.7	2.1	2.5	2.7	2.7	2.5	2.2	2.4
Jeollanam-do	2.1	2.9	2.5	3	3.2	2.8	2.6	2.4	2.3	2.2
Gyeongsangbuk -do	3.1	2.9	3	3.2	2.8	4.1	3.9	4	3.2	2.5
Gyeongsangnam-do	2.1	2.5	2.6	3.3	2.9	3	3.8	4	4.1	3.3
Jeju-do	1.8	2	1.9	2.2	1.9	2	2.1	2.5	3.1	2.1

Source: Statistics Korea; raw data from Economically Active Population Survey by year.

#### • (Associated indicator) Gini coefficient

South Korea's Gini coefficient was 0.333 in 2021, showing a gradual decline over the past decade. The Gini coefficient, which had maintained an overall downward trend since 2011, declined to 0.331 in 2020 but increased again to 0.333 in 2021. Although South Korea has shown some progress in reducing income inequality over the past decade, it still has a high level of inequality compared with other OECD countries (Figure 15).

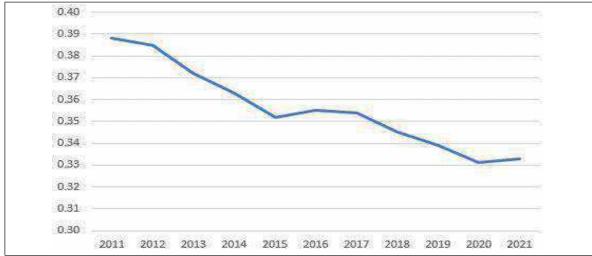


Figure 15 | Changes in South Korea's Gini coefficient (2011-2021)

Source: Statistics Korea; raw data from the Bank of Korea and Financial Supervisory Service by year.

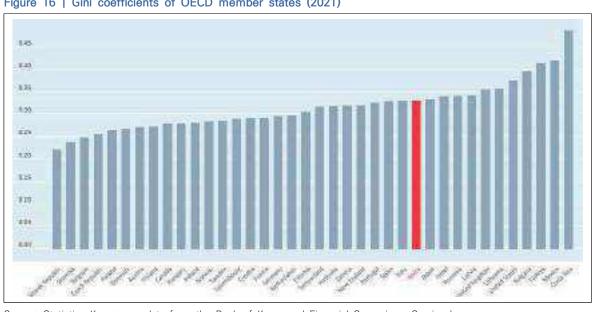


Figure 16 | Gini coefficients of OECD member states (2021)

Source: Statistics Korea; raw data from the Bank of Korea and Financial Supervisory Service by year.

# Achieve social inclusion of vulnerable groups: Women, youth, children, older persons, persons with disabilities, and migrants

• (Indicator) Women's recognized legal right to property inheritance and ownership Article 23 of the Constitution of the Republic of Korea states that the right of property of all citizens shall be guaranteed, and there shall be no discrimination between men and women in terms of inheritance according to the inheritance act. Therefore, the inheritance and ownership of property for all citizens, including women, is guaranteed by law.

#### • (Indicator) National legislation forbidding discrimination

Presence of national legislation forbidding discrimination in housing, access to public facilities and social services on the basis of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status South Korea enforces the Framework Act on Social Security, which mandates that state and local governments provide social security and services for maintaining and promoting a decent life for all citizens. Additionally, the Framework Act on Residence requires the State and local governments to provide support for the housing underprivileged (e.g., individuals with disabilities, the elderly, low-income persons, and the youth) so that they can maintain a safe and convenient residential life.

#### Text Box 4 | Basic principles for housing policies in Article 3 of the Framework Act on Residence

The State and local governments shall devise and implement housing polices in accordance with the following basic principles to guarantee the housing rights referred to in Article 2.

- 1. The people's housing expenses shall be maintained at affordable levels through supply of housing and subsidization of housing expenses according to income levels, life cycle, etc.
- 2. Housing standards for classes in need of housing support, such as individuals with disabilities, the elderly, low-income persons, newlyweds, the youth, and children subject to support, shall be elevated by giving them priority in rental-house supply and housing-expense subsidization according to demand for housing welfare.
- 3. The construction of good-quality houses shall be facilitated, and the supply of rental houses shall be expanded.
- 4. Housing shall be supplied in a systematic and efficient manner.
- 5. Housing shall be managed in a way that ensures people live in a pleasant and safe environment.
- 6. Housing standards for residents of existing houses shall be elevated by improving the residential environment, renovating run-down houses, etc.
- 7. Support shall be provided to ensure that individuals with disabilities, the elderly, and other housing underprivileged are able to maintain a safe and convenient residential life.
- 8. Pre-emptive countermeasures shall be taken in response to long-term socioeconomic changes such as a low birth rate, an aging population, and a diversified mode of life.
- 9. The normal functioning of the housing market and the sound development of the relevant housing industry shall be encouraged.

• (Indicator) Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

The proportion of public spaces in cities is important for the social inclusion of vulnerable groups. Since public spaces are available to all citizens, they enable people from all walks of life to have equal access to the city's resources and opportunities. For vulnerable groups, it is particularly important to ensure the existence of and access to sufficient public spaces to provide a better quality of life and opportunities for social participation. Parks, green spaces, and pedestrian walkways in public spaces promote physical activity and positively impact mental health. For vulnerable groups with limited access to a healthy living environment, public spaces can help resolve the imbalance. Moreover, green spaces contribute to the city's environmental sustainability. Since vulnerable groups are affected by the negative impacts of environmental change, high-quality public spaces may contribute to improving their quality of life. This report derived the proportion of public space in Korean cities for 77 cities (administrative areas where most are urban areas with a population of 50,000 or more), six metropolitan cities, Seoul Metropolitan City, and Sejong Special Self-Governing City. The proportion of public spaces in South Korea, including squares, parks, green areas, amusement parks, lands for public use, and streets, shows diverse patterns by city. As of 2022, cities with a proportion of public spaces exceeding 20% were mostly concentrated in the Seoul Metropolitan Area (or capital area), including Seoul and Gyeonggi Province, while the proportion of public spaces in provincial cities was significantly lower. Out of 85 cities and metropolitan cities, the proportion of public spaces was less than 10% in 59 cities. Therefore, it seems necessary to establish a measure to expand public spaces to achieve balanced regional development and improve the welfare and convenience of local residents.

Table 6 | Proportion of public spaces by city (2013-2022, unit: %)

Year		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Seoul Specia	al City	40.1	39.9	40.1	39.7	39.4	39.6	39.5	24.9	24.9	24.8
Busan Metropo	litan City	15.4	16.4	16.9	16.0	15.5	14.7	14.0	11.7	13.5	13.4
Daegu Metropo	litan City	11.8	11.6	11.7	11.6	11.7	11.6	11.6	9.2	9.2	11.3
Incheon Metropo	olitan City	11.7	11.7	11.9	11.6	11.3	11.5	12.0	12.1	11.9	12.0
Gwangju Metrop	olitan City	13.1	13.2	13.3	12.7	12.7	12.5	12.4	14.1	14.1	14.2
Daejeon Metropo	olitan City	13.3	13.2	12.8	12.8	12.9	14.0	14.1	10.9	11.0	11.0
Ulsan Metropol	litan City	8.9	9.0	9.1	9.2	9.1	9.0	9.0	8.2	7.5	6.5
Sejong Special Self-	Governing City	15.3	15.6	12.0	12.1	11.9	12.1	12.2	12.8	12.7	12.7
	Suwon	28.6	27.1	27.4	29.1	28.6	29.0	29.1	28.7	29.3	29.3
Gyeonggi -do	Seongnam	28.5	29.9	25.2	25.5	25.6	25.6	24.7	21.3	21.5	21.5
	Goyang	13.7	13.8	13.5	13.4	13.0	12.7	12.7	12.8	14.4	14.6

Year		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Yongin	9.8	9.8	9.8	9.8	9.7	9.7	9.8	9.3	9.4	8.8
	Bucheon	31.9	31.7	30.1	31.1	27.0	27.5	27.5	27.5	30.4	30.4
	Ansan	14.7	14.5	13.6	13.8	13.7	13.5	13.6	13.6	13.5	14.0
	Anyang	26.1	25.9	26.0	26.1	26.2	26.2	26.2	24.0	23.9	24.0
	Namyangju	6.2	6.4	6.4	6.3	6.4	6.8	7.0	6.5	7.1	7.8
	Hwaseong	2.0	2.0	11.2	11.3	13.4	11.3	11.3	11.3	11.3	11.0
	Pyeongtaek	4.0	3.9	3.9	7.2	5.4	10.8	10.3	10.3	10.3	10.6
	Uijeongbu	14.9	14.9	15.4	15.5	15.5	15.5	15.2	15.0	14.8	14.7
	Siheung	22.7	22.6	22.8	22.5	21.6	19.9	20.0	19.5	19.3	19.1
	Paju	3.3	3.3	3.8	3.8	3.8	3.9	3.9	3.6	3.6	3.5
	Gwangmyeong	29.5	33.0	24.6	24.8	24.9	25.8	25.8	22.8	23.3	20.3
	Gimpo	8.6	8.6	8.5	8.3	8.3	8.3	8.5	8.6	8.6	8.7
	Gunpo	21.1	20.9	21.2	21.2	21.3	21.2	21.1	20.9	19.4	19.4
	Gwangju	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	Icheon	2.8	2.8	2.8	2.7	2.7	2.6	2.6	2.6	2.6	2.6
	Yangju	7.1	7.1	6.9	7.1	6.8	6.8	7.6	7.3	7.4	7.6
	Osan	26.6	27.7	23.6	22.3	22.3	22.3	20.6	19.9	19.9	21.0
	Guri	29.7	29.7	24.7	24.8	25.2	25.2	26.0	19.3	19.2	19.2
	Anseong	2.2	2.2	2.2	2.2	2.2	2.9	2.9	3.5	3.9	4.0
	Pocheon	0.9	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2
	Uiwang	13.5	14.0	13.7	14.1	14.4	14.3	14.4	14.8	15.0	15.1
	Hanam	11.1	11.1	11.2	11.9	11.9	12.0	11.9	11.9	14.7	14.8
	Yeoju	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.4
	Dongducheon	7.5	4.3	4.3	4.7	5.3	5.5	5.5	4.7	4.7	4.7
	Gwacheon	25.8	25.2	27.9	28.2	27.8	28.8	28.8	28.8	28.8	28.8
	Chuncheon	2.0	2.0	2.0	2.1	2.1	2.1	2.1	1.4	1.4	1.4
	Wonju	3.4	3.4	3.4	3.4	3.4	3.4	2.9	2.9	2.9	2.9
	Gangneung	2.2	2.2	2.0	2.0	1.9	1.9	1.8	1.6	1.6	1.6
Gangwon -do	Donghae	7.4	7.5	7.5	7.5	7.5	7.2	7.2	5.2	5.2	5.3
-	Taebaek	2.9	2.9	2.9	3.0	3.0	3.0	3.0	2.9	2.9	2.9
	Sokcho	6.7	6.7	6.7	6.7	6.4	6.5	6.5	6.3	6.3	6.3
	Samcheok	1.1	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9
	Cheongju	34.7	51.2	6.2	6.2	6.5	6.4	6.5	6.5	6.5	5.3
Chungcheongbuk-do	Chungju	2.8	3.0	3.0	2.9	2.9	3.5	2.9	3.1	2.9	2.8
gg	Jecheon	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9
	Cheonan	3.9	4.0	4.9	5.0	5.0	4.9	5.0	4.7	4.8	4.9
	Gongju	2.1	2.1	1.9	1.9	1.8	1.8	1.8	1.6	1.6	1.6
	Boryeong	1.1	1.2	1.2	2.8	2.8	2.8	2.8	2.8	2.7	2.6
01	Asan	3.8	3.9	3.7	3.7	3.7	3.5	3.5	3.4	3.0	3.2
Chungcheongnam-do	Seosan	3.3	3.3	3.5	3.6	2.8	2.7	2.6	2.6	2.6	2.6
	Nonsan	3.1	3.1	3.2	3.2	3.0	3.0	3.0	2.7	2.8	2.8
	Gyeryong	18.1	7.7	7.7	8.0	7.5	7.5	7.5	5.0	5.1	5.1
	Dangjin	2.8	2.8	2.8	3.1	3.5	3.5	3.5	3.3	3.3	3.4
	Jeonju	16.3	16.3	16.5	16.5	16.2	16.3	16.4	16.3	16.4	16.4
	Gunsan	6.4	6.4	6.2	6.2	6.2	5.9	5.9	5.7	5.6	5.5
Lealle land ale	Iksan	3.6	3.6	3.6	3.6	3.7	3.6	4.0	3.6	3.7	3.8
Jeolla buk-do	Jeongeup	2.7	2.7	2.6	2.3	2.3	2.3	2.3	1.8	1.8	1.8
	Namwon	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
	Gimje	2.3	2.4	2.4	2.4	2.4	2.4	2.6	2.5	2.2	2.2
	Mokpo	17.0	16.1	16.0	15.8	16.1	16.9	16.8	13.9	13.3	13.4
	Yeosu	2.9	2.9	2.8	2.7	2.8	2.8	2.8	2.6	2.6	2.7
Jeolla nam-do	Suncheon	3.2	3.2	3.1	3.1	3.0	3.0	3.0	2.8	2.8	2.8
	Naju	3.5	3.5	3.0	3.0	3.0	3.0	2.1	2.0	2.0	2.0
	Gwangyang	6.5	7.4	6.6	6.6	6.6	6.4	6.4	5.6	5.6	4.9
=Gyeongsangbuk-do	Pohang	3.3	3.3	3.2	3.4	3.4	3.4	3.6	3.0	3.0	3.0

Year		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Gyeongju	2.9	2.9	2.9	2.9	2.9	3.0	3.0	2.6	2.4	2.4
	Gimcheon	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.7	1.8	1.8
	Andong	1.5	1.5	1.5	1.7	1.7	1.7	1.7	1.4	1.3	1.3
	Gumi	6.0	6.1	6.4	6.6	6.6	6.7	6.8	5.4	5.3	5.4
	Yeongju	1.8	1.9	1.7	1.7	1.7	1.8	1.8	1.7	1.7	1.6
	Yeongcheon	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
	Sangju	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	Mungyeong	0.7	0.8	0.9	0.8	1.1	1.2	0.7	0.5	0.5	0.4
	Gyeongsan	4.4	4.6	5.1	4.6	4.6	4.7	4.7	4.0	3.9	3.9
	Changwon	8.7	8.6	8.7	8.9	8.7	7.6	7.0	7.0	6.7	6.7
	Jinju	3.8	3.8	4.3	4.3	4.4	4.3	4.3	3.9	3.7	3.9
	Tongyeong	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.2	1.2	1.2
Cuangaana nam da	Sacheon	3.2	3.1	3.1	3.1	3.2	3.3	3.4	3.0	3.0	3.0
Gyeongsang nam-do	Gimhae	8.7	8.8	8.3	8.3	8.6	8.6	8.9	7.0	7.0	7.1
	Miryang	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Geoje	4.9	4.9	4.8	4.9	5.0	5.0	5.0	4.9	4.9	4.9
	Yangsan	6.1	6.1	6.0	6.0	6.0	6.0	6.0	4.8	4.8	4.8
lain da	Jeju	3.3	2.7	2.7	2.7	2.9	2.9	2.9	3.2	2.8	2.8
Jeju-do	Seogwipo	3.7	3.7	3.7	3.7	3.4	3.4	3.4	3.3	3.3	3.3

Source: Calculated by the author using raw data by year from the Urban Planning Statistics by the Ministry of Land, Infrastructure, and Transport.<sup>4)</sup>

# Ensure access to public spaces, including streets, sidewalks, and cycling lanes

 (Indicator) Percentage of road length that has dedicated bike lanes (excluding motorways)

The South Korean government is implementing a policy that promotes the use of bicycles, a non-motorized and eco-friendly means of transport, as part of a plan to diversify the car-centric transportation culture. Specifically, the government seeks to ensure the safety and convenience of bicycle users by improving the cycling infrastructure and expanding safety education and campaigns. According to the Ministry of Land, Infrastructure, and Transport's Yearbook of Road Statistics, South Korea's total cycling lane extension length was 25,249 m in 2021, showing an increase of approximately 38% compared with 2013. Compared with the total road extension length, the proportion of cycling lanes increased by 5.4% from 17.9% in 2013 to 23.3% in 2021. The city with the highest proportion of cycling lanes is Sejong, where the cycling lane extension length exceeded 50% of the total road extension length in 2021. In contrast, in Seoul, which has the highest population density, the ratio of cycling lane extension length to total road extension length was only 15.5% in 2021.

<sup>4)</sup> In South Korea, "the spaces open for public purposes" out of "the proportion of space open for public purposes in the city" in SDG 11.7.1 are defined as squares, parks, green areas, amusement parks, and lands for public use in urban planning to calculate the indicator. However, in this report, the proportion of public spaces is calculated according to the formula provided in the NUA Monitoring Framework by UN-Habitat.

Table 7 | Ratio of cycling lane extension length to total road extension length by city and province (2013-2021, unit: %)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nationwide	17.9	19.4	20.1	20.4	21.3	21.7	22.4	22.6	23.3
Seoul Special City	8.6	8.8	9.5	10.6	10.8	11.2	11.4	15.2	15.5
Busan Metropolitan City	10.1	11.9	13.1	13.0	13.3	13.4	13.9	14.2	14.7
Daegu Metropolitan City	28.4	32.3	34.1	33.7	32.8	37.5	37.3	37.2	36.7
Incheon Metropolitan City	31.7	24.4	26.3	26.1	28.8	28.1	28.6	29.7	32.9
Gwangju Metropolitan City	33.0	33.3	42.4	35.1	35.1	34.8	35.9	35.8	35.8
Daejeon Metropolitan City	31.8	42.0	37.0	37.0	37.0	37.1	37.3	37.4	36.4
Ulsan Metropolitan City	24.9	26.5	23.8	24.9	32.6	37.2	35.9	32.7	31.0
Sejong Special Self-Governing City	43.7	26.3	53.4	53.7	53.8	53.3	53.3	50.6	50.6
Gyeonggi -do	31.6	35.2	36.8	37.9	39.3	39.0	42.7	39.6	40.3
Gangwon -do	14.5	15.8	16.5	15.8	16.3	16.2	17.6	17.8	17.9
Chungcheong buk-do	17.9	19.3	19.0	19.4	19.5	18.6	19.2	19.5	20.1
Chungcheong nam-do	15.7	13.6	14.3	13.9	17.3	19.4	19.1	19.4	20.4
Jeollabuk-do	15.0	16.7	17.0	17.2	21.6	17.5	17.5	19.0	22.5
Jeollanam-do	10.9	10.9	11.2	12.5	13.1	13.6	13.5	14.3	13.9
Gyeongsangbuk-do	12.2	15.8	15.6	15.9	16.3	17.2	17.3	17.3	18.3
Gyeongsangnam-do	11.7	15.0	15.3	15.3	15.6	15.4	15.3	15.3	15.4
Jeju-do	41.7	39.3	40.5	40.5	41.7	40.7	41.8	42.2	42.1

Source: Created by the author using the Ministry of Land, Infrastructure, and Transport's Yearbook of Road Statistics by year and National Index cycling lane statistics by year.<sup>5)</sup>

 (Indicator) Percentage of road length that has dedicated sidewalks (excluding motorways

According to the Urban Planning Statistics, the total length of pedestrian-only streets in South Korea was approximately 9,887km in 2022, accounting for 1.3% of all streets. Sejong and Gyeonggi-do had the highest proportion of pedestrian-only streets at 3.2% and 2.8%, respectively.

<sup>5)</sup> The ratio of cycling lane extension length to total road extension length is calculated according to the formula provided in the NUA Monitoring Framework by UN-Habitat.

Table 8 | Ratio of pedestrian path to total road extension length by city and province (2013-2022, unit: %)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Nationwide	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.3
Seoul Special City	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Busan Metropolitan City	0.7	0.7	0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9
Daegu Metropolitan City	1.1	1.3	1.3	1.3	1.3	1.4	1.4	1.6	1.6	1.6
Incheon Metropolitan City	1.2	1.3	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.6
Gwangju Metropolitan City	0.9	0.9	0.9	1.0	1.0	0.9	0.9	1.0	1.0	1.0
Daejeon Metropolitan City	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.7	2.7	2.7
Ulsan Metropolitan City	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1
Sejong Special Self-Governing City	2.9	2.8	2.8	2.8	2.8	2.8	2.8	3.1	3.2	3.2
Gyeonggi -do	2.7	2.7	2.5	2.4	2.7	2.9	2.9	2.9	3	2.8
Gangwon -do	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
Chungcheong buk-do	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	1.0
Chungcheong nam-do	1.1	1.2	1.2	1.1	1.1	1.1%	1.1	1.1	1.1	1.2
Jeollabuk-do	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.9	8.0	0.7
Jeollanam-do	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7
Gyeongsangbuk-do	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
Gyeongsangnam-do	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Jeju-do	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5

Source: Calculated by the author using raw data by year from the Urban Planning Statistics by the Ministry of Land, Infrastructure, and Transport.

#### • (Policy measures) Bicycle riding encouragement policy

South Korea enacted the Act on Encouragement of Bicycle Riding on July 4, 2023, which requires the State and local governments to devise comprehensive measures to encourage bicycle riding, including improving facilities for bicycle riding and promoting the safety and convenience of bicycle riders. The State may partially subsidize local governments for costs incurred in maintaining facilities for bicycle riding to encourage the maintenance of these facilities. Each local government must also formulate a bicycle riding encouragement plan every five years. Even before the establishment of this Act, many local governments, such as Seoul, Daejeon, Gwangju, and Sejong, operated public bicycle systems to increase citizens' access to bicycles. A typical example is Daejeon, which is currently implementing a bicycle policy with the goal of achieving a 4.0% share of bicycle use among means of transport by 2025. Its major policy project is the public bicycle rental service "Tashu," and as of September 2022, Daejeon was

operating over 2,500 public bicycles with 1,150 bicycle rental stations<sup>6)</sup>. Daejeon is also test-operating a transfer system linking the public bicycle service with urban railways and intra-city buses starting in July 2023. This system uses "T-money GO," a private mobility platform, thus enabling connection and transfer between urban railways, intra-city buses, and public bicycles through a smartphone application and provides transfer mileage when using public bicycles, which can be used for recharging transportation cards or paying for other means of transport<sup>7)</sup>.

Data platform

Data p

Figure 17 | Operation of the pilot project for public bike-public transport transfers in Daejeon

Source: Daejeon Metropolitan City website

https://www.daejeon.go.kr/drh/drhStoryDaejeonView.do?boardId=blog\_0001&menuSeq=1479&ntatcSeq=1432204232 (searched on Nov. 27, 2023)

# (1.1.2) Access to adequate housing

South Korea's housing sector has shown remarkable achievements, both quantitative and qualitative, over the past few decades. The number of households not meeting the minimum residential standards<sup>8)</sup> has consistently decreased, accounting for only 4.5% of all households in 2021, and the residential area per capita has continuously increased, reaching 33.9 m<sup>2</sup> in 2021.

However, the serious issues of inadequate housing facilities for vulnerable groups represented by jjokbang (subdivided units), banjiha (semi-basement rooms), oktapbang (rooftop rooms), and gosiwon (dormitory-style single rooms) persist in urban areas. Despite positive outcomes

<sup>6)</sup> Daejeon Metropolitan City website https://www.daejeon.go.kr/bike/bikeContentsHtmlView.do?menuSeq=5428 (searched on Nov. 27, 2023)

<sup>7)</sup> Daejeon Metropolitan City website https://www.daejeon.go.kr/drh/drhStoryDaejeonView.do?boardId=blog\_0001&menuSeq=1 479&ntatcSeq=1432204232 (searched on Nov. 27, 2023)

<sup>8)</sup> Minimum residential standards: Based on the area, bedroom, and facility according to the number of household members, a single-person household shall have one 14 m² room with a standing kitchen, a flush toilet, and a bathing facility (e-National Index website, https://www.index.go.kr/unify/idx-info.do?idxCd=8014)

from various projects, such as complete redevelopment projects, improvement of old residential environments, an increase in new housing supply, and infrastructure maintenance, there are still many limitations in terms of protecting vulnerable groups that lack payment capacity.

The burden of housing costs is another major challenge in terms of housing. In South Korea, the average annual housing cost per household has been increasing continuously, as have the loan-to-value (LTV) ratio compared with GDP and the price to income ratio, thus gradually increasing the housing cost burden.

Although the South Korean government is making various policy efforts, such as providing housing benefits and public rental housing, additional efforts must be made to protect the leaseholds of lessees and improve housing environments.

# Ensure access to adequate and affordable housing

• (Proxy indicator) Ratio of average housing and transportation costs to average annual income per household<sup>9)</sup>

According to the Survey of Household Finances and Living Conditions in Korea, the ratio of average housing and transportation costs to average annual income per household in 2023 was approximately 9.4%. The average annual income, consumption expenditure per household, housing costs, and transportation costs were KRW 67.62 million, 29.87 million, 3.67 million, and 2.66 million, respectively. The ratio of average housing and transportation costs to average annual income has shown an overall decline, falling by 3.76% to 9.45% in 2023 from 13.21% in 2012. While the average annual transportation expenditure per household in 2022 decreased by 0.02% compared to 2012, housing expenditure increased by 17.8%. Additionally, considering that housing expenditure items only include monthly rent and management fees and costs of using utility services (water and sewage fees, electricity fees, heating costs) in the Household Financial Welfare Survey, the burden of actual housing expenses is expected to be more significant.

<sup>9)</sup> The indicator presented in the NUA Monitoring Framework is the median amount of money spent on housing and transportation per household as a percentage of the median annual household income of tenants. However, since it was impossible to obtain relevant statistical data, this report presented the indicator using the average housing and transportation costs and average annual income per household.

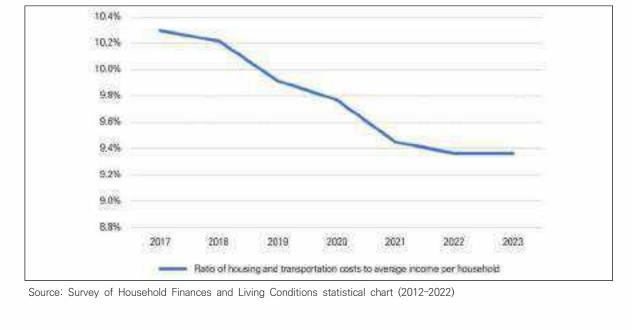


Figure 18 | Ratio of average housing and transportation costs to average annual income per household

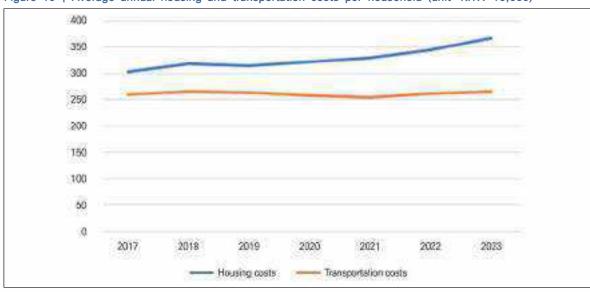


Figure 19 | Average annual housing and transportation costs per household (unit: KRW 10,000)

Source: Survey of Household Finances and Living Conditions statistical chart (2012-2022)

#### • (Proxy Indicator) Housing price to income ratio

According to the Korea Housing Survey conducted by the Ministry of Land, Infrastructure, and Transport, the price to income ratio (PIR) in South Korea in 2021 was 6.7. By region, a huge gap existed between the Seoul Metropolitan Area and other metropolitan cities and between the Seoul Metropolitan Area and provincial areas. In 2021, the Seoul Metropolitan Area had a PIR of 10.1. By income level, the PIR of the lower income bracket was the highest at 9.4, significantly exceeding the overall average

and marked by a 3.0% increase from 2008. Accordingly, it can be seen that the housing cost burden of the lower income bracket has increased.

Table 9 | House price to income ratio (PIR) by region and income level (2008-2021, unit: times)

	Region	2008	2010	2012	2014	2016	2017	2018	2019	2020	2021
	Overall	4.3	4.3	5.1	4.7	5.6	5.6	5.5	5.4	5.5	6.7
	Seoul Metropolitan Area	6.9	6.9	6.7	6.9	6.7	6.7	6.9	6.8	8.0	10.1
By region	Metropolitan city and others.	3.3	3.5	5.0	4.7	5.3	5.5	5.6	5.5	6.0	7.1
	Provincial area	3.0	2.9	3.6	4.2	4.0	4.0	3.6	3.6	3.9	4.2
	Lower (1-4 deciles)	6.4	6.1	7.5	8.3	9.8	8.3	9.0	8.9	8.3	9.4
By income	Middle (5-8 deciles)	4.3	4.2	4.3	5.0	5.6	5.2	5.2	5.2	5.7	6.3
level	Upper (9 -10 deciles)	4.2	4.0	4.4	4.7	5.0	4.8	4.8	4.8	5.4	7.1

Source: Ministry of Land, Infrastructure, and Transport Korea Housing Survey by year

- 2. Surveyed biennially since 2006 and annually since 2017
- 3. Until 2018, responses were based on the expected price if the house was sold, whereas from 2020, responses were based on the price on the third Monday of June in the year of the survey
- 4. Seoul Metropolitan Area: Seoul, Incheon, Gyeonggi-do, Metropolitan city, etc.: Busan, Daegu, Gwangju, Daejeon, Ulsan, Sejong. Sejong has been included since 2018 (Chungcheongnam-do was included until 2017). Provincial areas: Gangwon, Chungbuk, Chungnam, Jeonbuk, Jeonnam, Gyeongbuk, Gyeongnam, Jeju
- 5. Total household income is the average monthly take-home pay after excluding taxes and other deductions.

### • (Proxy indicator) Korea Housing Affordability Index (K-HAI)<sup>10)</sup>

Korea's HOUSTAT (Housing Finance Statistics) calculates the Korea Housing Affordability Index (K-HAI), which indexes the financial burden of purchasing a home on a quarterly basis. The K-HAI was developed to determine the level of household burden from purchasing a home. An index over 100 indicates that it is difficult to repay the loan when purchasing a home through income<sup>11)</sup>. The K-HAI was 68 in Q2 2023 and has maintained an overall upward trend since 2018, with a particularly rapid increase in 2020–2021. There was a huge gap by region, with Seoul showing the highest K-HAI at 165.2, suggesting that the housing cost burden of households living in Seoul is extremely high. This was followed by Sejong, which had a K-HAI of 100.3. Overall, the K-HAI of major urban areas, such as Seoul, Busan, Incheon,

Note) 1. House price to income ratio = Current housing price ÷ annual household income. Housing prices and annual household income are median values

<sup>10)</sup> The indicator presented in the NUA Monitoring Framework is generally the proportion of the population living in affordable housing that costs less than 30% of household income. However, because of a lack of related official statistical data in South Korea, the K-HAI was used as a proxy indicator.

<sup>11)</sup> Korea-Housing Affordability Index (K-HAI) = Available income for loan repayment / median household income (monthly) \*100 = (repayment / Debt to Income) / median household income (monthly) \* 100

Sejong, Gyeonggi, and Jeju, exceeded the national average, implying that the urban population has a significantly high housing cost burden, and the gap in real estate assets is expected to be substantial between regions.



Figure 20 | Quarterly Housing Affordability Index

Source: HOUSTAT (Housing Finance Statistics) https://houstat.hf.go.kr/research/portal/main/indexPage.do

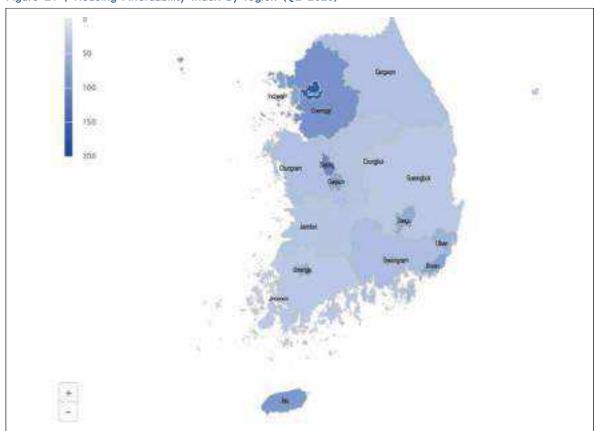


Figure 21 | Housing Affordability Index by region (Q2 2023)

Source: HOUSTAT (Housing Finance Statistics) https://houstat.hf.go.kr/research/portal/main/indexPage.do

# Ensure access to sustainable housing finance options

• (Indicator) Mortgage debt relative to GDP

South Korea's LTV ratio compared with GDP in 2023 was 186%, showing a 58.5% increase compared with Q1 2011.

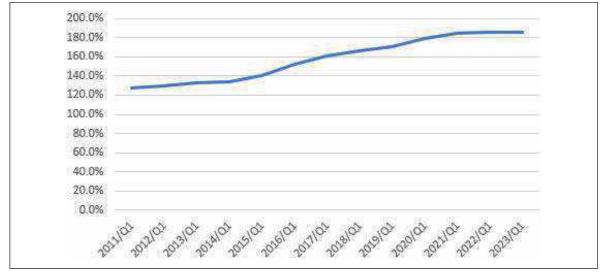


Figure 22 | LTV ratio compared with GDP (Q1 2011-Q1 2023)

Source: Created by the author based on raw data from Bank of Korea's household credit statistics and national income statistics by year

# 💷 Establish security of tenure

• (Indicator) Proportion of total adult population with secure tenure rights

Proportion of total adult population with secure tenure rights to land with (a) legally recognized documentation; and (b) who perceive their rights to land as secure, by sex and type of tenure In South Korea, all adult lessees can have their leasehold protected by law. Act No.19356 (The Housing Lease Protection Act) ensures that citizens can maintain a stable residence by providing special provisions in the Civil Act with respect to the lease of buildings for residence. According to the same Act, if the lessor fails to notify the lessee of a refusal to renew, or that renewal of the contract will be subject to a change in conditions, 2–6 months before the term of the lease expires, the lease shall be deemed to have been renewed under the conditions prevalent at the time of expiration of the term, which increases the sustainability of the lease contract. However, while the leasehold is legally protected, there are limitations to the existence of the lessee's leasehold. According to the Ministry of Land, Infrastructure, and Transport

Korea Housing Survey, the average housing residence period in Korea was 7.5 years in 2021, but the average residence period for jeonse (lump-sum housing lease deposit), monthly rent with deposit, and monthly rent without deposit was only 2.9, 3.1, and 3.7 years, respectively<sup>12)</sup>. This is contrary to the average residence period of an owner-occupied home, which is 10.5 years, suggesting that continuous policy efforts must be made to maintain the leasehold of tenant households.

## Establish slum upgrading programs

• (Indicator) Proportion of cities with slum upgrading programs

UN-Habitat defines a slum household as a group of individuals living under the same roof in an urban area who lack one or more of the following: 1) durable housing of a permanent nature that protects against extreme climate conditions; 2) sufficient living space, defined as no more than three people sharing a room; 3) easy access to safe water in sufficient amounts at an affordable price; 4) access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people; and 5) security of tenure, which prevents forced evictions (Cities Alliance website<sup>13)</sup>).

Based on these criteria, the residential area in South Korea that can be considered closest to a slum would be jjokbangchon, typically an area where inadequate housing, densely populated by vulnerable groups, is concentrated. As the number of homeless people increased significantly around metropolitan railway stations after the so-called "International Monetary Fund (IMF) crisis" in South Korea, there has been growing social interest in jjokbang and jjokbangchon as dwellings for the urban poor (Kim et al., 2022, 1). Both terms have various definitions. Kim et al. (2022) applied the Ministry of Health and Welfare and the Ministry of Land, Infrastructure, and Transport's definition, which states that jjokbang is "a residential space around 6.6 m² that does not meet minimum residential standards, where monthly or daily rent is paid without a deposit, and does not have a proper kitchen, washroom, bathroom, etc."

<sup>12)</sup> e-National Index website https://www.index.go.kr/unity/potal/indicator/IndexInfo.do?cdNo=2&clasCd=10&idxCd=F0193 (searched on Nov. 27, 2023)

<sup>13)</sup> https://www.citiesalliance.org/newsroom/news/urban-news/what-slum-twelve-definitions (accessed on Oct. 27, 2023)

South Korea has a total of ten areas in where jjokbang (slums) are concentrated, with Jjokbang Counseling Centers established to provide social welfare services for jjokbang residents<sup>14)</sup>. According to the results of the 2021 resident status surveys conducted by each Jjokbang Counseling Center, the population residing in jjokbangchon nationwide reached 5,212. While there are limitations in calculating the proportion of cities that have improvement programs for inadequate housing, such as jjokbangchon, based on the currently available statistical data, the South Korean government is supporting vulnerable groups living in inadequate housing by making the following policy efforts.

#### • (Policy measures) Jjokbang Counseling Centers and Saeddeul Maeul project

Housing support for jjokbangchon can be divided into social welfare and improvement of the residential environment, each of which is addressed by the Ministry of Health and Welfare and the Ministry of Land, Infrastructure, and Transport. The Ministry of Health and Welfare has been executing the jjokbang living support project since 2002, which endeavors to improve the welfare of jjokbang residents by installing Jjokbang Counseling Centers.

The Ministry of Land, Infrastructure, and Transport is executing the "Saeddeul Maeul project" to improve residential facilities and living infrastructure in areas with extremely poor residential environments, such as jjokbangchon. This project focuses on improving areas where the quality of life, including safety and sanitation, has reached a critical level; households that do not meet minimum residential standards; and areas where the socially disadvantaged are concentrated. Its main activities include hardware improvements, such as improving living infrastructure and supporting home repairs, and software improvements such as projects supporting job creation, resident welfare, and human care.

<sup>14)</sup> Ten locations such as Changsin Neighborhood, Namdaemun, Dongui Neighborhood, Seoul Station, Yeongdeungpo in Seoul / Dong District, Busanjin District in Busan / Seo District in Daegu / Dong District in Incheon / Dong District in Daejeon

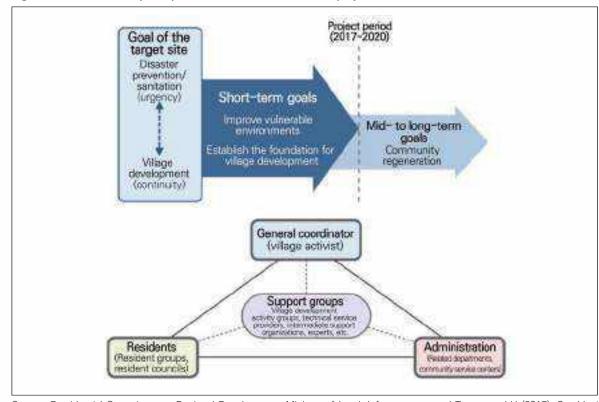


Figure 23 | Goals and participants of the Saeddeul Maeul project

Source: Presidential Committee on Regional Development, Ministry of Land, Infrastructure, and Transport, LH (2017). Saeddeul Maeul (urban area) project manual.

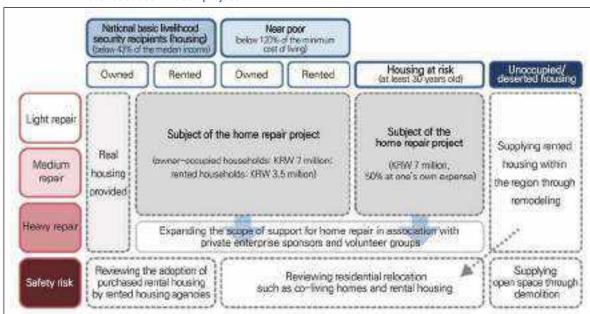


Figure 24 | Support measures for housing improvement by housing condition and resident characteristics in the Saeddeul Maeul project

Source: Presidential Committee on Regional Development, Ministry of Land, Infrastructure, and Transport, LH (2017). Saeddeul Maeul (urban area) project manual.

#### (Policy measures) Public rental housing

South Korea has been implementing a long-term public rental housing policy, starting with the supply of permanent rental housing adopted as part of the Two Million Housing Unit Construction Plan in 1988 (Jang & Song, 2020; as cited in Kang et al., 2021), and has supplied various forms of rental housing along with the change in government (Kim et al., 2015; as cited in Kang et al., 2021). South Korea's public rental housing can be classified by the method of supply into new construction, purchase of existing homes, and leasing of existing homes and can be legally categorized into 1) permanent rental housing, 2) national rental housing, 3) Happy Houses, 4) integrated public rental housing, 4) long-term jeonse housing, 5) public rental housing converted for sale, 6) rental housing with the purchase of an existing home, and 7) jeonse rental housing of existing homes. The supply of public rental housing in Korea from 2018 to 2022 amounted to 130,000 units, and the South Korean government established a plan to secure a long-term public rental housing stock of 2.4 million units by 2025 through the Housing Welfare Roadmap 2.0 in 2020.

• (Indicator) Total investment in housing (in both formal and informal sectors in the urban area), as a percentage of gross domestic product

South Korea's investment in residential building construction<sup>15)</sup> was approximately KRW 118 trillion in 2022, which is 5.47% of GDP that year. The ratio of South Korea's investment in residential building construction to GDP in 2010 was 3.49%, but it maintained a gradual increase and reached 6.18% in 2017, after which it decreased slightly.

<sup>15)</sup> Investment in residential building construction was obtained from statistical data classifying gross capital formation by type of capital goods among expenditure items for GDP; nominal figures were used for the data. Investment in construction includes all goods and services (including intermediate inputs such as materials) that form fixed capital resulting from construction activities such as facility construction.

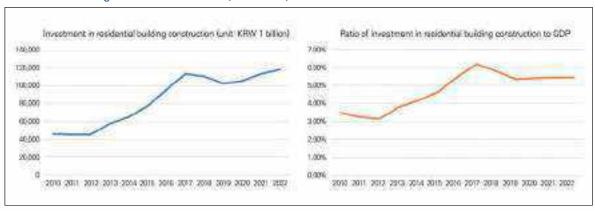


Figure 25 | South Korea's investment in residential building construction and ratio of investment in residential building construction to GDP (2010–2022)

Source: Created by the author based on raw data from Bank of Korea's national accounts statistics by year.

# 1.1.3 Access to basic services

Access to basic services in South Korea is extremely high. Nearly 100% of the population can access safe drinking water and adequate sanitation services, and South Korea's Internet usage rate has reached 97.6%. However, because of regional disparities in drinking water supply and use of public transport, there appears to be a need for customized policy support that considers the level of provision of basic services to each region.

# 💹 Provide access to safe drinking water, sanitation, and solid waste disposal

• (Indicator) Proportion of the population using safely managed drinking water services In 2021, the proportion of the South Korean population receiving water through water service providers, village water supply systems, and small water supply facilities was 97.7%, indicating a 7.6% increase from 2004, which indicates significant improvement in the supply of safe drinking water. However, the water supply rates differed between urban and rural areas. In 2021, the water supply rate in rural areas was only 81.6%, indicating the need for policy efforts to reduce the urban–rural gap in the water supply. In particular, areas with declining populations show a low level of infrastructure supply, highlighting the need for continuous improvement.



Figure 26 | Water supply in South Korea

Source: E-National Index website https://www.index.go.kr/unity/potal/indicator/IndexInfo.do?cdNo=2&clasCd=10&idxCd=F0219 (searched on Nov. 6, 2023)

• (Indicator) Proportion of population using safely managed sanitation services

The proportion of population in South Korea using safely managed sanitation services
reached 100% in 2019.

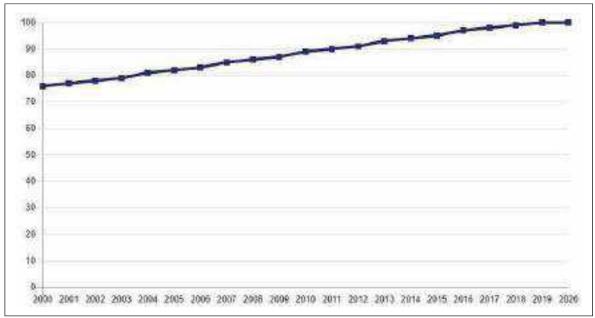


Figure 27 | Proportion of population in South Korea using safely managed sanitation services

Source: SDG Data Platform for the Republic of Korea https://kostat-sdg-kor.github.io/sdg-indicators/6-2-1/ (searched on Jul. 23, 2023))

# Ensure access to safe and efficient public transportation

#### • (Indicator) Proportion of commuters using public transportation

According to the 2020 Population Census, 23.3% of commuters aged 12 or more commuted to school or work by public transport, including by 1) intra-city, express city, and village buses; 2) express and intercity buses; 3) subways; and 4) trains. Excluding adolescents and children, the proportion of public transportation users in the general population was 81.73% in 2022. However, there was a difference in the proportion of public transportation users between regions, with major metropolitan cities, except Busan, exceeding 80%, while Chungcheongnam-do, Jeollanam-do, and Jeju-do (Island), which have relatively lower urbanization rates, showed relatively lower proportions of public transport users.

Table 10 | Proportion of public transport users (2014-2022)

Region	2014	2015	2016	2017	2018	2019	2020	2021	2022
Overall	85.55	84.81	84.76	84.56	81.93	82.70	87.49	83.05	81.73
Seoul Special City	86.41	84.67	84.71	83.89	83.05	83.96	87.95	84.91	84.16
Busan Metropolitan City	90.07	90.66	89.98	91.27	70.16	70.51	73.75	70.23	69.08
Daegu Metropolitan City	80.25	82.47	81.77	85.62	88.21	89.46	96.18	88.56	88.36
Incheon Metropolitan City	84.01	83.54	83.92	81.86	80.74	82.11	88.46	83.51	81.81
Gwangju Metropolitan City	83.21	84.22	84.14	82.98	83.23	84.32	91.07	83.83	81.75
Daejeon Metropolitan City	86.16	86.75	85.52	85.08	84.87	85.50	91.16	86.63	85.00
Ulsan Metropolitan City	84.18	85.29	86.64	86.04	85.89	87.07	95.09	88.97	86.05
Sejong Special Self-Governing City	ı	87.94	89.88	89.70	88.27	89.40	94.95	87.49	87.43
Gyeonggi-do	85.65	84.78	84.97	84.46	84.52	85.02	90.28	85.76	84.05
Gangwon-do	80.09	77.83	79.07	77.84	75.79	79.09	91.80	81.38	79.65
Chungcheongbuk-do	84.82	85.86	85.26	85.36	_	_	92.75	82.24	81.70
Chungcheongnam-do	78.71	79.39	79.32	78.64	_	_	70.73	60.58	60.37
Jeollabuk-do	84.56	86.26	85.11	85.17	_	_	93.43	87.07	86.03
Jeollanam-do	79.96	83.15	83.57	82.68	69.33	71.90	77.75	69.18	65.37
Gyeongsangbuk-do	79.71	79.58	80.94	83.69	_	_	94.60	85.19	84.71
Gyeongsangnam-do	80.78	84.10	83.38	86.14	_	_	87.42	78.74	76.07
Jeju Special Self-Governing Province	70.63	72.86	77.25	77.66	62.51	63.90	67.64	64.51	64.05

Source: Korea Transportation Safety Authority's national public transport DB https://www.kotsa.or.kr/ptc/inside\_use.do (searched on Nov. 7, 2023)

## Provide access to modern renewable energy

• (Indicator) Renewable energy share in the total final energy consumption

The renewable energy share in the total final consumption of South Korea in 2020 was 4.4%, showing a 2.1% increase from 2005. This share is low, but the South Korean central government and local governments are making multiple policy efforts to promote the use of renewable energy.

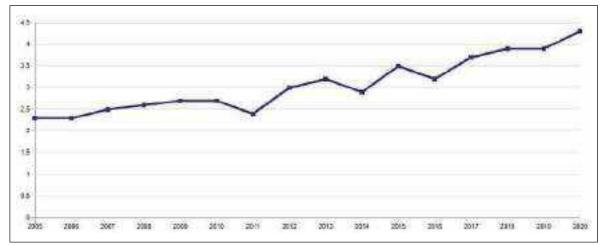


Figure 28 | Renewable energy share in total final consumption (2005-2020)

Source: SDG Data Platform for the Republic of Korea https://kostat-sdg-kor.github.io/sdg-indicators/7-2-1/ (searched on Jul. 23, 2023))

#### Text Box 5 | Case of Sinan County's Haetbit Allowance

Sinan County (Sinan-gun) is an island located on the west coast of South Korea. It promotes renewable energy generation using solar and wind power resources, which are natural advantages of the region, and implements a policy of sharing the profits from renewal energy production with local residents. The Sinan County Haetbit Allowance project is a project implemented according to the Ordinance on Sharing of Renewable Energy Development Profits in Sinan County (adopted in 2022 and enforced on April 4, 2022), through which a total of KRW 10 billion renewable energy development profits were paid to local residents for approximately three years from 2021 to Q3 2023 (KRW 1.7 billion in 2021 → KRW 3.6 billion in 2022 → KRW 4.7 billion in Q3 2023). Moreover, Sinan County has adopted the Haetbit Child Allowance project, which provides child allowances to children under the age of 18 residing in Sinan County after amending the ordinance in 2022. Additionally, it has provided a subsidy of KRW 400,000 per child to approximately 2,000 children under the age of 18 in Sinan County since May 2023. Sinan County is one of the areas included in the high-risk group for population aging and local extinction, and the Haetbit Allowance project is considered to improve local residents' quality of life and awareness of renewable energy while helping prevent local population outflow.<sup>16</sup>)

<sup>16)</sup> Sinan-gun press release "Sinan-gun achieves KRW 10 billion for Haetbit Allowance in 3 years" (Oct. 23, 2023)

# Access to information communication technology

• (Indicator) Fixed broadband subscriptions per 100 inhabitants

According to Statistics Korea, the number of high-speed Internet subscribers in South Korea was approximately 23.5 million in 2022. The Internet penetration rate in 2022 was 97.6%.

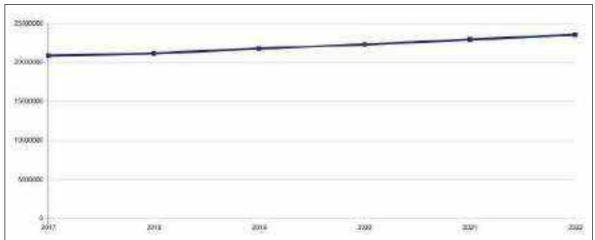


Figure 29 | Fixed broadband subscriptions per 100 inhabitants (2017-2022)

Source: SDG Data Platform for the Republic of Korea https://kostat-sdg-kor.github.io/sdg-indicators/17-6-1/ (searched on July 23, 2023)

## 1.2 Sustainable and Inclusive Urban Prosperity and Opportunities for All

# 1.2.1 Inclusive Urban Economy

Since the 1997 financial crisis, South Korea has been setting forth various measures to stimulate the economy and industries. From the 2000s, led by the central government, the nation has been striving for institutional improvements and policy application to increase employment rates, with particular focus on the youth (amendment of the Special Act on the Promotion of Youth Employment in 2009). South Korea also made great strides by promoting youth employment and stabilizing jobs for agencies that serve as public institutions or enterprises. As a central implementation agency for employment policies, the Ministry of Employment and Labor is making efforts to secure outcomes through the diversification of relevant ministries' government-led youth employment projects. It seeks to establish legal standards to increase the number of beneficiaries through various measures such as expanding the legal scope of the youth. Meanwhile, the Ministry of Land, Infrastructure, and Transport, which oversees land and urban sector policies considering urban economic growth, aims to support the youth by implementing policies that combine local talent training and balanced development.

# 1.2.1.1. Achieve productive employment for all including youth employment

#### • (Key point) Youth employment policies in South Korea

The South Korean government enacted the Special Act on Support for Human Resources of Small and Medium Enterprises in 2004 as the first law related to youth employment policies (limited to small and medium enterprises). In the same year, the Special Act on Measures against Youth Unemployment was enacted to encourage youth participation in the labor market by supporting unemployed youth with vocational skills development training and other services both in and outside the country. The Act was amended in 2009 to the Special Act on the Promotion of Youth Employment.

In addition to this Act, 19 central government departments led by the Ministry of Employment and Labor are operating and managing policies that correspond to the characteristics of each relevant field, and over 100 policy programs related to youth employment have been operated to date (Jeon & Kim, 2022. p. 108). By expanding the scope of the general youth, the Enforcement Decree of the Special Act on the Promotion of Youth Employment, which was partially amended in 2013, aims to extend

the scope of beneficiaries for youth employment policies in the public sector to those aged 34 years.

Among the various policies implemented by the Ministry of Employment and Labor, which is in charge of employment policies, those targeting youth now account for the largest proportion. (Table 11) lists and categorizes the policies.

Table 11 | Youth employment policies implemented by the Ministry of Employment and Labor

Category	Description
Special grant for youth recruitment	Creates high-quality jobs for youth by supporting labor costs of small and medium enterprises that additionally hire young employees as full-time workers
Young Tomorrow	Encourages long-term service through asset formation among youth and supports youth in forming their early careers
Online Youth Center	Offers employment services through a website that provides information on youth policies and spaces, policy guidance, and central and local government consultations
Youth Challenge Support Project	Supports social activities and labor market participation of youth who have given up on finding a job by using operating organizations such as local government youth centers
Work-learning balance	South Korea's "apprenticeship-style education and training system": a field-centered education and training system that conducts National Competency Standards (NCS)-based on-the-job training after company pre-recruitment, which leads to the youth obtaining the necessary qualification through theoretical education at schools and joint training centers
Industry-led customized youth training	Provides training that reflects industrial and corporate demands (primarily for youth) and supports them in finding quality jobs
Youth work experience support project	Facilitates entry into the labor market by providing various opportunities for quality work experience to unemployed youth that lack work experience
University Job Plus Centers	Enhances university competencies in employment support by linking the space and functions of career guidance and employment support within universities
Overseas employment support	Provides customized training programs (K-Move School) and overseas employment information and opportunities for youth seeking overseas employment
Expansion of blind recruitment for equal opportunities and fair processes	Expands the method of recruiting talent by evaluating practical skills without requesting personal information that may cause irrational decisions due to bias in the recruitment process of the public and private sectors
Youth Employment Grant Project	Promotes youth employment by supporting companies to recruit more youth and helping youth with difficulties in finding jobs

Source: Ministry of Employment and Labor. 2022. 2022 Employment and Labor Policies

• (Indicator) 11. Proportion of youth (aged 15-24 years) not employed or receiving education and training

• (Associated indicator) SDG 8.6. Reduction of the proportion of youth not in education, employment, or training (NEET); SDG 8.6.1. Proportion of youth (aged 15–24 years) not employed or engaged in education or training

The standards and concept of NEET in South Korea differ from those of OECD nations and thus cannot be compared with other countries. Informal education (education without degrees or qualifications) is excluded from the definition in South Korea, but the OECD includes those receiving such education in its definition. Because of the unity of standards among OECD countries, some data are estimated separately using the Economically Active Population Survey among the indicators submitted by South Korea (OECD, 2022). However, since informal education (education without degrees or qualifications) is excluded from the definition of NEET in South Korea, it is difficult to refer to such data (according to the data, South Korea ranks 7<sup>th</sup> out of 34 countries (NEET rate approximately 19% in 2017), showing a NEET ratio far exceeding the OECD average). According to the Korea Employment Information Service<sup>17)</sup>, the NEET ratio in South Korea exceeded an average of 18% in 2020 (over 20% in the OECD comparative data), showing an upward trend over the past three years.

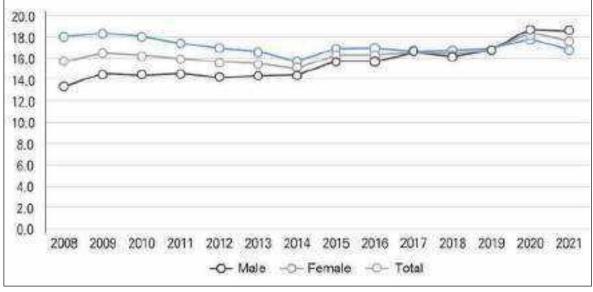


Figure 30 | NEET rates in Korea by gender (aged 15-24 years) (unit: %)

Source: Statistics Korea, raw data from the Economically Active Population Survey, as cited by the Korea Employment Information Service (2022)

<sup>17)</sup> This follows the definition of NEET by Jeong et al. (2017), which includes unemployed youth aged 15–29 years who are on standby for assignment, military service, or break; those engaged in childcare or housework; those preparing for employment or higher education, those with mental and physical disabilities; and those unemployed for other reasons.

#### (Related policy) Urban Regeneration Youth Internship

The Ministry of Land, Infrastructure, and Transport, which is tasked with implementing the NUA, has been operating the Urban Regeneration Youth Internship program since 2019 to provide local youth with experience in urban regeneration and foster their skills/expertise as experts and business owners with both theory and practice. Organized by the Korea Land and Housing Corporation and hosted by the Ministry of Land, Infrastructure, and Transport, this project selects young people aged 19–34 years from 17 cities/provinces nationwide (based on the second selection in 2023) and provides internship programs that specialize in basic competency, expert, and work experience training. This project also contributes to balanced development by nurturing local talent as it is offered to the youth not only in the Seoul Metropolitan Area but also in the provinces.

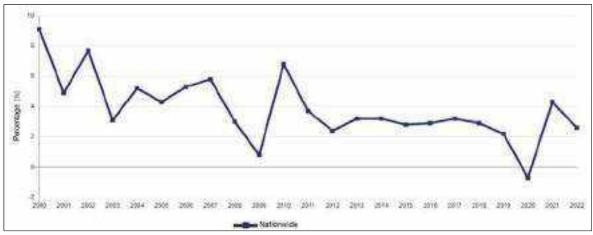
• (Indicator) 8. Annual growth rate of real GDP per employed person (SDG 8.2.1.)

Table 12 | Gross domestic product (nominal GDP) and growth rate per employed person in South Korea

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP (nominal, \$100 million)	13,705.6	14,839.5	14,653.4	15,000.3	16,233.1	17,251.6	16,510.1	16,446.1	18,176.9	16,732.6
Employed persons aged 15 and over (thousand persons)	25,299	25,897	26,178	26,409	26,725	26,822	27,123	26,904	27,273	28,089

Source: Statistics Korea

Figure 31 | Annual growth rate of real GDP (unit: %)



Calculation: Processed statistics that comprehensively show the movements of the entire economy; total outputs and intermediate inputs are calculated on the basis of over 170 types of basic statistics (over 300 types including simple data), and intermediate inputs are subtracted from total outputs to calculate added value (created by the National Income Manage ment Team of the Bank of Korea).

Source: Statistics Korea SDG Data Platform for the Republic of Korea. https://kostat-sdg-kor.github.io/sdg-indicators/ (accessed on Jul. 21, 2023)

Over the last decade, South Korea's nominal GDP grew steadily until 2018, followed by repeated fluctuations due to internal and external conditions. The GDP per employed person (aged over 15) requires extra calculation, however, since the conditions for calculation cannot be matched with the nominal GDP calculation, a simple division such as GDP divided by number of employed people cannot be a sensible indicator. While, the annual growth rate of real GDP fluctuated, potentially influenced even more by comprehensive internal and external factors, such as the COVID-19 pandemic, in addition to national economy and market conditions.

## 1.2.1.3. Support small- and medium-sized enterprises (SMEs)

#### • (Key point) Support policies for SMEs in South Korea

In South Korea, the Korea SMEs and Start-ups Agency, which is under the purview of the Ministry of SMEs and Start-ups, is implementing policies for SMEs with a focus on providing supportive measures in light of SME market trends and demands. Notable efforts include the "Young Tomorrow" project, the business support transition project, the trade adjustment support project, the SME innovation voucher project, the resurgence support project, the data valuation support project, the SME technology commercialization capacity building project, and the SME carbon neutral transition support project.

Table 13 | Projects supported by the Korea SMEs and Start-ups Agency

Project scope	Project details / Sub-projects
Policy finance funds	Operated in five types of funds according to the characteristics and policy objectives of each phase of corporate growth
Export marketing	Sourcing and facilitating the transition of domestic companies into export companies through an online export support project, a project giving preference to social economy companies, an export voucher project, a local SME export marketing project, an e-commerce export market entry project, and an overseas branch office project
Building a global cooperation base	Building a network of overseas governments and relevant agencies that support SMEs and supporting cooperation between nearby SMEs by operating the Asia-Pacific Economic Cooperation (APEC) SME Innovation Center
Korea Start-up Center (overseas expansion)	Supporting the globalization of small and medium-sized venture companies by operating centers in the major trading bases of the world and providing specialized services for each region (total of 20 centers in operation)
Human resources (HR) training	Providing support through the Corporate HR Difficulty Center, training projects, the Youth Start-up Academy, the technology officer training project, the SME contract department, the customized industry-academia technical manpower training project, and training HR from specialized vocational high schools for SMEs

Project scope	Project details / Sub-projects
•	Transferring credit sales receivables generated from providing goods or services in the course of corporate activities to the public corporation, supporting quicker cashing
SIVIE diagnosis	Industry experts diagnose and analyze corporate difficulties, and provide solutions (strategy roadmap, growth solutions, etc.) and support in connection with policy projects (policy funds, training, marketing) to resolve difficulties

Source: Korea SMEs and Start-ups Agency, www.kosmes.or.kr/nsh/ (accessed on Jul. 24, 2023)

• (Indicator) 45. Small and medium-sized enterprises' 18) percentage share of GDP

Although it does not exactly coincide with the relevant NUA indicator, the South Korean government compiles basic statistics on SMEs through the Ministry of SMEs and Start-ups, which can be used to track the number of businesses and employees, sales, and type of organization by region for all industries. According to the Basic Statistics on SMEs and Microenterprises, SMEs in South Korea accounted for 99.9% of all enterprises in South Korea from 2012 to 2021. The fact that there is a separate central government department (i.e., the Ministry of SMEs and Start-ups) for SMEs reflects the vast scale and proportion of these enterprises.

However, the sales of SMEs compared with South Korea's overall GDP is considerably lower than the proportion of all enterprises, and as of 2019, the sales of the 64 major business groups<sup>19)</sup> accounted for only 84% of South Korea's GDP (Korea International Trade Association, 2020).

As shown in [Figure 32] below, similar indicators can be found in the K-SDG Indicators and Goals. Some of the recently added new indicators are ① the number of employees in SMEs and microenterprises and ② the number of start-ups.

(Associated indicator) K-SDG 8-3.1 Number of employees in SMEs and microenterprises,
 8-3.2 Number of start-ups

Figure 32 | K-SDG 8-3 "Promote the growth of micro, small, and medium enterprises." Indicators and Goals

K-SDG 8-3	Indicator	Current figure	Goal
	(1)Number of employess in SMEs and microenterprises	Must finalize the calculation criteria using the National Establishment	- 2030; Stable maintenance - 2040; Stable maintenance
	(2) Number of start- ups	- 2019: 1,285,259	- 2030: Stable maintenance - 2040: Stable maintenance

Source: Sustainable Development Portal, https://ncsd.go.kr/ksdgs?content=3 (accessed on Jul. 24, 2023)

<sup>18)</sup> The scope of small and medium-sized enterprises (SMEs) includes SMEs, microenterprises, start-ups, and ventures

<sup>19)</sup> According to Statistics Korea, there were approximately 5,000 large enterprises in 2019.

#### • (Related policy) Innovative City<sup>20)</sup>

Regarding NUA Indicator 45 and K-SDG 8-3, the Innovative Cities project carried forward by the Ministry of Land, Infrastructure, and Transport, along with the relocation of administrative capital, can be considered best practices. The Ministry of Land, Infrastructure, and Transport's Innovative City Development Promotion Team established and enacted the Special Act on the Establishment and Development of Innovative Cities and designated and planned four types of innovative cities along with the relocation of public institutions to various provinces to lay the groundwork for new growth engines in the region. To attract companies in industries related to public institutions, which is essential for the creation of innovative cities, KRW 2 billion in government funds had been invested in ten innovative cities by 2023 to encourage companies to move into these target cities by supporting them in renting office space, purchasing land, or paying the interest on construction loans. Furthermore, innovative cities are striving to boost regional employment rates and competencies through collaborative projects in local talent recruitment, local talent training, and regional cooperation.

Figure 33 | Innovative Cities by region



Source: Ministry of Land, Infrastructure, and Transport's Innovative City Development Promotion Team website, http://innocity.molit.go.kr/content.do?key=2208172074710 (accessed on Sept. 18, 2023)

<sup>20)</sup> Ministry of Land, Infrastructure, and Transport's Innovative City Development Promotion Team, https://innocity.molit.go.kr/index.do

Figure 34 | Innovative City development types



Source: Ministry of Land, Infrastructure, and Transport's Innovative City Development Promotion Team website, http://innocity.molit.go.kr/content.do?key=2208172074710 (accessed on Sept. 18, 2023)

• (Youth policies) Support for youth start-ups in expressways by the Ministry of Land, Infrastructure, and Transport Korea Expressway Corporation

The Ministry of Land, Infrastructure, and Transport is also supporting simple business start-ups for youth in association with the implementation policies of affiliated organizations. It holds contests for excellent youth start-ups in highway rest areas in cooperation with the Korea Expressway Corporation, which oversees highway operations, and implements youth support policies for microbusinesses by allocating stores for youth start-ups. The qualifications for young entrepreneurs are citizens of the Republic of Korea aged 20–38 years. The project seeks to help promote start-ups of youth residing in areas near highways and expressways by constantly receiving applications for each rest area. This project is a job-related policy that supports youth

by providing space for start-ups, exemptions on initial rents, and store operation consultations and offers low-interest loans for the start-up. It is the only policy through which the Ministry of Land, Infrastructure, and Transport provides direct support for start-ups.

#### Text Box 6 | Cases of entrepreneurial support for urban regeneration and economic revitalization

Measures to support employment and start-ups of urban residents are discussed in various ways by each local government in terms of strengthening local government competitiveness. The Ministry of Land, Infrastructure, and Transport promotes urban space innovation, urban competitiveness, and balanced regional development through participation of the regional entities and the private sector through the Urban Regeneration New Deal Project. It also establishes goals and strategies for space innovation with a focus on economic revitalization at the village level by diagnosing village declines.

In Jeojeon-dong, Suncheon-si, Jeollanam-do (South Jeolla Province), the local government has sought to revitalize the local economy and support young entrepreneurs by implementing a specialized project for commercial alleys that creates specialized streets and supports start-ups by using empty stores. In addition, the local government has succeeded in creating jobs and generating projects for the village with a specialized project for Garden Village and village hotels.

In Nam-gu, Daegu, the local government has made efforts to create senior jobs by expanding the scope of employment. Considering that Nam-gu is a super-aging society with the population aged 65 and over exceeding 25% of the entire population, the local government has carried forward the Nam District Senior Happiness Center Project and created senior jobs by allocating profitable facilities (café, flower shop, studio, etc.) within the center.

# 1.2.1.4. Promote an enabling, fair, and responsible environment for business and innovation

• (Key point) Government efforts to create a business environment

South Korea has distinguished itself globally in the information technology (IT) industry and e-government. According to the E-Government Survey 2022, conducted by the United Nations Department of Economic and Social Affairs (UNDESA), South Korea ranked third among 193 member states and was the only country in the world to be ranked within the top 3 seven times in a row (2010–) (Ministry of the Interior and Safety, 2022, "UN, UN E-Government Survey 2022").

Table 14 | E-Government Development Index of top 10 countries in 2022

2022 Ranking	Country	E-Government Development Index (EGDI)	Online Service Index (OSI)	Telecommunicati on Infrastructure Index (TII)	Human Capital Index (HCI)	2020 Ranking
1	Denmark	0.9717	0.9797	0.9795	0.9559	1
2	Finland	0.9533	0.9833	0.9127	0.9640	4
3	Republic of Korea	0.9529	0.9826	0.9674	0.9087	2
4	New Zealand	0.9432	0.9579	0.8896	0.9823	8
5	Sweden	0.9410	0.9002	0.9580	0.9649	6
5	Iceland	0.9410	0.8867	0.9705	0.9657	12
7	Australia	0.9405	0.9380	0.8836	1.0000	5
8	Estonia	0.9393	1.0000	0.8949	0.9231	3
9	The Netherlands	0.9384	0.9026	0.9620	0.9506	10
10	The United States	0.9151	0.9304	0.8874	0.9276	9

<sup>※</sup> EGDI (E-Government Development Index): Mean of Online Service Index (OSI), Telecommunication Infrastructure Index (TII),
Human Capital Index (HCI)

Source: Ministry of the Interior and Safety, 2022, UN, UN E-Government Survey 2022 (press release)

#### • (Indicator) 26. Number of days to register a new business in the country

The "number of days to register a new business in the country" can be measured by the activation or efficiency of the South Korean government's computer system and active administration. Hometax (www.hometax.go.kr) is an excellent electronic information system in South Korea that meets global standards.

On Hometax, users can newly apply for or correct business registration and report suspension/closure and re-open businesses online. Individual business owners can report business on the same day, as long as they have the required documents that are listed on the portal.

<sup>\*\*</sup> TII (Telecommunication Infra. Index): Internet penetration rate, mobile phone users, wired and wireless broadband subscribers, etc. / Citation of International Telecommunication Union (ITU) statistics

# 1.2.2

### Sustainable Prosperity for All

The South Korean government is promoting various policies to revitalize the urban economy, including national land and cities, at the level of several central government departments. The country develops policies that impact basic indicators of the urban economy, such as creating local jobs and securing access to vocational training, and monitors their impact. In recent times, it has sought to approach the revitalization of the urban economy from more diverse perspectives, promoting economic growth with "culture" as the main keyword by designating cities of culture (or culture cities) for culture-based economic and regional revitalization and encouraging the development of the cultural industry through urban regeneration projects. Above all, the South Korean government has constantly advanced the national plan encompassing these detailed policies—namely, the Comprehensive National Territorial Plans—for over 50 years while solidifying the effectiveness and status of the policy through timely applications and revisions and reflecting on changing trends in each plan, thereby securing an exemplary policy system.

# 1.2.2.1. Diversify the urban economy and promote cultural and creative industries

• (Key point) Identifying policy connectivity between the urban economy and cultural and creative industries

The South Korean government is preparing and promoting policies with a focus on the Ministry of Culture, Sports, and Tourism, which is in charge of implementing the "UNESCO Convention on Cultural Diversity." It defines the policy concepts of cities of culture and continuously plans the creation of such cities (designated cities of culture). As of 2023, a total of 24 cities had been designated, including six Phase 4 cities of culture.

Table 15 | Status of designated cities of culture

Category	Gangwon Province	Gyeonggi Province	Gyeongsang Province	Busan Daegu Ulsan Jeju	Seoul Incheon	Jeolla Province	Chungcheong Province
(24 cities)	(4 cities)	(3 cities)	(4 cities)	(4 cities)	(2 cities)	(4 cities)	(3 cities)
Phase 1 cities of culture (2020-2024)	Wonju	Bucheon	Pohang	Yeongdo District Seogwipo	-	-	Cheonan Cheongju
Phase 2 cities of culture (2021–2025)	Gangneung Chuncheon	-	Gimhae	-	Bupyeon District	Wanju County	-
Phase 3 cities of culture (2022-2026)	_	Suwon	Miryang	_	Yeongdeungpo District	Mokpo Iksan	Gongju
Phase 4 cities of culture (2023-2027)	Yeongwol County	Uijeongbu	Chilgok County	Dalseong County Ulsan Metropolitan City	-	Gochang County	-

Source: Regional Culture & Development Agency, https://www.rcda.or.kr/business/business1-1.asp (accessed on Oct. 5, 2023)

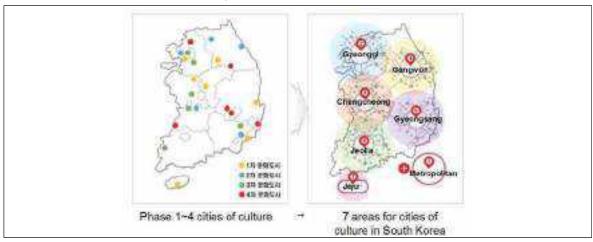
This policy focuses not only on promoting cultural industries but also on seeking revitalization of regional economies and balanced development in order to promote balanced regional development based on culture. The designation of cities of culture, based on the Regional Culture Promotion Act, which designated the first legal cities of culture in December 2019, now seeks connections with surrounding cities to expand cultural autonomy within the region.

Vision Leading regional development as a nation of attractive culture through cities of culture in South Korea Cities enjoyed through Cities enjoying culture culture 10 million people participating in Economic impact of KRW 500 2024-2027 and enjoying culture billion + 10,000 neighborhood cultural Private-public cooperation comulative spaces investment of KRW 500 billion 0006 Leisure satisfaction Jobs created for 1,700 people 17%(21)-20%(27) Seven cities of culture in Korea leading the metropolitan areas Value Six implementation strategies Cultural creation Cities creating creative culture Cultural enjoyment Cities freely enjoying culture Cities that revitalize regional Cultural impovation 0 economy through culture Solidarity of people Leading sustainable development with permissible between various subjects such as residents, viprisins in culture and arts. youth, companies Solidarity of policies Leading regional cultural development as the hub of regional policies such as culture, intustry, fourtain, 9's, and education Bolidarity of regions Leading wirkwin growth of regions culture as a metropolital oily beyond the administrative districts of cultural and neighborhood oties.

Figure 35 | Implementation strategies and designation guidelines for cities of culture in South Korea

Source: Ministry of Culture, Sports and Tourism

Figure 36 | Direction for implementation of cities of culture in South Korea: Developing a leading model for balanced cultural development



Source: Ministry of Culture, Sports and Tourism

• (Indicator) 46. Employment in cultural and creative industries as a proportion of total employment

An examination of the number of persons employed in each industry to understand the domestic status of the NUA indicator reveals that the number of persons employed in the arts, sports, and leisure-related service industries, compared with the total number of persons employed, maintained the same ratio of approximately 2% from 2013 to 2022, while the total number of employed persons increased, indicating that the number of employment in this sector is growing.

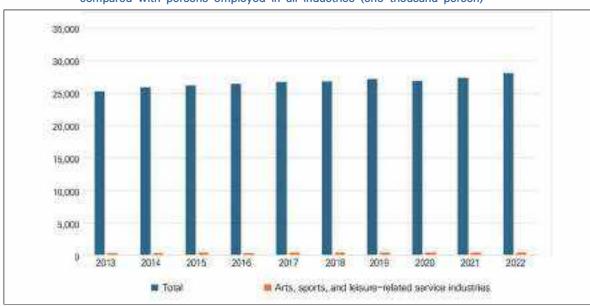


Figure 37 | Number of persons employed in the arts, sports, and leisure-related service industries compared with persons employed in all industries (one thousand person)

Source: Graph made by author based on the data from Statistics Korea https://kosis.kr/statHtml/statHtml.do?orgld=101&tblld=DT \_1DA7E06S&conn\_path=I3 (accessed on Jul. 23, 2023)

Value added in the content industry compared with total GDP in South Korea can be tracked for reference. The ratio of value added in the content industry to total GDP increased steadily from 2005 to 2021 but showed slight fluctuations every year. Thus, value added in the content industry has increased steadily, although not at a pace as high as the GDP growth rate.

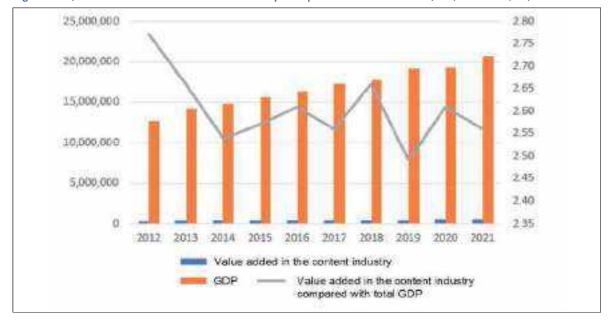


Figure 38 | Value added in the content industry compared with total GDP (100,000 KRW, %)

Source: Graph made by author based on the data from Statistics Korea<sup>21)</sup> https://kosis.kr/statHtml/statHtml.do?orgld=113&tblld=DT\_113\_STBL\_1024771&conn\_path=I2 (accessed on Jul. 23, 2023)

However, despite the increasing share of cultural industries in South Korea, civil society has decided that the policy connection at the government level is still insufficient in terms of meeting SDG requirements (Korea SDGs Network, 2023). With the increasing value and importance of culture in the implementation of UN SDGs, the implementation of the UNESCO Convention on Cultural Diversity was identified as the government's only relevant policy. Accordingly, it seems necessary to establish and reevaluate policies to secure sustainability at the government level.

#### • (Related policy) Regional development projects

The Ministry of Land, Infrastructure, and Transport is operating the leading investment district system, designated and publicly notified by the Minister of Land, Infrastructure, and Transport pursuant to the Regional Development Assistance Act (Ministry of Land, Infrastructure, and Transport Land Use Glossary Dictionary, 2019, p. 320), which will be developed as a hub for growth of the relevant region and stimulate private investment. This project has been carried out annually since 2015 and consists of two sub-types depending on the project purpose and content: leading investment district (discover and support strategic projects to develop a hub for growth of the relevant region and

<sup>21)</sup> Ministry of Culture, Sports, and Tourism, Korea Creative Content Agency, "Content Industry Statistics," 2021, Oct. 6, 2023, Content industry: Ratio of value added to GDP

stimulate private investment) and customized support for local demand (support projects that are closely related to residents' daily lives in growth promotion areas). The importance of cultural industries is emphasized by the clause "Growth potential in the area's specialized industry, culture, tourism, etc., shall be excellent," among the conditions for designation or recission of the district by the relevant Act.

Figure 39 | Implementation procedures for regional development projects



Source: Ministry of Land, Infrastructure, and Transport, https://www.molit.go.kr/USR/policyTarget/dtl.jsp?idx=720 (accessed on Oct. 16, 2023)

The Ministry of Land, Infrastructure, and Transport selects projects after receiving operational plans from local governments, which are then reviewed for implementation. In this way, it encourage cultural industries and actually reflects the priority needs of the local community.

Table 16 | Culture and arts encouragement projects among best practices in regional development projects

Year of selection	Project	Region	Main content			
	Hadong-eup Abandoned Railway Park Maintenance Project	Hadong-gun, Gyeongsangnam-do	<ul> <li>Converted an abandoned railway into a park to preserve the logistics history and create new tourism resources</li> <li>Created a landmark and provided jobs for artists</li> </ul>			
2021	New Vitality Creation Center	Hadong-gun, Gyeongsangnam-do  Yesan-gun, Chungcheongnam-do  Seocheon-gun,	Planned the "New Vitality Creation Center" by remodeling a public health center and creating a base facility to attract young people Offered specialized education focused on entrepreneurial support in food service			
2019	Janghang City Exploration Station, where history coexists with the future		· Secured a space that contributes to the local community by remodeling Janghang Station			
	Plateau Industrial-Cultural Complex Project	_	· Established a multi-purpose space for residents at a factory relocation site and created a space to enjoy local culture			
2018	Dogye Glass World Project		Produced and sold glass products using stone pagoda waste from abandoned mine areas and operated experience programs			

Source: Created by the author based on best practices of regional development in the Regional Development Information System (https://rdis.or.kr)

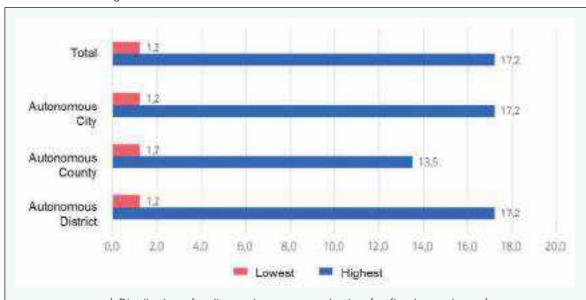
# 1.2.2.2. Develop technical and entrepreneurial skills to thrive in a modern urban economy

(Key point) Government-level HR development project to enhance the competencies
of industries and individuals

The Ministry of Employment and Labor collaborates with various affiliated organizations that implement policies and actual projects to enhance the competencies of industries and individuals. In particular, the Human Resources Development Service of Korea carries out HR development projects across all stages—from cultivating talent and testing the qualifications through lifelong competency development to promoting employment by placing the right talents in the right position. Major related fields include competency development and evaluation, proficiency and skills, and development of the National Competency Standards (NCS). Notably, vocational skills development training is aligned with this indicator in promoting corporate competitiveness and national productivity by developing workers' vocational skills.

- (Indicator) 47. Annual number of individuals trained in vocational and technical education
- (Associated indicator) Urban sustainability indicator 46. Efforts for job creation and entrepreneurial support (including the elderly, individuals with disabilities, and youth)

To evaluate the relevant indicator, each local government can derive the following (Text Box 2) qualitative results by submitting details about 1) local government efforts, 2) performance, and 3) evidential materials (official documents, photographs, reports, etc.), which are rated on a 5-point scale under a qualitative evaluation graded on a curve (Korea Research Institute for Human Settlements, 2022, p. 71).



Text Box 7 | Results of evaluating "efforts for job creation and entrepreneurial support" in 32 out of 38 local governments in 2022

〈 Distribution of policy and program evaluation for fiscal soundness 〉

Efforts for job creation and employment support (including the elderly, individuals with disabilities, and youth) (Code: 2 2 3)

- In the "efforts for job creation and employment support" (including the elderly, individuals with disabilities, and youth)" item, the cities of Bucheon and Siheung in Gyeonggi Province scored the highest with 16.4 points in autonomous si (city). Wangju County in North Jeolla Province scored the highest with 15.7 points in autonomous gun (county). Seo District in Daejeon Metropolitan City, Buk and Suyeong districts in Busan Metropolitan City, and Yeongdo and Yangcheon districts in Seoul Special City scored the highest with 16.4 points in autonomous gu (district).
- The average score of this item was 10.7 points, showing the second highest score among the five items in the urban economy sector.
- By local government, the average scores were 10.9 points for autonomous si (city), 6.4 points for autonomous gun (county), and 11.7 points for autonomous gu (district), with autonomous gu (district) having the highest average scores.
- The difference between the average scores of autonomous si (city) and autonomous gu (district) and the average score of autonomous gun (county) was the second largest among the five items in the urban economy sector, indicating that job creation and employment in autonomous gun (county) are extremely difficult.

Source: Korea Research Institute for Human Settlements, 2022, p. 158

#### • (Related policy) Village Management Social Cooperatives

One of the policies implemented by the Ministry of Land, Infrastructure, and Transport that were related to local job creation is "Village Management Social Cooperatives." In social cooperatives, the Ministry of Economy and Finance supports and defines projects that contribute to the local community and promotes public service based on the Framework Act on Cooperatives. The Ministry of Land, Infrastructure, and

Transport aims to apply this strategy to village management to effectively manage public facilities created through the Urban Regeneration New Deal Project, provide goods and services for residents, reinvest profits into villages, and support resident self-help organizations that promote the sustainability of the village. It also seeks to promote public interests, including economic activities within the village, by operating business models for the base facilities of the village, such as operating and managing village restaurants and public parking lots, maintaining key facilities and the residential environment, running a resident-invested solar power plant, and providing elderly care service. The project is autonomously operated at the village level and seeks to promote public interests, including economic activities in the form of public support and follow-up management of village cooperatives according to the local government's urban regeneration plan.

Figure 40 | Establishment status of Village Management Social Cooperatives (as of October 2023)

		Tota	number of esta	iblishmems	approved 186			
tabilshmen	t by year (plac	ce)						
201	9	2020		2023		2022	ž	2003
2		28		54		64		38
tablishmen	t by type							
Village revitalizat		dential support	General neighborno		Central urban district	Economic foundation	proje	or (authorized of preliminary roject, etc.)
30		41	72		29	10		13
tablishmen	t by metropol	itan city and pr	cvince					
Secul	Busen	Daegu	Incheon	Ġwengju	Виејеоп	Ulaan	Sejong	Gyeonggi
7	9	8	9	6	10	7	4	22
Gangwon	Chungbuk	Chungnam	Jeonnam	Jeonbuk	Gyeongbuk	Gyeorgnam	Jeju	Total
13	12	16	10	18	13	17	5	186

Source: Urban Regeneration Information System website, https://www.city.go.kr/portal/business/vilmgrcoop/center/list.do (accessed on Oct. 5, 2023)

#### Text Box 8 | Various job models of Village Management Social Cooperatives

Village projects and job models that reflect regional and project characteristics can be found in actual cases of Village Management Social Cooperatives (based on five cases of Village Management Social Cooperatives selected in the 2023 Urban Re-creation Festival). As a village business, each social cooperative contributes to job creation by distributing human resources to major projects.

Cooperative (region)	Approval of establishment and number of members (as of July 2023)	Major projects				
Vitamin Jeojeongol (Suncheon, Jeollanam-do)	Nov. 2021 29 members	Jeojeon Neighborhood village hotel "Eoyeowa," Garden Village specialized project (tour and education), manufacturing and sales project, space operation (Vita Center, Jeojeon Sharing Center)				
Somokgol (Dong-gu, Daegu)	Dec. 2021 30 members	House repair project group, residential environment maintenance (sand disinfection, disease control, etc.), parking lot, operation of village café and published.				
Bongsan Village (Yeongdo-gu, Busan)	Aug. 2020 77 members	Operation and management of base facilities, home repair project, village café				
Ganghwa Namsan (Ganghwa-gun, Incheon)	Mar. 2022 30 members	Operation and management of base facilities (Ganghwa-gun Happy Center), village café, side dish store (village restaurant)				
Dongmyeong Eoullim (Dong-gu, Gwangju)	Apr. 2022 47 members	Integrated care (healthy lifestyle guidance), cultural center (yoga, gardening, etc.), youth (market, youth market, share house, creative center), empty house management, brewing and village café				

⟨ Case of Vitamin Jeojeongol Village Management Social Cooperative ⟩







Jeojeon Neighborhood Garden Tour

Village hotel "Eoyeowa"

Jeojeon Sharing Center

Source: Korea Social Enterprise Promotion Agency Urban Regeneration Village Management Social Cooperatives publication, https: //www.socialenterprise.or.kr/social/board/view.do?pg=1&m\_cd=D019&seq\_no=244631&search\_word=%26amp%3B%2 349324%3B%26amp%3B%2354924%3B%26amp%3B%2351201%3B%26amp%3B%2344032%3B%26amp%3B%23528 24%3B&search\_type=titl&board\_code=BO02&category\_id=&com\_certifi\_num=&selectyear=&magazine=&mode=view (accessed on Jan. 31, 2024)

#### 1.2.2.3. Develop urban-rural linkages to maximize productivity

• (Key point) Policy efforts for balanced national development

South Korea has established a policy foundation for the development of the national territory on the basis of the post-war Five-Year Economic Development Plans (total:

7 plans, 1962–1996) and the Comprehensive National Territorial Plans (total: 5 plans, 1972–). These plans strategically establish an industrialization base and outline the composition of living areas at the national level. In the 1990s, South Korea implemented "national development" as a core strategy for the first time and proposed a national framework based on decentralization.

 Escape from poverty, huild a self-reliant Suppress concentration in metropolitan areas and seek economic foundation Pending decentralization (balanced national development) Suppress overproviding and concentration ISSUES Strengthen national competitiveness and achieve national in metropolitan areas and support happiness underdeseloped areas Core Resolve regional disparities (balanced national values of development and decentralization) Growth and development policy · National competitiveness, creation /happiness, goals inclusion /innovation/decentralization Awareness of the need for systems led by the central . Led by the central government government and various regions. Implement Economic support and indirect social National tasks: Committee for Balanced Development, ation capital: Economic Development Plans & Special Act on Balanced National Development, Special system Comprehensive National Territorial Plans Accounts for Balanced National Development, Balanced National Development Plan 1960-19708 19805 2004~2008 2018-2022 19904 2008-2013 2018~2022 Lincol Rappy **Вироли** Galancent Минорожия Growth broad perelopment development economic fiving zone halicent and all property atrate ps stratestr sambings **Revelopioors** attributy STORY flasponding to globalization and localization Building an innovation-driven loundation Strangtvering national competitiveness Breaking out of the vicious code Growth wed land Promoting Local's lod occeptuaged, belanced of paverty Suppressing **Тарркунии** Focused CHOME development Building a set Debablishes the concentration is Decembrained Promising. strategies Revestiging relignit economic foundation national land framework metropoliton Soundation for озерняліся Strategy for and policy 20045 self-rehance in belveet regional fostering people. underdeveloped metropolican economy by increasing Jobs space, and industry tasks Supporting notional Developing settlement living Consenting the RESIDE areas and resone economic growth Qualitative bris asses environment improving (e.g. creation of supporting sevelopment of indireportion Forming basic educational National land underseyeroped conditions living areas base in preparation for industrialization expending culture welfare. 20924 areas. Lincally led with unification. Forming retwork-type national wie development and medical care lambory

Figure 41 | Paradigm of balanced development policies in South Korea (1960s-2022)

Source: Cha et al., 2022, p. 4

The core values are balanced development and decentralization by resolving regional disparities from the 2000s to the present. Currently, the Presidential Committee for Decentralization and Balanced Development (formerly the Presidential Committee for Balanced Development) is established under the President (Articles 62 and 63 of the Special Act on Local Government Decentralization and Balanced Regional Development). It seeks to resolve regional imbalances and promote independent development suitable for regional characteristics.

Figure 42 | Vision, goal, strategies, and values of the Local Era by the Yoon Suk-yeol government

Vision	Local Era for happy lives anywhere in the Republic of Korea
Goal	Locally led balanced development, responsible decentralization
Five key strategies	Bold decentralization that develops autonomy Drastic education reform that nurtures talent Creative innovative growth that increases jobs Leading specialized development that promotes individuality Customized living welfare that improves the quality of life
Four core values	Autonomy / Justice / Solidarity / Hope

Source: Presidential Committee for Decentralization and Balanced Development, website http://www.balance.go.kr/base/contents/view?contentsNo=27&menuLevel=2&menuNo=52 (accessed on Oct. 5, 2023)

- (Indicator) 20. Does your country have a NUP or Regional Development Plan that (a) responds to population dynamics, (b) ensures balanced territorial development, and (c) increases local fiscal space?
- (Same indicator) SDG 11a. 1. Countries that have national urban policies or regional development plans that respond to population dynamics, ensure balanced territorial development, and increase local fiscal space

The unit of measurement for this indicator is Yes/No, which is determined on the basis of data submitted by the South Korean government in response to the NUP survey. According to the qualitative evaluation interpreted by UN-Habitat and UNFPA (UN Fund for Population Activities), the South Korean government was deemed to have an adequate development plan. The core policies are the Five-Year Economic Development Plans (1962–1997) and the Comprehensive National Territorial Plans (1972–present). These plans have served as the basis for establishing various policies and implementation strategies derived from the field of national territorial development, with a focus on the policy goals and core values of the time, and were classified as the norms to be considered as top priority. Other countries in which the central government provides an integrated basic framework for national development plans received the same evaluation in the relevant indicator (e.g., Finland achieved 100% SDG 11.a.1 every year from 1990 to 2019)

#### 1.3 Environmentally sustainable and resilient urban development

### 1.3.1 Resilience, mitigation, and adaptation of cities and human settlements

The NUA emphasizes that environmental sustainability can be achieved by promoting clean energy and sustainable use of land and resources in urban development by protecting ecosystems and biodiversity, promoting sustainable consumption and production patterns, building urban resilience, reducing disaster risks, and mitigating and adapting to climate change.

To meet these goals, South Korea is enhancing competencies in climate disaster response, organizing systems to prepare for climate disaster, strengthening the ability to make midto long-term impact assessments of climate change, establishing climate change adaptation measures for each sector, and implementing specific management policies for climate change adaptation projects. Relevant measures include establishing an integrated information system for climate change risk assessment and management, providing effective weather disaster services, and integrating regulations related to climate change response.

South Korea's urban areas have expanded steadily over the last decade at a rate that is slightly higher than the ratio of land consumption rate to the population growth rate (LCRPGR) suggested by the UN. However, the degree of growth varies by region, and efforts are being made to prevent indiscreet expansion by preserving green areas on the outskirts of cities using a system involving "development restriction zones."

Additionally, comprehensive urban disaster vulnerability is assessed and predicted for local governments by considering urban sensitivity and vulnerability components due to climate change. To establish efficient disaster and safety management system and policies, related laws are being formulated and implemented so that all government departments can cooperate with each other and efficiently perform the core functions of disaster management affairs assigned to each department.

#### Minimize urban sprawl and the loss of biodiversity resulting from it

• (Indicator) Ratio of land consumption rate to population growth rate (LCRPGR): Continuous urban sprawl

The degree of urban sprawl is measured through the domestic ratio of LCRPGR, the average of which in South Korea is approximately 2. Using data from 2010 to 2018, and LCRPGR is based on DegURBA (Degree of Urbanization), an urban standard agreed upon at the 51<sup>st</sup> session of the UN Statistical Commission (UNSC, 2020). Urban

regions are determined on the basis of the urban or gun (county) management plan by the Ministry of Land, Infrastructure, and Transport (Statistics Research Institute, 2021). Based on DegURBA, the urban area has increased by a national annual average of 1.3% while the population increased by 0.6%, resulting in an LCRPGR of 2.289. Meanwhile, the urban area (based on urban regions) increased by a national annual average of 1.4%, and the population increased by 0.5%. Thus, the land consumption rate for 2010–2018 was measured at 2.525.

Table 17 | Ratio of land consumption rate to population growth rate (LCRPGR)

			DegURBA				Sp	ecific use	area	
City/ Province	Urban area ratio	Annual average urban area growth rate (%)	Population ratio	Average annual population growth rate (%)	LCR PGR	Urban area ratio	Annual average urban area growth rate (%)	Population ratio	Average annual population growth rate (%)	LCR PGR
Nationwide	1.112	1.3	1.047	0.6	2.289	1.117	1.4	1.045	0.5	2.525
Seoul	1.031	0.4	0.970	-0.4	-1.001	1.008	0.1	0.968	-0.4	-0.254
Busan	1.022	0.3	0.989	-0.1	-1.907	1.115	1.4	0.992	-0.1	-12.792
Daegu	1.019	0.2	0.989	-0.1	-1.753	1.016	0.2	0.989	-0.1	-1.518
Incheon	1.272	3.0	1.086	1.0	2.934	1.089	1.1	1.080	1.0	1.113
Gwangju	1.057	0.7	0.993	-0.1	-7.485	1.051	0.6	0.995	-0.1	-10.308
Daejeon	1.084	1.0	1.001	0.0	54.189	1.053	0.6	1.001	0.0	40.616
Ulsan	1.127	1.5	1.038	0.5	3.169	1.068	0.8	1.052	0.6	1.298
Sejong	2.688	12.4	5.398	21.1	0.586	1.120	1.4	4.994	20.1	0.071
Gyeonggi	1.176	2.0	1.125	1.5	1.378	1.200	2.3	1.116	1.4	1.663
Gangwon	1.028	0.3	1.007	0.1	4.007	1.104	1.2	1.028	0.3	3.616
Chungbuk	1.103	1.2	1.062	0.7	1.644	1.297	3.3	1.066	0.8	4.058
Chungnam	1.016	0.2	1.125	1.5	0.135	1.200	2.3	1.196	2.2	1.016
Jeonbuk	1.027	0.3	1.021	0.3	1.292	1.071	0.9	1.017	0.2	3.984
Jeonnam	1.144	1.7	10.46	0.6	3.005	1.082	1.0	1.027	0.3	20979
Gyeongbuk	1.073	0.9	1.034	0.4	2.137	1.129	1.5	1.028	0.3	4.405
Gyeongnam	1.106	1.3	1.064	0.8	1.637	1.141	1.6	1.064	0.8	2.115
Jeju	1.427	4.4	1.212	2.4	1.852	1.110	1.3	1.117	1.4	0.940

Source: Statistics Korea, 2021, Research on the production of SDGs indicators using GIS: Focusing on LCRPGR, p. 35.

Comparison of the two time points (2010 and 2018) reveals that the urban area, relative to the population, showed at least a twofold increase in both DegURBA and the Ministry of Land, Infrastructure, and Transport standards, which exceeds 1, the adequate level presented by UN-Habitat, indicating that South Korea has been using land inefficiently over the past few years. However, there are regional differences, with Sejong City and Chungchungnam-do and Jeju provinces showing figures below 1. Moreover, considering the quality of life in the city, there is room for other interpretations

for figures exceeding 1 given that land consumption per capita has increased.

 (Indicator) Development restriction zones: The proportion of development restriction zones has been maintained or slightly decreased

A "development restriction zone" refers to a part of a green area designated on the outskirts of an urban area and was established to prevent disorderly sprawl of cities according to the National Land Planning and Utilization Act (Ministry of Land, Infrastructure, and Transport, 2013). To protect the natural environment around the city, the government designated 5,397.1 km² nationwide as development restriction zones, with eight designation announcements from 1971 to 1977. However, to resolve the inconveniences caused by excessive regulations to local residents, the government began to lift development restriction zones in small and medium-sized cities (not metropolitan areas) in the mid-2000s and added conditions to control the development of city outskirts in land utilization plans as a metropolitan plan to minimize the impact of such zones (Lee, 2018). Since adopting a systematic lifting plan through system improvement, the lifting rate of development restriction zones over the last decade was 0.04% of the national land area, and the lifting rate in 2022 was 0%.

Table 18 | Designation and release of development restriction zones (unit: km²)

Division	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Nationwide	3,895	3,890	3,874	3,868	3,862	3,859	3,854	3,846	3,841	3,837	3,829	3,793	3,793
Seoul	153	152	151	-	151	151	151	151	150	150	150	150	150
Busan	270	268	258	253	253	253	253	251	251	251	250	250	250
Daegu	403	402	402	401	401	401	401	401	401	401	400	400	400
Incheon	89	89	89	89	88	88	88	88	88	88	88	84	84
Gwangju	247	247	247	247	247	247	245	244	244	244	244	244	244
Daejeon	309	309	309	309	305	305	305	305	304	304	304	304	304
Ulsan	271	271	270	270	269	269	269	269	269	269	269	269	269
Sejong	_	-	_	-	_	_	-	41	41	41	41	41	41
Gyeonggi	1,182	1,181	1,178	1,177	1,175	1,175	1,172	1,171	1,167	1,165	1,163	1,131	1,131
Gangwon	-	-	-	_	-	0	0	0	0	0	0	0	0
Chungbuk	54	54	54	54	54	54	54	54	54	54	54	54	54
Chungnam	66	66	66	66	66	66	66	25	25	25	25	25	25
Jeonbuk	_	-	_	_	_	0	0	0	0	0	0	0	0
Jeonnam	272	272	272	272	271	271	271	271	271	271	268	268	268
Gyeongbuk	115	115	115	115	115	115	115	115	115	115	115	115	115
Gyeongnam	465	464	464	464	464	464	463	460	459	458	458	458	458
Jeju	-	-	-	-	-	0	0	0	0	0	0	0	0

Source: e-National Index website https://www.index.go.kr/unity/potal/main/EachDtlPageDetail.do?idx\_cd=1003 (final search on July 21, 2023)

#### Implement climate change mitigation and adaptation actions

• (Indicator) Disaster vulnerability due to climate change: Guidelines for the Analysis and Use of Disaster Vulnerability due to Urban Climate Change

The Ministry of Land, Infrastructure, and Transport (2015) established the Guidelines for the Analysis and Use of Disaster Vulnerability due to Urban Climate Change, which require conducting disaster vulnerability analysis according to urban climate change for special cities/metropolitan cities/special self-governing cities/special self-governing provinces/cities or gun (counties) when establishing or changing an urban or gun (county) master plan or drafting an urban or gun (county) management plan. The main goal of the Guidelines is to analyze the city's comprehensive disaster vulnerability due to heavy rain, heat wave, heavy snow, strong wind, drought, and sea level rise through climate exposure and urban sensitivity indicators. As of December 2019, disaster vulnerability analyses had been completed in 158 (approximately 99%) of the local governments subject to analysis (Han, 2019). In particular, the Korea Research Institute for Human Settlements(KRIHS) has continuously verified the results of disaster vulnerability analysis by operating the National Urban Disaster Prevention Research Center since 2017. The Institute has since been in charge of providing explanations on systems and guidelines and training on the analysis process for public officials and technicians every year.

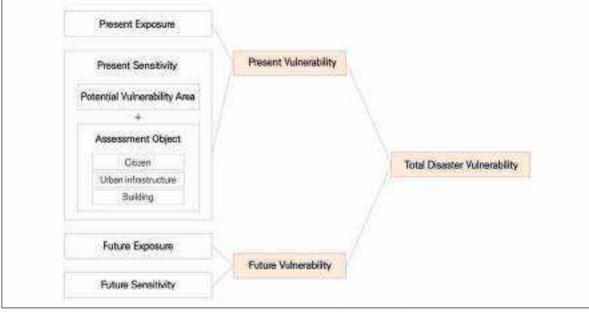


Figure 43 | Disaster vulnerability analysis structure

Source: Han, 2019, Disaster vulnerability analysis system in preparation for the era of abnormal climate, National Land Issue, 458, p. 23.

• (Indicator) Regarding air pollution: Slight decrease in air pollution rate by city

According to Statistics Korea (2019), the mortality rate attributed to household and

ambient air pollution in Korea was calculated to be 19 per 100,000 people, which is the age-standardized number of deaths. This is the result of an estimate combining various data, including the proportion of the population dependent on polluting fuels for cooking at home, the risk of exposure to air pollution, and the number of deaths from diseases.

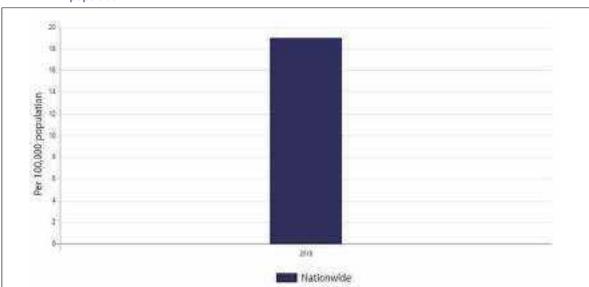


Figure 44 | Mortality rate attributed to household and ambient air pollution, age-standardized per 100,000 population

Source: Statistics Korea

The annual average for fine dust (PM2.5) concentrations decreased in 2021 in all seven major South Korean cities (Seoul, Busan, Daegu, Incheon Gwangju, Daejeon, Ulsan), compared with 2015, and decreased from around 20 ug/m³ to 10 ug/m³ for Busan, Daegu, Gwangju, Daejeon, and Ulsan.

Table 19 | Annual average fine dust (PM2.5) concentrations in major cities

Division	2015	2016	2017	2018	2019	2020	2021
Seoul	23	26	25	23	25	21	20
Busan	26	27	26	23	21	17	15
Daegu	26	24	23	22	22	20	17
Incheon	29	26	25	22	23	19	20
Gwangju	26	23	24	24	23	18	18
Daejeon	28	21	21	22	22	18	16
Ulsan	25	23	25	23	20	17	15

Source: Ministry of Environment, "Annual Report of Ambient Air Quality in Korea", E-National Index website, https://www.index.go.kr/unify/idx-info.do?idxCd=4275 (final search on Jul. 21, 2023)

Moreover, to increase public access to information about air pollution, the government is providing the public with various forms of measurement data on standard substances present in the atmosphere, such as fine dust and ozone, through the Korea Environment Corporation's NAMIS (National Ambient air quality Monitoring Information System), Air Korea, and the Special Policy Committee on Fine Dust under the Prime Minister.

#### Develop systems to reduce the impact of natural and human-made disasters

• (Indicator) Disaster and safety management: Establishment of an efficient disaster and safety management system and disaster and safety policies

South Korea's disaster management system is mainly characterized by government-wide cooperation. For example, if a large-scale disaster occurs, the Central Disaster and Safety Countermeasure Headquarters exercise general control over and coordinate matters concerning the response and recovery; each department of the central disaster management headquarters manages disaster types under its jurisdiction, and the local disaster and safety countermeasure headquarters exercise general control over and coordinate responses at the local government level (Ministry of the Interior and Safety, 2021). Moreover, to establish a disaster and safety management system that is focused more on prevention, related plans are established and implemented so that each of the disaster management agencies (central administrative agencies, local governments, public institutions, etc.) can maintain their core functions in disaster management affairs. These plans include the establishment of policy goals for each agency, an emergency organization system, and continuous education and training for members.

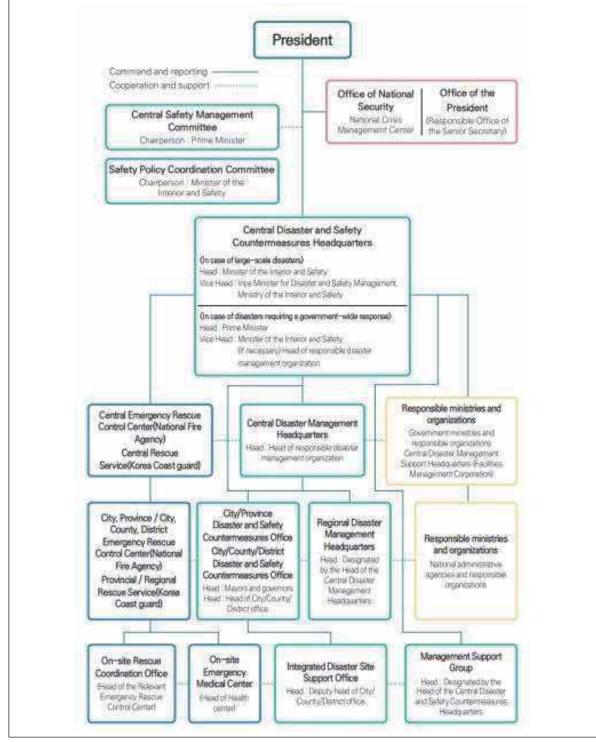


Figure 45 | Disaster management system in South Korea

Source: Ministry of Security and Public Administration, 2021, Disaster & Safety Management in Korea, p. 10-11

#### Text Box 9 | Response to natural disasters in summer by Gwanak-gu, Seoul

Gwanak-gu, located in the southwest of Seoul, has the 5<sup>th</sup> largest population in Seoul with a significantly high rate of registered single-person households and persons with disabilities. In particular, the number of semi-basement households, which are vulnerable to flooding, is the largest among the autonomous gu (districts) in Seoul. Approximately 58.7% of semi-basement residents are single-person households, and 42.3% are over 65 years old, showing the characteristics of populations vulnerable to flooding. Because of the large number of rocks on nearby Mt. Gwanak, rainwater is not absorbed by the ground during rainfall and ends up flowing into nearby rivers. Rivers have a narrow section of water flow, so the water levels rise quickly, even with little rainfall, resulting in a high risk of the river flooding.

In fact, the record-breaking local heavy rain in August 2022 that occurred for the first time in 102 years resulted in the death of three family members with disabilities living in a semi-basement in Sillim-dong, Gwanak-gu, and 709 victims, causing significant damage. Accordingly, Gwanak-gu District was declared a special disaster area, and efforts were made to establish and operate a local government system that can effectively respond to natural disasters in the era of climate crises.

#### Gwanak District flood prevention system

Division	Implementation system
Reinforcing organizational innovation and response capabilities	Revamping the control tower and manual Substantializing the safety management plan Conducting situational training in preparation for storm and flood damage Establishing a new disaster scene response team Establishing a disaster and safety situation room
Building a community safety net	Building public-private governance for a joint disaster response system     Flood prevention projects (e.g., a non-life insurance social contribution council)     Establishing emergency safety equipment for vulnerable households     Operating a rainwater gutter management responsibility system     Organizing and managing caregiving administrator and companion partners
Strengthening physical and technical functions	Installing flood forecasting and warning facilities     Installing flood prevention equipment     Installing smart mixed-use shelters and shade canopies     Establishing a broadcasting transmission system in preparation for storm and flood damage
Follow-up prevention and mid- to long-term planning	Project expanding the section of water flow for the Byeolbit Naerincheon Stream     The Byeolbit Naerincheon Stream rainwater drainage tunnel project     Retention tank installation work at two locations

Source: Gwanak-gu, Seoul Special City (2023). Innovation in the response system for summer natural disasters in the era of climate crises, 2023 Korea City Awards

This response system stands out for its focus on establishing prevention measures rather than for disaster recovery and for establishing a joint response safety net of the private sector centered on those vulnerable to disasters within the community. Accordingly, as of August 2023, precisely one year after this flood responsive project was implemented, the number of flood-damaged households fell to 0. In the future, Gwanak District plans to implement other projects to improve physical infrastructure, such as expanding the section of water flow in the river, installing retention tanks, organizing a rainwater drainage tunnel project, and increasing the capacity of rainwater pumping stations to reduce flood damage.

• (Related policy) Emergency alerts: Operation of the nationwide emergency alert system

Emergency text alerts refer to disaster warning broadcast system that is delivered to mobile phones equipped with the cell broadcasting service (CBS) reception function and digital multimedia broadcasting (DMB) in order to prevent damage to life and property due to a disaster or civil air defense situation (Ministry of the Interior and Safety, Rule No. 244). Emergency text alerts are sent out in the case of typhoons, heavy rains, fine dust, heavy snow, strong wind, heat wave, and Asian micro-dust. Additionally, fire emergency text alerts are directly operated and managed by the Central Disaster and the Safety Management Center of the Ministry of the Interior and Safety. However, for a timelier response, 17 upper-level local governments nationwide can individually send alerts for social disasters, excluding a state of national emergency, special weather report, and civil air defense situation. Starting from 2019, lower-level local governments are also authorized to send emergency alerts so that such alerts can now be sent at the city and gu (district) levels in the event of a large-scale disaster such as a forest fire or blackout. South Korea's previous emergency text alerts over the last decade show that the number of alerts sent increased gradually from 2011. Additionally, alerts related to COVID-19 skyrocketed in 2020, with approximately 60 times more alerts compared with 2019.

Table 20 | Emergency alerts sent

Year	Total number of alerts	Strong wind · wind wave	Heavy rain	Typhoon	Heat wave	Cold wave	Heavy snow	Drought	Earthquake	COVID	Fine dust	Other
2011	22	5	4	0	0	0	11	1	0	0	0	1
2011	22	22.73%	18.18%	0.00%	0.00%	0.00%	20.00%	4.55%	0.00%	0.00%	0.00%	4.55%
2012	342	34	111	38	18	18	19	5	0	0	0	99
2012	342	9.94%	32.46%	11.11%	5.26%	5.26%	5.56%	1.46%	0.00%	0.00%	0.00%	28.95%
2013	388	25	106	8	152	12	19	11	0	0	0	55
2013	300	6.44%	27.32%	2.06%	39.18%	3.09%	4.90%	2.84%	0.00%	0.00%	0.00%	14.18%
2014	284	30	92	12	62	19	49	5	0	0	0	15
2014	204	10.56%	32.39%	4.23%	21.83%	6.69%	17.25%	1.76%	0.00%	0.00%	0.00%	5.28%
2015	448	46	52	10	134	0	13	23	0	0	2	168
2015	440	10.27%	11.61%	2.23%	29.91%	0.00%	2.90%	5.13%	0.00%	0.00%	0.45%	37.50%
2016	372	33	82	20	78	14	25	8	21	0	2	89
2010	3/2	8.87%	22.04%	5.38%	20.97%	3.76%	6.72%	2.15%	5.65%	0.00%	0.54%	23.92%
2017	871	59	203	9	127	24	23	20	18	0	9	379
2017	0/1	6.77%	23.31%	1.03%	14.58%	2.76%	2.64%	2.30%	2.15%	0.00%	1.03%	13.51%
2018	859	76	206	73	55	78	64	39	1	0	59	208
2010	009	8.85%	23.98%	8.50%	6.40%	9.08%	7.45%	4.54%	0.12%	0.00%	6.87%	24.21%

Year	Total number of alerts	Strong wind · wind wave	Heavy rain	Typhoon	Heat wave	Cold wave	Heavy snow	Drought	Earthquake	COVID	Fine dust	Other
2019	911	86 9.44%	158 17.34%	111 12.18%	44 4.83%	3 0.33%	7 0.77%	28 3.07%	16 1.76%	0 0.00%	137 15.26 %	319 35.02%
2020	54.749	908	1,193	1,811	4.1	77	96	141	10	32,733	11	17,368
2020	34,743	1.66%	2.18%	3.31%	0.73%	0.14%	0.18%	0.26	0.02%	59.79%	0.02%	31.72%
2021	30,775	573	64	36	0	826	479	114	0	20,327	113	8,243
2021	30,773	1.86%	0.21%	0.12%	0.00%	2.68%	1.56%	0.37%	0.00%	66.05%	0.37%	26.78%

Source: Song & Jo (2022), The Economic Analysis of the Disaster Alerts Messages, Korean Journal of Public Finance 15(1), p. 53, Ministry of the Interior and Safety emergency alerts status (as of Jun. 30, 2021)

However, there is a limitation in that the elderly and low-income groups are classified as being underprivileged in terms of using smartphones and may be left in a blind spot with respect to the text notification system. Accordingly, the government is implementing a disaster warning system that transmits not only emergency alerts but also emergency disaster information through TV broadcast subtitles and radio through the Disaster Information Transform System (DITS).

#### 💹 Build urban resilience through quality infrastructure and spatial planning

 (Related policy) Daily safety information – Providing nationwide information on daily safety

The Ministry of the Interior and Safety integrates South Korea's essential safety information (e.g., safety maps and statistics) and facility safety information of 17 upper-level local governments nationwide on a map through the official Safety Map website, which is accessible to the public. The safety map displays the expected risks of daily life hazards regarding disasters, public order, traffic, and health. Examples include urban flooding maps, river flooding maps, forest fire records, and crime risk zones. Moreover, by adopting the concept of a regional safety index, each disaster (e.g., fire, crime, or infectious disease) is classified into Grades 1–5 (Grade 1 being the safest), with the changes by region and year provided in statistical form.



Figure 46 | Example of the Safety Map website (nationwide flood traces)

Source: Ministry of the Interior and Safety official Safety Map website https://www.safemap.go.kr/main/smap.do?flag=2# (final search on July 24, 2022)

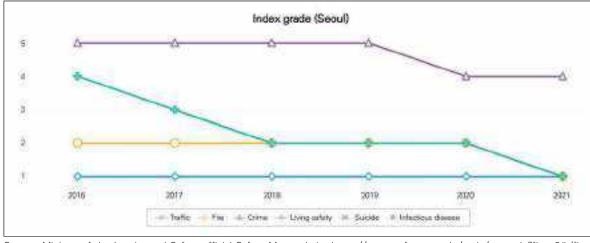


Figure 47 | Example of the regional safety index (Seoul)

Source: Ministry of the Interior and Safety official Safety Map website https://www.safemap.go.kr/main/smap.do?flag=2# (final search on July 24, 2022)

### 1.3.2

#### Sustainable management and use of natural resources

The NUA constantly emphasizes the importance of sustainability in efficient consumption and production methods for energy resources. Key indicators include material consumption related to carbon emissions, waste recycling rate, water resource management, and smart transportation systems to reduce air pollution.

South Korea's relevant key policy is the K-Circular Economy (South Korean-style circular economy) Implementation Plan established in December 2021, which seeks to create a society in which material circulation is complete, including energy conversion, industry, transport, buildings, agriculture, and forests. Multi-dimensional efforts are being made in several fields, such as establishing a marine pollutant management system, protecting marine ecosystems, managing sustainable fishery resources, and enhancing competencies in marine science and technology.

Material consumption in South Korea is higher than the overall average of other countries but has been decreasing steadily since 2000 due to the Framework Act on the Use and Management of Natural Resources, accompanied by the government's diverse policy efforts to ensure the smooth circulation of resources.

The total waste recycling rate in South Korea is high, reaching approximately 90%. Waste materials are classified into construction, industrial, and household waste. The recycling rate for household waste discharged from general homes or small businesses is approximately 60%.

In the pursuit of smart energy, the government is creating National Pilot Smart Cities (in two locations), which are new cities that apply smart technology. Additionally, it is implementing the Smart City Challenge project and Smart City solutions to enhance energy efficiency in existing cities. Regarding transportation and safety, the focus is on the city information data hub, and Seoul, as the capital city, provides big data services in transportation, specializing in advanced smart transportation technology.

#### Strengthen the sustainable management of natural resources in urban areas

• (Indicator) Material footprint - High material footprint and related policy efforts

According to the South Korean Statistical Information Service (KOSIS), South Korea's
material footprint has increased steadily from 2011 to 2019, reaching 1.128 billion

tons as of 2019, which is higher than the Organization for Economic Cooperation and Development's (OECD) average of 770 million tons. The difference in South Korea's material footprint was lowest at 313 million tons in 2013 and highest at 397 million tons in 2017. South Korea's material footprint was higher than the OECD average every year from 2011 to 2019.

Table 21 | Material footprint in South Korea (Unit: million tons)

Division	OECD total	OECD average	South Korea	Difference*
2011	29,015	763	1,128	365
2012	28,677	755	1,091	336
2013	28,700	755	1,068	313
2014	29,001	763	1,088	325
2015	28,720	756	1,092	336
2016	28,601	753	1,101	348
2017	29,036	764	1,161	397
2018	29,159	767	1,108	341
2019	29,265	770	1,128	358

Source: KOSIS, website https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT\_2OEV077&vw\_cd=MT\_RTITLE&list\_id=R\_SU B\_OTITLE\_OTIT\_OECDTIT\_AH\_O&seqNo=&lang\_mode=ko&language=kor&obj\_var\_id=&itm\_id=&conn\_path=MT\_RTITLE (final search on Jul. 24, 2023)

Note: Difference between the OECD average and South Korea

South Korea has been making policy efforts based on the Framework Act on Resources Circulation regarding the use and management of natural resources to reduce its relatively high material footprint. The key points of the Framework Act on Resources Circulation, which has been in effect since 2018, comprise matters regarding resource circulation performance management, waste disposal charges, and circular resource recognition (Ministry of Environment, 2016).

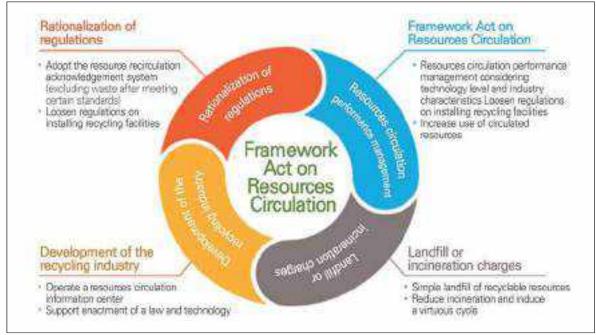


Figure 48 | System of the Framework Act on Resource Circulation

Source: South Korea Vinyl Environmental Council website, http://www.ikovec.or.kr/index.php/webzine/page/vol\_05/b\_01(final search on July 25, 2023)

• (Indicator) Domestic material consumption – Domestic material consumption that varies depending on the conditions

While domestic material consumption per gross domestic product (GDP) in South Korea is gradually decreasing, gross domestic material consumption and domestic material consumption per capita are rising steadily. South Korea's domestic material consumption per GDP has steadily declined from 0.923 in 2000–2019 (except in 2003) to 0.563 in 2019, approximately half of what it was 20 years ago. Conversely, gross domestic material consumption has been increasing steadily from 2000 to 2019 (except 2005), showing an increase of approximately 20,000 tons in 2019 compared to 20 years ago. Domestic material consumption per capita has been steadily increasing (except in 2005) for 20 years, reaching approximately 17 tons in 2019 compared to 15 tons in 2000, with an increase of 20,000 tons compared to 29 years ago.

Table 22 | Domestic material consumption

Year	Material consumption per GDP (kg/USD)	Material consumption (ton)	Material consumption per capita (ton)
2000	0.923	737,525,100.1	15.566
2001	0.908	760,671,137.8	15.945
2002	0.866	781,160,332.7	16.274
2003	0.891	828,820,891.9	17.174
2004	0.829	811,832,152.1	16.741
2005	0.714	728,674,790	14.962
2006	0.697	748,738,938.1	15.318
2007	0.683	776,296,395.4	15.832
2008	0.674	789,328,578.8	16.049
2009	0.651	768,574,775.1	15.575
2010	0.618	779,346,277.1	15.73
2011	0.59	770,877,863.2	15.484
2012	0.604	809,051,555.6	16.161
2013	0.6	828,350,448.6	16.453
2014	0.586	835,014,650	16.5
2015	0.598	876,795,357.7	17.252
2016	0.617	931,200,942	18.265
2017	0.61	949,666,843	18.586
2018	0.582	932,499,258.9	18.223
2019	0.563	920,410,002.6	17.968

Source: United Nations Environment Program (UNEP) Global Material Flows Database, https://kostat-sdg-kor.github.io/sdg-indic ators/12-2-2/ (final search on July 25, 2023)

#### • (Indicator) Green area ratio - Maintaining a certain green area

Green areas refer to areas requiring conservation to protect the natural environment, farmland and forests, preserve health, sanitation, and security, and prevent disorderly urban sprawl among the four area types (residential, commercial, industrial, green) classified as urban under the specific use areas designated by the Ministry of Land, Infrastructure and Transport. After experiencing growth in the early 2000s, South Korea's total green area ranged from 12 km² to 13 km² from 2003 to 2022. The trend in the area of green space in South Korea over the past 20 years shows steady growth. Green areas accounted for 11,751 km² in 2000 (11.2% of the total area of 105,532 km²) and had increased by approximately 500 km² by 2003. From 2003 onward, it maintained a similar level but experienced a slight decline from 2011 to 2021 (12,704 km²). According to the most recent statistics, the total green area in 2022 was estimated at 12,581 km².

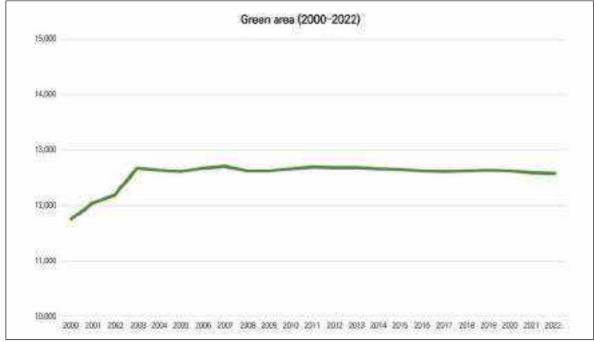


Figure 49 | Green area in South Korea (Unit: km²)

Source: e-National Index website, https://www.index.go.kr/unity/potal/main/EachDtlPageDetail.do?idx\_cd=1002 (final search on July 25, 2023)

#### Drive resource conservation and waste reduction, reuse, and recycling

• (Indicator) Waste recycling rate – Increase in the overall recycling rate and stagnation of household waste

As of 2020, South Korea's total waste recycling rate was 87.4%, showing an average annual fluctuation rate of more than 0.5% over the past ten years (Statistics Research Institute, 2023). However, the changes by waste type differ; for example, the household waste recycling rate decreased slightly to 59.5% in 2020 year on year, while the industrial waste recycling rate in the same year increased by 1.7% to 84.3% annually. The designated waste recycling rate increased from 56.2% in 2017 to 63.7% in 2020 and has shown steady growth for the last five years.

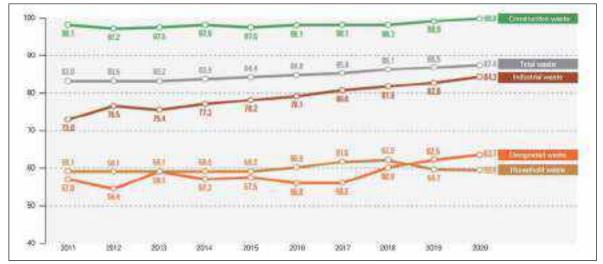


Figure 50 | Recycling rates by type of waste (Unit: %)

Source: Statistics Research Institute, 2023, SDGs in the Republic of South Korea: Progress Report, 2023, p. 84, reprocessed data from the Ministry of Environment-South Korea Environment Corporation

The ultimate purpose of this indicator is to examine the nation's adaptation to disasters related to climate change. Against this background, it is necessary to examine the overall waste generation and waste recycling rates to monitor the general status of waste generation and management. As mentioned earlier, the waste recycling rates of each waste type in South Korea have, on average, shown an increase over the past ten years, and the average daily amount of waste generated by type has increased in proportion. The correlation between the figures of each waste type shows that, among household, industrial, construction, and designated waste, construction waste had the highest daily average amount until 2020, when it was surpassed by industrial waste in 2021 for the first time.

Table 23 | Average daily amount of waste generated by type (Unit: tons/day)

Year	Total	Household waste	Industrial waste	Construction waste	Designated waste
2012	394,496	48,990	146,390	186,629	12,487
2013	393,116	48,728	148,443	183,538	12,407
2014	401,658	49,915	153,189	185,382	13,172
2015	418,214	51,247	155,305	198,260	13,402
2016	429,128	53,772	162,129	199,444	13,783
2017	429,531	53,490	164,874	196,262	14,905
2018	446,102	56,035	167,727	206,951	15,389
2019	497,238	57,961	202,619	221,102	15,556
2020	534,055	61,597	220,951	236,183	15,324
2021	540,781	62,178	232,603	229,618	16,381

Source: E-National Index, Waste Generation, https://www.index.go.kr/unify/idx-info.do?idxCd=4278 (final search on November 19, 2023)

## Implement environmentally sound management of water resources and urban coastal areas

• (Related policy) Coastal management policy - Coast Management Act

In South Korea, the management policies for water resources and coastal areas are crafted with a focus on the Coast Management Act. The Ministry of Oceans and Fisheries established the 1<sup>st</sup> Plan for Integrated Coastal Management in 2000 based on Article 6 of the Coast Management Act and formulated the 2<sup>nd</sup> Plan ten years later in 2011 (Ministry of Oceans and Fisheries, 2016). The main contents of the implementation strategies for the 2<sup>nd</sup> Plan for Integrated Coastal Management comprise applying the new coastal management system and improving ecosystem health and the coastal landscape.

Table 24 | Implementation strategies and key tasks for the 2<sup>nd</sup> Plan for Integrated Coastal Management

Implementation strategy	Key task			
Applying the new coastal management system	<ul> <li>Implementing coastal sea use (4 uses) and functional zoning (19 functional zones)</li> <li>Implementing natural coast management objectives: managing the total amount of natural coastlines, beaches, and tidelands</li> </ul>			
Improving ecosystem health and the coastal landscape	<ul> <li>Promoting biodiversity by strengthening the management of coastal protected areas and protected biological species</li> <li>Strengthening pollution source management and restoration projects, establishing use and development in light of environmental capacity</li> </ul>			
Strengthening the response to climate change and disasters	<ul> <li>Implementing climate change adaptive coastal space management in association with spatial planning of coastal land</li> <li>Promoting discovery of coastal maintenance projects in which there is harmony between natural and artificial defense systems</li> </ul>			
Establishing coastal governance	<ul> <li>Institutionalizing stakeholder participation and collaboration in the process of building the conflict management system and establishing/implementing the plan</li> <li>Promoting inter-Korean exchange and cooperation in coastal management and establishing a costal management hub for East Asia</li> </ul>			
Strengthening coastal management execution skills	<ul> <li>Improving the management system to improve public transparency and access to public waters as public goods and common pool resources</li> <li>Making focused investments in implementing the four major measures to secure execution skills for integrated coastal management</li> </ul>			

Source: Ministry of Oceans and Fisheries, 2016, Coastal Management Policy Overview, p. 6. reprocessed

The basic structure of the coastal management system is focused on the Coast Management Act, with local plans for coastal management areas, public waters reclamation based on use and development, and coastal erosion management areas based on preservation and management as the specific policy foundation. Basic research

on coasts is led by the Minister of Oceans and Fisheries, metropolitan city mayors, provincial governors, and the governors of special self-governing provinces for individual research, which is classified into basic research (every five years), natural cost and beach research and measurement (every ten years), supplementary research, and research on the actual conditions of coastal erosion conducted to collect necessary information for efficient coastal management. Local plans for coastal management areas are led by the governor of a special self-governing province and the heads of gu (district), si (city), gun (county), established every ten years, and re-examined every five years.

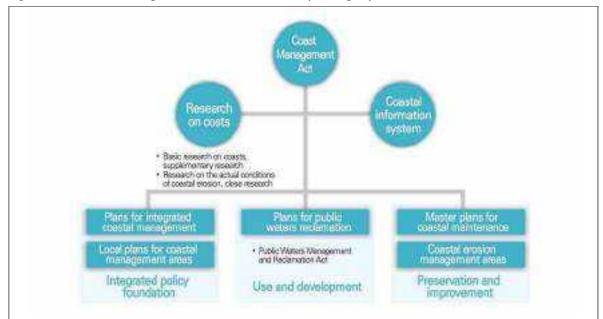


Figure 51 | Coastal management (research-evaluation-planning) system

Source: Ministry of Oceans and Fisheries, 2016, Coastal Management Policy Overview, p. 5.

#### Adopt a Smart City approach that leverages digitization, clean energy, and technologies

 (Related policy) Sustainable smart technology – Government-led National Pilot Smart City

One of the key issues of the Smart City project led by the South Korean government is the promotion of smart energy technology at the city level. The Presidential Committee on the 4<sup>th</sup> Industrial Revolution and the relevant ministries demonstrated smart meters, Internet of Things (IoT) meters, and smart home appliances that provide real-time power consumption data collection and analysis and consulting for electricity bill reduction based on IoT and big data in smart energy. Among the project sites of the

"National Pilot Smart City," which is the largest Smart City project in South Korea, Sejong 5-1 Living Area (or Zone) and Busan Eco Delta City are the best practices for using sustainable Smart City services considering environmental and energy sustainability. The Sejong 5-1 Living Area (or Zone) Smart City project provides advanced technologies in energy, such as a zero energy town and an energy trading platform, by building urban IoT infrastructure and activating artificial intelligence (AI) services accordingly (Presidential Committee on the 4<sup>th</sup> Industrial Revolution, 2018).



Figure 52 | Sejong 5-1 Living Area (or Zone) Smart City Service

Source: Son, 2022, "Comparison of domestic and overseas Smart City projects and energy services, Journal of Electrical World http://www.keaj.kr/news/articleView.html?idxno=4575 (final search on July 25, 2023),

Busan National Pilot Smart City (Eco Delta City), the largest of the Smart City projects in South Korea, actively uses new renewable energy (e.g., hydrothermal and geothermal heat) and zero energy building technology to streamline the city's energy use and improve sustainability. Moreover, various projects, such as demonstration of innovative technology and research and development (R&D) of other ministries, are conducted in association with "Smart Village," a living lab-style detached housing complex created for citizens to experience in advance the technologies to be implemented in Busan National Pilot Smart City.



Figure 53 | Busan National Pilot Smart City Smart Village

Source: Kim, 2023, "Application cases and development direction for Smart Water City," Water Journal,, https://www.waterjournal.co.kr/news/articleView.html?idxno=67252 (final search on January 3, 2023)

In addition to the National Pilot Smart City, which serves as an example of an integrated approach to a Smart City, more specific projects are focused on smart technology, such as achieving carbon neutrality and the use of hydrogen energy. For example, the Ministry of Land, Infrastructure, and Transport is operating the Carbon Space Map system to support local community-led carbon neutrality activities and lay the foundation for carbon emissions data in national land and urban planning according to the Enforcement Decree of the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (March 2022). The Carbon Space Map provides visual data that show carbon emissions in each sector generated by activities within the city as well as the carbon absorption of urban sinks in spatial units. The central government also uses this data to diagnose the levels of carbon emissions in cities implementing carbon neutrality policies and establish adequate reduction strategies and institutional grounds for them.



Figure 54 | Total carbon emissions at the national level (2019)

Source: Carbon Space Map website https://www.carbonmap.kr/gis.do#void (final search on January 16, 2024),

Hydrogen City refers to a healthy and clean city in which citizens can experience urban innovation, with a hydrogen ecosystem established within the city so that hydrogen is used as the main energy source (Kwon, 2019). The Hydrogen City project is based on the establishment and use of infrastructure related to residence and transport to produce and distribute the hydrogen supply base. Based on the achievements of four operating pilot Hydrogen Cities that commenced in 2019, the Ministry of Land, Infrastructure and Transport began implementing new Hydrogen City projects in six cities in 2023.

• (Related policy) Smart transportation technology - Seoul Transport Big Data Platform

Seoul operates various intelligent transport systems and data services (e.g., real-time traffic signal information) through the "Seoul Transport Big Data" platform. This platform, which has been in operation since 2022, provides diverse information, including real-time road hazards, traffic signals, and vehicle status from Cooperative Intelligent Transport Systems (C-ITS) in the form of an open application programming interface (API). It effectively relieves traffic congestion by providing real-time traffic conditions and the remaining signal time at 788 major intersections in the city by analyzing traffic-related big data.

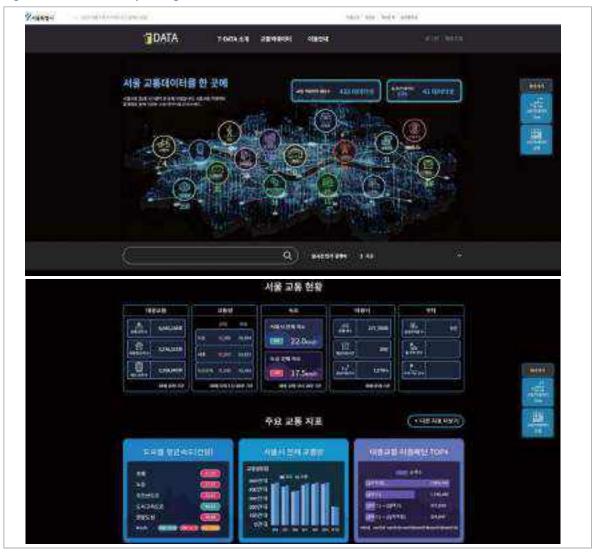


Figure 55 | Seoul Transport Big Data Platform website

Source: Seoul Transport Big Data Platform website, https://t-data.seoul.go.kr/ (final search on Aug. 10, 2023),

More specifically, anyone can check real-time traffic information related to the signal system, such as the current signal color of major intersections and remaining signal time through the platform. Based on this, vehicle-to-everything (V2X) communication is used to provide related information (e.g., real-time traffic signals and remaining signal time data) at 642 major intersections through private navigation applications. This data service improves traffic safety and contributes to reducing unnecessary time incurred by traffic congestion. It also has environmental value because it reduces the possibility of pollutants generated from various means of transport on the road by promoting traffic circulation. The scope of this service will be expanded to all road intersections (3,660 locations) with at least four lanes by 2024.

### 02 Effective Implementation

PART I

## 2.1 Building the urban governance structure: Establishing a supportive framework

In the process of rapid economic development and democratization, urban governance in South Korea has promoted decentralization by adequately delegating the central government's authority and responsibilities to local governments in legislative and administrative aspects. In terms of legislation, most local governments are making plans with relevant central authorities to establish urban plans. In terms of administration, they are performing local affairs, establishing and operating the foundation for autonomous decentralization.

The metropolitan planning committee and the standing planning office for urban planning are operated as local and metropolitan multilevel governance systems and are making efforts to resolve metropolitan urban issues by establishing the Seoul Metropolitan Area Readjustment Committee and Metropolitan Transport Commission. The level of resident participation in each city is inspected through the "Assessment of Sustainability of Cities and Level of Living Infrastructure" as part of an urban planning system considering age and gender, and records are monitored under the Plan to Improve Women's Representation in the Public Sector.

A legal system focused on the Comprehensive National Territorial Plans was established in 1972 and continues to implement an integrated, balanced national development policy. Balanced development is managed via a presidential committee that seeks to maintain the national agenda consistently. In terms of space, housing and urban development plans are carried forward in various ways through urban development projects. Additionally, numerous policies and projects are undertaken depending on the changing socioeconomic conditions. Measures include selecting cities of culture, carrying out urban regeneration projects, enhancing the competencies of urban planners, and conducting other policies and projects that consider small— and medium—sized cities.

# Decentralize to enable subnational and local governments to undertake their assigned responsibilities

Local governments, which play a key role in local autonomy in South Korea, are closely connected to residents' lives. Local governments refer to organizations formed by residents in accordance with the law and are qualified as public corporations. These can be categorized into two general types: upper-level local governments (e.g., special cities, metropolitan cities, special self-governing cities, provinces, special self-governing provinces) and lower-level local governments at the gu (district), si (city), autonomous gu (autonomous district), and gun (county) levels. As a result of examining the ratio of local public officials according to the composition of local governments, local public officials account for 33.8% of all public officials: 313,588 (27.4%) in local autonomy general service and 73,865 (6.4%) in education autonomy general service.

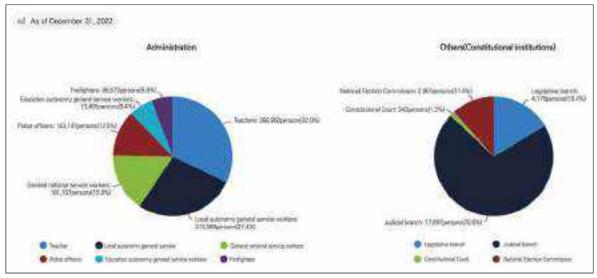


Figure 56 | Status of public officials

Source: Government Organization Management https://www.org.go.kr/psncpa/pbsvnt/selectAll.do (final search on July 14, 2023)

In terms of decentralization, the central government has implemented a policy of transferring central administrative authority to local governments for local autonomy, which began with the formation of local councils in 1991. Since then, the tasks and authority of local governments have continued to expand. Regarding the transfer of administrative authority, the ratio of central administrative agencies is higher than that of local governments. Since the implementation of local autonomy, there have been continuous efforts to transfer central administrative authority to local governments

nationwide. The ratio between national and local affairs was 80:20 in 2009, and that between national and local affairs was 67.7:32.3 in 2013, indicating an increase in the ratio of local affairs. This is the result of transferring many of the national affairs actually delegated to local governments or handled jointly and affairs that were the nation's administrative authority to local governments. However, the ratio between national and local affairs changed to 65.5:34.5 in 2017. In addition to transferring central government affairs to local governments, the central government is striving to shift more substantial authority to local governments. To that end, it has established the Act on Price Stabilization for Full-Scale Local Transfer of the Central Administrative Authority and Affairs, which partially amends 46 Acts (hereinafter referred to as the Full-Scale Local Transfer Act) and is implementing a plan to fully transfer 400 affairs specified in 46 Acts to local governments<sup>22)</sup>.

As for the current status of legal systems regarding urban planning for transferring legislative authority, legislative decentralization has been extended since 1991, as ordinances could be established only within the scope of general and administrative legislation (e.g., enforcement ordinances and regulations). Guidelines for establishing urban master plans and urban / gun (county) management plans have been legally established so that the head of a si (city) / gun (county) formulates the urban master (management) plan and has it approved through the deliberation of the local urban planning committee after consulting with relevant administrative agencies, indicating a foundation for legislative decentralization. As of 2022, excluding 34 out of 127 si (city) / gun (county) local governments, 93 local governments were in the process of establishing urban or gun (county) master plans, and 160 local governments were creating urban management plans.

<sup>22)</sup> On November 29, 2019, the House Steering Committee held a general meeting and passed a bill that included the Act on Price Stabilization for Full-Scale Local Transfer of the Central Administrative Authority and Affairs (Full-Scale Local Transfer Act) to amend 46 Acts partially. Major affairs to be transferred include the development and management of locally managed ports, approval for the establishment of foreign educational institutions, and authorization for the establishment of community credit cooperatives. The government also plans to calculate and support human resources and costs required to perform the transferred affairs. The passage of the Full-Scale Local Transfer Act is expected to expand the authority of local governments so that they can meet residents' needs promptly and effectively. The government had initially submitted the Act with 571 affairs to transfer; nonetheless, this was adjusted to 400 affairs during deliberation at the National Assembly.

Table 25 | Cities establishing urban or gun (county) master plans

Year	Total	Si (city) level	Gun (county) level	Not established
2018	128	85	43	34
2019	127	85	42	35
2020	128	85	43	34
2021	127	84	43	34
2022	127	84	43	34

Note 1: "Si (city) level" and "gun (county) level" refer to cities and guns (counties) among local governments.

Note 2: Total by year refers to the number of local governments that established the urban or gun (county) master (management) plan in that year.

Source: EUM website, 2022 Urban Planning Statistics https://www.eum.go.kr/web/cp/st/stUpisStatDet.jsp

Table 26 | Cities establishing urban or gun (county) management plans

Year	Total	Si (city) level	Gun (county) level
2018	162	85	77
2019	162	85	77
2020	162	85	77
2021	161	84	77
2022	160	84	76

Note 1: "Si (city) level" and "gun (county) level" refer to cities and guns (counties) among local governments.

Note 2: Total by year refers to the number of local governments that established the urban or gun (county) master (management) plan in that year.

Source: EUM website, 2022 Urban Planning Statistics https://www.eum.go.kr/web/cp/st/stUpisStatDet.jsp

The consolidated financial independence ratio represents the proportion of own income among the consolidated financial earnings of local governments and is an indicator<sup>23)</sup> showing the autonomy of local finance operations. The national average (net) consolidated financial independence ratio as of 2023 was 48.1%<sup>24)</sup>, representing a 1.5% decrease annually. The average (total) consolidated financial independence ratio by local government was 57.4% for special, metropolitan, and special self-governing cities, 35.7% for provinces and special self-governing provinces, 33.4% for cities, 13.6% for gun (counties), and 26.4% for autonomous gu (districts). Despite the implementation of the financial decentralization plan, the average national consolidated financial independence ratio by year over the past seven years decreased slightly, from 54.2% in 2017 to 48.1% in 2023. A low financial independence ratio is a serious threat to decentralization, and local financial poverty causes side effects such as deterioration of urban infrastructure management competency.

<sup>23)</sup> The consolidated financial independence ratio is the ratio of the sum of current income, capital income, and loan recovery among consolidated financial earnings converted into a percentage.

<sup>24)</sup> This is the arithmetic average of the consolidated financial independence ratio of local governments nationwide.

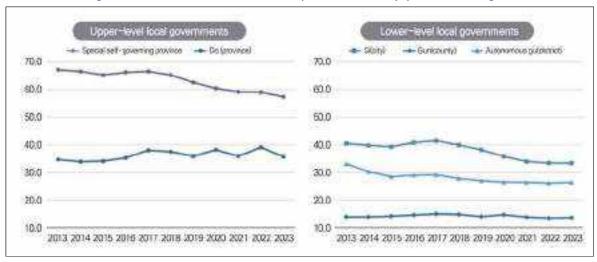


Table 27 | Changes in the consolidated financial independence ratio by year and local government

Source: Note: Average by city and province is based on general accounts + special accounts + net funds; average by local government is based on general accounts + special accounts + gross funds.

Source: Created based on "Subnational Governments Integrated Finance Overview" by the Ministry of the Interior and Safety in each year; as cited in National Assembly Budget Office, 2023, 2023, Local Finance of South Korea, p. 109.

The consolidated financial autonomy ratio represents the proportion of actual independent financial resources (e.g., own income and transfer income excluding subsidies among the consolidated financial earnings of local governments). The consolidated financial autonomy ratio differs from the consolidated financial independence ratio in that financial power is calculated by including local subsidies and grants-in-aid for adjustment excluding subsidies among transfer income. The national average consolidated financial autonomy ratio as of 2023 was 70.9%, showing a 1.1% decrease annually. The average consolidated financial autonomy ratio by local government was 65.8% for special, metropolitan, and special self-governing cities, 47.2% for provinces and special self-governing provinces, 61.8% for cities, 62.3% for gun (counties), and 42.9% for autonomous gu (districts). The consolidated financial autonomy ratio by year over the past seven years also decreased slightly—from 74.1% in 2017 to 70.9% in 2023.

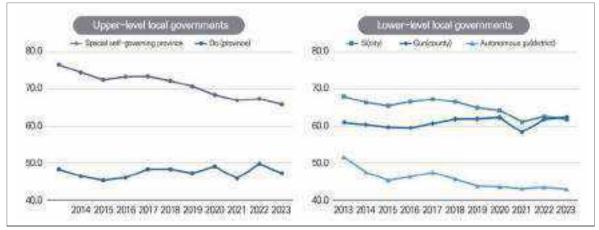


Figure 57 | Changes in the financial autonomy ratio nationwide

Source: Note: Average by city and province is based on general accounts + special accounts + net funds. The average by local government is based on general accounts + special accounts + gross funds.

Source: Created based on "Subnational Governments Integrated Finance Overview" by the Ministry of the Interior and Safety in each year; as cited in National Assembly Budget Office 2023, Local Finance of South Korea, p. 110.

## • (Related policy) Special autonomy

Special autonomy is a concept contrary to general autonomy, and there is a growing demand for expansion of special self-governing cities in the sense of transferring central authority to local governments.<sup>25)</sup> The system of special self-governing cities and provinces originates from the special structure of local governments (Geum & Park, 2019). Moreover, the diversification of local autonomy indicates the special case of institutional operations and support systems of local autonomy applied to local governments, which is distinctly different from general autonomy.

- The Local Autonomy Act comprises 211 articles in 12 sections. Section 1 covers General Provisions, with items such as General Principles, Residents, Municipal Ordinances and Municipal Rules, Elections, Local Councils, Local Executive Agencies, Financial Affairs, Relationship among Local Governments, Guidance for and Supervision of the State, Administrative Special Cases of Seoul Special Metropolitan City and Other Large Cities, Sejong Special Self-Governing City and Jeju Special Self-Governing Province, and Special-Purpose Local Government. The legal basis for Administrative Special Cases of Seoul Special Metropolitan City and Other Large Cities and Sejong Special Self-Governing City and Jeju Special Self-Governing Province is stated in Article 197 (2), which describes special self-governing cities and provinces. Furthermore, "distinctive administrative

<sup>25)</sup> South Korea Research Institute for Local Administration, 2022, Research on the Operating Direction for Special Self-governing Cities and Provinces

systems" are provided by law as the condition for recognition of such special cases.

- As of December 2023, there were three special self-governing cities and provinces in operation in South Korea—Jeju Special Self-Governing Province, Sejong Special Self-Governing City, and Gangwon Special Self-Governing Province. The establishment of special self-governing cities and provinces is based on a separate legal foundation, and the special cases applied to special self-governing cities and provinces are based on the Local Autonomy Act.
- Jeju Special Self-Governing Province is based on the Special Act on the Establishment of Jeju Special Self-governing Province and the Development of Free International City (2006). Sejong Special Self-Governing City is based on the Special Act on the Establishment of Sejong Special Self-Governing City (2010). Finally, Gangwon Special Self-Governing Province is based on the Special Act on the Establishment of Gangwon Special Self-Governing Province. In sum, 23 articles cover the three self-governing cities and provinces in operation. The laws underlying Jeju Special Self-Governing Province, Sejong Special Self-Governing City, and Gangwon Special Self-Governing Province require the enactment of a special act on establishment and operation. The regulations on the types of local governments are separately provided in the Local Autonomy Act.
- (Related policy) Authority for autonomous organization<sup>26)</sup>

A Special-Purpose Local Government is established for two or more local governments to conduct "special affairs" jointly and is a concept distinct from general local governments.

- Special-purpose local governments were developed to handle various affairs (e.g., public transportation planning, waste disposal, water management, metropolitan medical care, and metropolitan environmental conservation), as the need to manage extensive affairs was raised with the expansion of decentralization. Special-purpose local governments have juristic personality and can independently organize councils and executive agencies to handle affairs under their jurisdiction and manage their finances. Regulations on the establishment and operation of special-purpose local governments are provided in Chapter 12 of the Local Autonomy Act, amended in 2021.
  - ▶ Special-purpose local governments are established after constituent local governments formulate rules following resolutions by the respective local councils and obtain approval from the Minister of the Interior and Safety. Special-purpose

local governments have juristic personality, and the jurisdiction of a Special-Purpose Local Government is generally the sum of the jurisdictions of the constituent local governments. Notably, special-purpose local governments can independently organize councils and executive agencies to handle affairs under their jurisdiction and manage their finances. If a special-purpose local government is established to conduct affairs under its jurisdiction regarding public transport or waste disposal, the authority to establish related master plans or manage the finances is delegated to the special-purpose local government.

- ▶ The council of a special-purpose local government comprises council members of the constituent local governments, and council members of the constituent local governments may hold office concurrently. Moreover, the head of a special-purpose local government can be elected by the council of the special-purpose local government, and the head of a constituent local government may concurrently hold the office of head of the special-purpose local government.
- In accordance with the amendment of the Local Autonomy Act in 2021, plans have been established to install special-purpose local governments nationwide. For upper-level governments, Busan City, Ulsan City, South Gyeongsang Province, Daegu City, North Gyeongsang Province, Gwangju City, South Jeolla Province, and Chungcheong Province are preparing to establish special-purpose local governments. For lower-level governments, the Jirisan Mountain areas (South Gyeongsang Province, Hamyang County, Hadong County, Sancheong County; North Jeolla Province, Namwon, Jangsu County; Jeonnam Gurye County, etc.), the Gyeonggi Province Nambu Union (Suwon, Seongnam, Yongin, Hwaseong, Pyeongtaek, Anseong, Icheon, etc.), and the Border Area-DMZ Special Union (Gyeonggi Province, Yeoncheon County, Paju City, Gimpo City; Gangwon Province, Cheorwon City, Hwacheon City, Yanggu City, Inje City, Goseong County; Incheon City Ganghwa City, Ongjin County, etc.) are preparing to do the same.

## • (Related policy) Discussions on megacities

Discussions on megacities, as part of the administrative district reorganization plans, are actively being conducted with a focus on Bu-Ul-Gyeong and Seoul.<sup>27)</sup> On April 18, 2022, for the first time in South Korea, the Busan-Ulsan-South Gyeongsang Province Special Union (hereinafter referred to as Bu-Ul-Gyeong Special Union or Bu-Ul-Gyeong Megacity) was officially established through resolutions by local councils of local

<sup>27)</sup> https://www.erc.re.kr/webzine/vol38/sub16.jsp https://blog.naver.com/PostView.naver?blogId=koti10&logNo=222857835590

governments and approval from the Ministry of the Interior and Safety. Bu-Ul-Gyeong Special Union is based on Article 199 of the fully amended Local Autonomy Act and is a type of special-purpose union aimed at functional cooperation between metropolitan governments.

- Since the second half of 2023, discussions have been underway to incorporate the lower-level nearby local governments of Gyeonggi Province (e.g., Gimpo City) into Seoul and form a competitive mega-regional economic and living area centered on local metropolitan areas. In October 2023, the government established the 1<sup>st</sup> Comprehensive Plan for the Local Era (2023–2027) and presented the "4+3 Mega-Region Specialized Development Strategies" to nurture the four major local mega-regions (Busan City in South Gyeongsang Province, Ulsan City in Chungcheong Province, Gwangju City in South Jeolla Province, and Daegu City in North Gyeongsang Province) and the three major special self-governing provinces (Gangwon, North Jeolla, and Jeju).

#### • (Related policy) Special zone system

The "special zone system" can be understood as an institutional matter that regulates zoning standards, development plans, and support matters regarding the designation of special zones. The most typical special zones in South Korea are free economic zones and special tourist zones.<sup>28)</sup>

- The free economic zone system, one of the first special economic zones to be initiated, was introduced by the national government to enable South Korea to take the lead in economic development (Lee et al., 2008; p. 181). To date, the most well-known special zones are special economic zones for specialized regional development, also referred to as "regional special zones." Balanced regional development has emerged as a new topic upon entering economic maturity after compressed economic growth. In response, special economic zones for specialized regional development have been newly adopted as a system for local governments to take the lead in formulating strategies and plans to revitalize the regional economy, supported by the national government.
- Until the 2000s, various special zone systems focused on economic revitalization (e.g., special tourist zones, free economic zones, special economic zones for specialized regional development, and special R&D zones) were adopted. The special zone system was also actively adopted as a planning tool to maximize the

<sup>28)</sup> Park, 2023, A Study on the Effective Operation of Special Zone System through Comparative Analysis, KRIHS Policy Brief, Vol. 931.

- architectural features within one region, such as special planning and building zones.
- From the 2010s, systems to induce land use complexity were fully adopted through the amendment of the National Land Planning and Utilization Act. Some examples include areas under minimal site restrictions and complex development promotion districts. In 2019, the innovation district system was adopted through the amendment of the Special Act on Promotion of and Support for Urban Regeneration, and the concept of innovation district that had been introduced several times in cases overseas began to be fully adopted and institutionalized in South Korea. After its adoption, the system began to be used as a means to create a complex space utilizing locational benefits and local resources of the declining original downtown area. With the recent inauguration of the Yoon Suk-yeol administration, there has been an emphasis on promoting urban regeneration projects through choice and concentration via the innovation district system. The adoption of various urban functions targeting specific areas (e.g., downtown) or the introduction of systems for complex use of facilities has been discussed since the 2010s and was actively discussed in 2022.
- Since the launch of the Presidential Committee for Decentralization and Balanced Development, the government has institutionalized four special zone systems—special urban convergence zones, special opportunity and development zones, special education development zones, and special culture zones—to support specialized regional development. In particular, the special urban convergence zone is a project that aims to create a growth base in which jobs, leisure, and housing are integrated into the urban center of a local metropolitan city. A special urban convergence zone allows creative urban planning and development and promotes corporate settlement and start-ups in association with other special zones. Special urban convergence zones are currently being carried forward in five major metropolitan cities: Daegu, Gwangju, Daejeon, Busan, and Ulsan.
- Meanwhile, the government began implementing an urban policy for compressed and complex use of urban space beyond the conventional urban management system through the Urban Planning Innovation Method in January 2023. Recently, by amending the National Land Planning and Utilization Act, the government established an institutional framework by adopting the concepts of "white zone," which enables creative urban planning, "complex use zone," which integrates multiple uses (e.g., residential, commercial, and industrial), and "multi-dimensional"

and complex zone for urban planning facilities," in which urban planning facilities and amenities are formed in one place.

# Link urban policies to finance mechanisms and budgets

#### • (Related policy) Government-funded projects

Each department of the central government is progressing government-funded projects by matching central government and local funds to conduct various urban development, improvement, and regeneration projects for successful urban policies. As of 2023, projects under the jurisdiction of the central government related to urban policies were being carried forward throughout all central administrative departments, including the following: Ministry of Land, Infrastructure and Transport; Ministry of Culture, Sports and Tourism; Cultural Heritage Administration; Ministry of Small and Medium-sized Enterprises (SMEs) and Start-ups; Ministry of Environment; South Korea Forest Service; Ministry of the Interior and Safety; Ministry of Employment and Labor; Ministry of Agriculture, Food and Rural Affairs; Rural Development Administration; Ministry of Oceans and Fisheries; Ministry of Trade, Industry and Energy; Ministry of Justice; National Police Agency; Ministry of Education; Ministry of Gender Equality and Family; Ministry of Health and Welfare; Ministry of Science and Information and Communication Technology (ICT).

Table 28 | Examples of government-funded projects related to urban policies

Department	Major project
Ministry of Land, Infrastructure and Transport	<ul> <li>Architectural landscape specialization project</li> <li>Architectural asset promotion zone</li> <li>Happy neighborhood project (home repair linked to alleyways)</li> <li>Happy neighborhood project (home repair linked to alleyways)</li> <li>Regional Vitality Town, etc.</li> </ul>
Ministry of Culture, Sports and Tourism	<ul> <li>Cities of culture creation project</li> <li>Project to create a living and cultural facilities</li> <li>Cultural regeneration project for idle spaces such as abandoned industrial facilities</li> <li>Support for humanities programs at living and cultural facilities</li> <li>Cultural Impact Assessment Creating an open tourism environment</li> <li>Creating an open tourism environment</li> <li>Creating happy spaces through public design</li> <li>Regeneration of old tourist facilities by applying cultural contents</li> <li>Village art project</li> </ul>
Cultural Heritage Administration	<ul> <li>Transformation of modern cultural heritage into tourism resources</li> <li>Project involving cultural heritage experts</li> <li>SaengSaeng Cultural Heritage</li> <li>Historical and cultural area historical and cultural environment maintenance and development project, etc.</li> </ul>

Department		Major project	
Ministry of SMEs and Start-ups	Cultivating specialized markets     Nurturing young merchants     (creating and revitalizing youth	estalling and operating a	Constructing knowledge industry centers Supporting revitalization of local innovative start-ups, etc.
Ministry of Environment	areas pro Preventing environmental • Ur	rban micro-ecosystem upport project	Support for building hydrogen charging stations Recycling and upcycling center installation project, etc.
South Korea Forest Service	, ,	Vood-friendly city evelopment project, etc.	
Ministry of the Interior and Safety	Village enterprise development    Su		Youth village development project, etc.
Ministry of Employment and Labor	Support for job creation tailored • Mi to local industries	finistry-type preliminary social nterprises, etc.	
Ministry of Agriculture, Food and Rural Affairs	General agricultural and fishing village development projects, etc.		
Rural Development Administration	Urban agriculture and healing agriculture technology development, etc.		
Ministry of Oceans and Fisheries	Port redevelopment project	ishing Village New Deal 300	General agricultural and fishing village development projects, etc.
Ministry of Trade, Industry and Energy	Industrial complex environment • Ne creation project su	ew renewable energy supply upport project, etc.	
Ministry of Justice	Crime prevention, environmental improvement, etc.	apport project, etc.	
National Police Agency	Urban Regeneration New Deal project, crime prevention consulting, etc.		
Ministry of Education	construction of school facilities do	onstruction of public and joint ormitories for university tudents	Future education autonomy cooperation district, etc.
Ministry of Gender		peration of cooperative nildcare places, etc.	
Equality and Family  Ministry of Health and Welfare	Establishment of national and su public daycare centers an Together Care Center	ilot project for integrated	Social security special support zone project, etc.

Source: Ministry of Land, Infrastructure and Transport, 2023, Joint projects on urban regeneration by several departments.

# Develop legal and policy frameworks to enhance governments' ability to implement urban policies

South Korea has established a legal foundation by setting up an urban planning system. The previous national land planning system was based on the Act on Comprehensive Plans for Construction in the National Territory, the Act on the Utilization and Management of the National Territory, and the Urban Planning Act. As land use regulations and development activity permits were implemented through approximately 90 individual laws, it was difficult to plan and manage national land consistently and efficiently, resulting in reckless development of national land.

To prevent reckless development of national land and seek sustainable development by reforming the national land and land utilization plan system, the Act on Comprehensive Plans for Construction in the National Territory, which is likely a procedural law of the Comprehensive Plans for Construction in the National Territory, was reorganized as the Framework Act on the National Land in 2003. The new Act concerns matters related to basic ideas for environmentally-friendly management and balanced development of national land and the creation of competitive conditions of national land. It also clarifies the national land planning system by specifying that a comprehensive national land plan must form the basis for provincial, city, and county plans, that sector plans and regional plans must be in harmony with the comprehensive national land plan, and that a provincial comprehensive plan must form the basis for si (city) / gun (county) comprehensive plans, to be formulated within the jurisdictional area of the relevant do (province). By substituting the si (city) / gun (county) comprehensive plan with the urban or gun (county) master or management plans, which are urban plans established according to the National Land Planning and Utilization Act, the national land planning system is systemized from the comprehensive national land plan to the urban or gun (county) management plans.

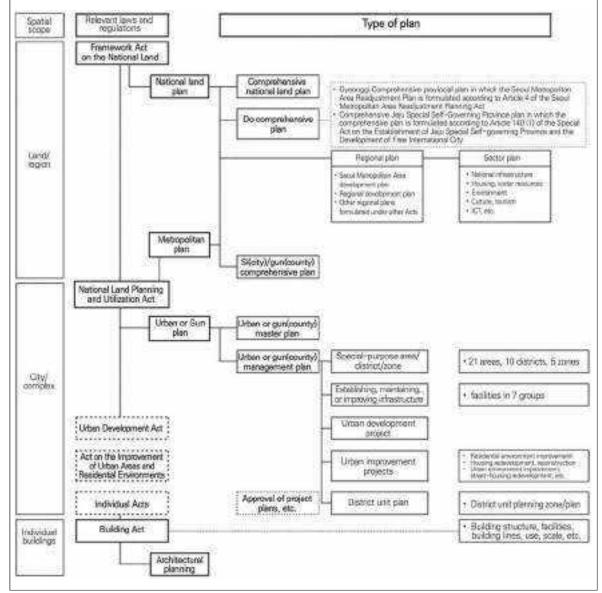


Figure 58 | Diagram of the national land planning system

Source: Gyeonggi Province, 2022 Land-Related Laws and Regulations, p. 1.

# Build the capacity of local and subnational governments to implement local and metropolitan multilevel governance

To implement local and metropolitan multilevel governance, a legal system was established so that local governments could independently promote urban policies by establishing a local urban planning committee and a permanent urban planning group. A local urban planning committee is a decision-making body based on the National Land Planning and Utilization Act that deliberates and advises on matters regarding urban planning (e.g., making urban master plans and determining urban management

plans) and is divided into central and local urban planning committees. Local urban planning committees are further divided into do (provincial), special city, metropolitan city, gun (county), si (city), and gu (district) urban planning committees. In addition to the typical urban planning committees in urban planning, there are other specialized governance systems for each field. Examples include the urban regeneration, urban renewal, market improvement project deliberation, and building committees. The permanent urban planning group or the standing planning office for urban planning is based on Article 111 (Expert Members), Article 113 (Local Urban Planning Committees), and Article 116 (Permanent Urban or Gun [County] Planning Groups) of the National Land Planning and Utilization Act. They refer to an organization composed of expert members set up in a local urban or gun (county) planning committee to examine a metropolitan plan, an urban or gun (county) master plan, or an urban or gun (county) management plan drafted by the head of a local government. Such an organization conducts planning, instruction, investigations, or research on a metropolitan plan, an urban or gun (county) master plan, or an urban or gun (county) management plan entrusted by the head of a local government (for gun (county), it is referred to as a permanent gun [county] planning group). The details are determined by the municipal ordinance of the relevant local government.

For metropolitan multilevel governance, the Seoul Metropolitan Area Readjustment Committee and the Metropolitan Transport Commission are in operation. The Seoul Metropolitan Area Readjustment Committee was established under the jurisdiction of the Minister of Land, Infrastructure and Transport to deliberate on important policies related to the readjustment and sound development of the Seoul Metropolitan Area based on Articles 21, 22, and 23 of the Seoul Metropolitan Area Readjustment Planning Act. The Seoul Metropolitan Area Readjustment Working Committee, which comprises public officials of the relevant administrative agencies and persons with abundant knowledge and experience relating to the Seoul Metropolitan Area readjustment policies, must be established within the Seoul Metropolitan Area Readjustment Committee. The Metropolitan Transport Commission was established under the Ministry of Land, Infrastructure and Transport to oversee metropolitan transport planning in five metropolitan areas, including the Seoul Metropolitan Area, reach agreements with local governments for each project, and establish an efficient metropolitan transport administrative system, with its committees, headquarters, and local government working committees for each region working in collaboration.

# Implement participatory-, age- and gender-responsive approaches to urban policy and planning

#### • (Related policy) Urban Sustainability Assessment

To encourage participation in the implementation of urban systems and plans, the Ministry of Land, Infrastructure and Transport prepares the "ratio of budget to promote resident participation" as one of the items for the "Urban Sustainability Assessment," an annual statutory assessment, ensuring resident participation. However, it is difficult to distinguish the budgets of various projects related to encouraging resident participation, such as urban universities for citizens and village development projects.

Table 29 | Urban Sustainability Assessment index: Ratio of budget to promote resident participation

Indicator	Ratio of budget to promote resident participation					
Data	<ul> <li>Budget to promote resident participation</li> <li>Amount of budget spent to promote resident participation (e.g., urban universities for citizens and village development projects)</li> <li>Does not refer to the budget determined by the participatory budgeting system but the budget used to promote resident participation</li> <li>Limited to the relevant budget for which documentary evidence exists</li> <li>Whether the submitted budget is related to resident participation is ultimately validated by the Ministry of Land, Infrastructure and Transport</li> </ul>					
Source	Individual local governments					
Format	Local governments	Budget to promote resident participation(KRW)  (A)	Total expenditure (KRW) (B)	Indicator (A/B)		

Source: Assessment of Sustainability of Cities and Level of Living Infrastructure Guidelines [Implemented on July 15, 2022.]
[Instruction No. 1540, July 15, 2022 complete amendment] [Appendix 2] Collection and establishment of assessment data

## • (Related policy) National Resident Autonomy Expo

National Resident Autonomy Expo is a national event hosted by Citizen Union for Open Society, Ministry of the Interior and Safety, and local governments. It has been held 21 times from 2001 to 2022 to identify and disseminate best practices of the eup (city with > 500,000 residents) / myeon (township) / dong (neighborhood) residents' associations and provide a venue for exchange and learning among residents. As the only national event related to resident autonomy in South Korea, this expo has contributed to creating an environment to promote resident self-sufficiency, improving the resident autonomy system led by local governments, and disseminating innovative cases by introducing best practices of resident autonomy in South Korea annually and

holding related academic events. Some of the categories of best practices of resident autonomy discovered include resident autonomy, regional revitalization, learning community, resident organization network, special contest, and institutional policy, which were exhibited and distributed in a book of collections. However, the National Resident Autonomy Expo was downgraded to a side event of the "Local Era Expo" in 2022 and has no longer taken the format of a contest since 2023, such as holding contests of best practices of resident autonomy or setting up booths for each eup (city with  $\rangle$  500,000 residents) / myeon (township) / dong (neighborhood) resident association. Its current form involves sharing cases of resident participation instead of direct engagement of eup (city with  $\rangle$  500,000 residents) / myeon (township) / dong (neighborhood) residents' associations, and the host of the event was changed from the Ministry of the Interior and Safety to the Presidential Committee for Decentralization and Balanced Development. Thus, this event is undergoing a transitional period in which the scale and content of the event are changing.

Figure 59 | The 21st National Resident Autonomy Expo website (left), collection of best practices (right)

Source: The 21st National Resident Autonomy Expo website https://juminexpo.kr/home (final search on January 29, 2024)

Since 2010, the government has been carrying forward a project to develop women-friendly cities based on Article 39 of the Framework Act on Gender Equality. Women-friendly cities refer to cities where women and men equally participate in regional policies and development processes to ensure the activity competence of local communities as well as healthcare/welfare and safety.

Table 30 | Designation of women-friendly cities (as of January 2023)

Davi	Total	Designated city					
Region	Total	Newly designated	Phase 1	Phase 2	Phase 3		
Total	101	25	35	36	5		
Seoul Special City	13	Dobong District, Mapo District, Seodaemun District	Yongsan District, Gwanak District, Geumcheon District, Dongdaemun District, Dongjak District, Jongno District	Seocho District, Songpa District, Eunpyeong District, Seongdong District	-		
Busan Metropolitan City	5	-	-	Buk District, Suyeong District, Nam District, Geumjeong District, Saha District	-		
Daegu Metropolitan City	3	Dalseo District, Suseong District	Dalseong County	_	-		
Incheon Metropolitan City	6	Bupyeong District	Jung District, Namdong District	Dong District, Michuhol District, Yeonsu District	-		
Gwangju Metropolitan City	4	Gwangsan District, Seo District	_	_	Dong District, Buk District		
Daejeon Metropolitan City	5	-	Jung District	Dong District, Yuseong District, Seo District, Daedeok District	-		
Ulsan Metropolitan City	-	_	_	-	-		
Sejong Special Self-Governing City	1	-	-	Sejong Special Self-Governing City	-		
Gyeonggi -do	14	Suwon City, Anyang City, Uijeongbu City, Hwaseong City	Osan City, Uiwang City, Icheon City, Paju City, Hanam City	Seongnam City, Gwangmyeong City, Yongin City, Goyang City, Bucheon City	-		
Gangwon -do	7	Sokcho City	Taebaek City, Hongcheon County, Samcheok City, Chuncheon City	Hoengseong County, Wonju City	-		
Chungcheong buk-do	7	Eumseong County, Chungju City	Goesan County, Jincheon County	Jeungpyeong County, Jecheon City	Cheongju City		
Chungcheong nam-do	10	Dangjin City, Buyeo County	Seocheon County, Gongju City, Yesan County, Cheonan City	Seosan City, Boryeong City, Hongseong County	Asan City		
Jeollabuk-do	3		Sunchang County, Gochang County	Namwon City	-		
Jeollanam-do	9	Gwangyang City,	Naju City, Yeongam	Suncheon City, Gangjin	-		

Dogion	Total	Designated city					
Region	Total	Newly designated	Phase 1	Phase 2	Phase 3		
		Yeosu City, Jangheung County, Haenam County	County, Hwasun County	County			
Gyeongsangbuk-do	6	Pohang City	Gyeongju City, Gimcheon City	Gumi City, Gyeongsan City, Chilgok County	-		
Gyeongsangnam-do	7	Gimhae City, Sacheon City	Namhae County, Goseong County, Jinju City	Changwon City	Yangsan City		
Jeju-do	1	Jeju Special Self-Governing Province	-	-	-		

Source: Ministry of Gender Equality and Family http://www.mogef.go.kr/mp/pcd/mp\_pcd\_s001d.do?mid=plc500&bbtSn=704875 (final search on July 27, 2023)

• (Associated indicator) K-SDG 11-3. Enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management.

According to an analysis by the Ministry of Land, Infrastructure and Transport and the Ministry of the Interior and Safety, it is necessary to respond to social consensus on the need for national land and urban policies that can achieve sustainable development and enable citizens to enjoy happy lives in preparation for the transition to an era of population decline and low growth. Further, there is a need to promote communication and participation in the planning and execution process and improve awareness of policy implementation in accordance with the changing policy environment, including decentralization, private sector growth, and increased demand for citizen participation.

In this regard, the South Korean government has adopted and is currently promoting the expansion of citizen participation in the planning and execution process and democratic coordination and management of policy conflicts as policy tasks. First, regarding the expansion of citizen participation in the planning and execution process, the government is seeking to establish and systematically operate governance to promote public-private communication as well as a citizen-led administrative participation system (institutionalizing deliberative democracy, establishing a citizen participatory policy platform, etc.). The government is also collecting public opinions on major issues (e.g., the future image of national territory and core values, balanced development and local autonomy, and the environment and development) by organizing and operating a citizen participatory policy platform and citizen participatory group. Moreover, a

national territory monitoring system was adopted in the "5<sup>th</sup> Comprehensive National Territorial Plan" (2020–2040) to provide the foundation for evidence-based national territory and urban policy implementation, as emphasized by the OECD. National territory monitoring is a system that divides the national territory into 1 km × 1 km units and analyzes population activities to identify regional populations, industrial bases, and the interdependence between bases. This provides the basis for designing and establishing efficient national land and urban planning and serves as a foundation for objectively evaluating and providing feedback by monitoring the effects. Second, to achieve democratic coordination and manage policy conflicts effectively, the government is establishing preventive and management measures for various conflicts that may arise in the process of establishing and executing a plan, including issues likely to generate conflicts. Moreover, it is developing resident participatory projects to resolve community issues, such as consensus meetings, citizen juries, citizen participatory planning, and participatory budgeting.

Although the "ratio of budget to promote resident participation" is a related indicator, the current values and targets are not provided because there are no relevant statistics.

## Achieve women's full participation in all fields and levels of decision-making

In November 2017, the government finalized the "5-Year Roadmap to Improve Women's Representation in the Public Sector" at the Cabinet meeting and presented the target for adopting female executive officers in the public sector. The Ministry of Gender Equality and Family has established the Plan to Improve Women's Representation in the Public Sector (2018–2022) according to Article 21 (Participation in Policy-Making Processes) of the Framework Act on Gender Equality (Nov. 2017). According to the inspection of the results for implementing the Plan to Improve Women's Representation in the Public Sector announced by the Ministry of Gender Equality and Family in March 2023, the targets for each field were achieved every year. Accordingly, the target for 2022 was increased compared to the 2017 plan. The implementation results will be monitored continuously in the future.

Table 31 | Implementation status and target of each category for improving women's representation in the public sector

	Category			2021 result (%)	2022 target (%)
		Senior civil service officials	8.5	10	10.2
Public officials	State	HQ manager level (Grade 4 or higher)	22.8	24.4	25.0
Officials	Local	Manager level (Grade 5 or higher)	20.8	24.3	24.5
Public		Executive officers	22.1	22.5	23.0
institutions		Managers	26.4	27.8	28.0
Local public enterprises		Managers	10.6	11.8	12.0
Faculty.	Profes	sors at national universities	18.1	18.9	19.1
Faculty	Princ	cipals and vice-principals	44.5	45.8	46.0
Military		Military officers	7.5	8.2	8.8
Dalias		Police officers	13.4	14.2	15.0
Police Coast guard officers		13.2	14.5	14.6	
	Governm	nent committees	43.2	42.4	40.0

Source: Ministry of Gender Equality and Family, https://www.mogef.go.kr/sp/geq/sp\_geq\_f003.do (final search on October 17, 2023)

The historical proportion of women in the upper- and lower-level local councils shows that the proportion of women has been continuously increasing in local constituencies and proportional representation. By region, the proportion of women in proportional representation accounts for over 60% and 90% in upper-level and lower-level councils, respectively, providing evidence that the nomination of female candidates on the party list is being implemented in principle. However, the proportion of women in local constituencies is 14.76% and 24.99% in upper-level and lower-level councils, respectively—the nomination rate of female candidates through local constituencies remains low.

Table 32 | Historical proportion of women in the upper- and lower-level local councils

	Upper-level local council				Lower-level local council			
Local election	Local constituencies				Local constituencies		Proportional representation	
election	Women	Proportion of women	Women	Proportion of women	Women	Proportion of women	Women	Proportion of women
1995 (1st)	12	1.4	42	44.2	72	1.6	-	-
1998 (2nd)	14	2.3	27	36.5	56	1.6	ı	-
2002 (3rd)	14	2.3	49	67.1	77	2.2		-

		Upper-level	local cou	ncil	Lower-level local council			
Local election	Local Proportional constituencies representation			Local con	stituencies	Proportional representation		
GIGGLIOIT	Women	Proportion of women	Women	Proportion of women	Women	Proportion of women	Women	Proportion of women
2006 (4 <sup>th</sup> )	32	4.9	57	73.1	110	4.4	327	87.2
2010 (5 <sup>th</sup> )	55	8.1	58	71.6	274	10.9	352	93.6
2014 (6 <sup>th</sup> )	58	8.2	55	65.5	369	14.6	363	95.8
2018 (7 <sup>th</sup> )	98	13.3	62	71.3	526	20.7	374	97.1
2022 (8 <sup>th</sup> )	115	14.76	58	62.37	650	24.99	348	90.16

Source: National Election Commission Election Statistics System http://info.nec.go.kr/ (searched on June 15, 2022.); as cited in Kim, 2022, The 8th local elections and the representation of women trapped in the glass ceiling of political parties, Gender Review 2022 Summer Issue, South Korean Women's Development Institute, p. 45.

• (Associated indicator and policy task) K-SDG 5-4. Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life

According to an analysis by the Ministry of Gender Equality and Family, women's representation in politics and the public sector is gradually expanding, and the female participation rate in decision-making is improving but remains low. Thus, the government must make continuous efforts and strengthen implementation and management to improve women's representation in the public sector. In particular, the glass ceiling exists for women due to the low proportion of women managers in private enterprises. The proportions of female corporate managers and executives are only 14.5% and 3.3%, respectively, which is considerably low compared to the OECD average.

Against this backdrop, the Ministry of Gender Equality and Family is pursuing a policy task to increase women's representation in politics, the public sector, and private enterprises. First, to improve women's representation in politics and the public sector, active measures are being taken at various levels of government and public institutions, such as implementing a target system for senior civil service officials and executive officers of public institutions and increasing the proportion of women in managerial positions in national and local government offices, public institutions, and local public enterprises. Second, to improve women's representation in private enterprises, the government is providing management support for companies, such as training human resources (HR) managers or providing consultations to improve the organizational culture. Third, to improve women's leadership and political capacity, the government

is conducting private-public cooperation projects to foster and support next-generation female political leaders.

Table 33 | K-SDG 5-4 current values and targets

Indicator	Current value	Target
(1) Proportion of seats held by women in national parliaments and local council	• 2020: 19%	• 2030: Continuous increase • 2040: Continuous increase
(2) Goal achievement rate for the Plan to Improve Women's Representation in the Public Sector	<ul> <li>2020</li> <li>National public officials (Senior civil service officials): 7.9%</li> <li>National public officials (Grade 4 or higher): 20.8%</li> <li>Local public officials (Grade 5 or higher): 17.8%</li> </ul>	• 2030: 100% • 2040: Maintain 100%
(3) Proportion of women in managerial positions in the private sector	• 2019: 19.76%	• 2030: 32.4% • 2040: Continuous increase

Source: Ministry of Environment, 2022, 4th Basic Plan for Sustainable Development (Part 2), p. 96.

## 2.2 Planning and managing urban spatial development

# Implement integrated and balanced territorial development polices

To pursue integrated and balanced territorial development, South Korea has established a legal system focused on the Comprehensive National Territorial Plan, a top-level national spatial plan based on the Constitution and the Framework Act on the National Land, which sets the direction for long-term development of all national land. After the 4<sup>th</sup> Comprehensive National Territorial Plan expired in 2020, the government formulated the 5<sup>th</sup> Comprehensive National Territorial Plan for the following 20 years. In light of megatrends (e.g., population decline and changes, low economic growth, climate and environmental changes, technological innovation and intelligence in territorial and living space, participation and decentralization, and changes in domestic and international political conditions, the plan was established with the vision of "Our Land, Shared Future." The three objectives of the 5<sup>th</sup> Comprehensive National Territorial Plan are as follows: 1) balanced national territory with livable places across the country; 2) safe and sustainable smart national territory; 3) active and healthy innovative national territory, with six national development strategies to achieve them.

Table 34 | History of the Comprehensive National Territorial Plan

Plan	Objective
The 1 <sup>st</sup> Comprehensive National Territorial Plan (1972–1981)	Promote development of bases centered on the Seoul Metropolitan Area and the southeastern coastal industrial belt, with the goal of establishing infrastructure for high economic growth
The 2 <sup>nd</sup> Comprehensive National Territorial Plan (1982–1991)	Inhibit concentrated growth in the Seoul Metropolitan Area and promote regional development, with the goal of local settlement of population and improvement in the nation's natural environment
The 3 <sup>rd</sup> Comprehensive National Territorial Plan (1992–2001)	Seek decentralized territorial development by nurturing the west coast industrial zones and regional cities, with the goal of improving public welfare and preserving the land environment
The 4 <sup>th</sup> Comprehensive National Territorial Plan (2000–2020)	<ul> <li>Seek open and integrated national land through balanced development and harmony between development and environment, with the goal of regional integration and integration with Northeast Asia</li> <li>Change in period (10 years →20 years), revised plans were formulated and operated in 2006 and 2011</li> </ul>
The 5 <sup>th</sup> Comprehensive National Territorial Plan (2020–2040)	Achieve "Our Land, Shared Future" in pursuit of a farsighted policy that impacts present and future generations

Source: The Republic of Korea government, 2019, The 5<sup>th</sup> Comprehensive National Territorial Plan, p. 5.

South Korea has a presidential committee that responds to the President's advice on important policies to promote balanced national development efficiently. The Presidential Committee for Balanced National Development and the Balanced National Development Planning Group, which supports the committee, were launched on April 7, 2003, based on the Special Act on Local Government Decentralization and Balanced Regional Development. Furthermore, the Presidential Committee for Balanced National Development was extended and reformed to the Presidential Committee on Regional Development on April 12, 2010. As of 2023, the Autonomous Decentralization Committee had been integrated and renamed the Presidential Committee for Decentralization and Balanced Development. This committee is in charge of the following: ① adjusting the basic direction and related policies for local government decentralization and balanced regional development and overseeing, adjusting, inspecting, and supporting national policy tasks; ② establishing the Comprehensive Plan for the Local Era; ③ promoting, investigating, analyzing, evaluating, and adjusting balanced regional development policies and projects and local government decentralization tasks; 4 designating and supporting special opportunity and development zones; 5 relocating public institutions to the provinces, activating Innovative Cities, and determining the locations of new public institutions; 6 deliberating on the designation and development of regional innovation clusters and signing and operating regional development investment agreements. Moreover, relevant subcommittees are to be formed in each regional and local government levels so that each local government can be in charge of affairs regarding deliberation and consultation.



Figure 60 | Presidential Committee for Decentralization and Balanced Development Organizational Chart

Source: Presidential Committee for Decentralization and Balanced Development website http://www.balance.go.kr/base/contents/view?contentsNo=26&menuLevel=2&menuNo=30 (final search on July 14, 2023)

• (Related policy) Establishment of the Comprehensive Plan for the Local Era

In November 2023, the Presidential Committee for Decentralization and Balanced Development established and announced the 5-year mid-term legal plan called the "Comprehensive Plan for the Local Era" according to the Special Act on Local Government Decentralization and Balanced Regional Development (Chapter 2 Comprehensive Plan for the Local Era).

The Comprehensive Plan for the Local Era is an integrated plan that encompasses local government decentralization and balanced regional development and a pan-governmental plan jointly formulated by the central and local governments as well as the Presidential Committee for Decentralization and Balanced Development. It has the status of a top-level plan for the Local Era policy and is reviewed by the Presidential Committee for Decentralization and Balanced Development and the Cabinet, approved by the President, and reported to the National Assembly. In particular, it is significant because it integrates the 5-year national balanced development plans and comprehensive decentralization plans, which have been formulated individually since 2004, for the first time.

Figure 61 | History of the Comprehensive Plan for the Local Era



Source: Presidential Committee for Decentralization and Balanced Development, 2023, 1st Comprehensive Plan for the Local Era (2023–2027), p. 1.

The Comprehensive Plan for the Local Era is a compilation of policies and projects related to decentralization and balanced development that encompasses all government departments, with the goal of "preparing a regionally customized self-governance model by establishing a decentralized national management system." It sets the direction for projects related to decentralization and autonomy for the next five years through key tasks such as bold transfer of authority, strengthening local administrations, establishing a self-governance model, and enhancing accountability and expertise.

Table 35 | Tasks for establishing a regionally customized self-governance model in the Comprehensive Plan for the Local Era

Task	Key points
(Bold transfer of authority) Promoting bold transfer of central authority to local governments to improve residents' convenience and efficiently meet administrative demands	<ul> <li>Transferring authority such as authority for autonomous organization* and planning rights related to regional development (2023-)</li> <li>* For example, expanding autonomy when establishing local organizations and abolishing various regulations on consultations with the Ministry of the Interior and Safety</li> <li>Promoting reorganization considering redundant roles between local and special local administrative agencies</li> </ul>
(Strengthening local fiscal capacity) Strengthening the autonomy of fiscal management to promote development led by local governments and securing measures for fiscal balance between local governments for balanced development	<ul> <li>Expanding the financial scale of special accounts for local development and the proportion of local autonomous accounts that are like block grants and improving the allowable range of local tax reduction through ordinance* (Act on the Restriction of Special Local Taxation)</li> <li>* (Current) Limited allowance of support for ordinary people's lives, etc. → (Improvement) All autonomous affairs under the Local Autonomy Act</li> <li>* Considering improvement of distribution standards for general subsidies and grants-in-aid for adjustment to resolve regional imbalances</li> </ul>

Task	Key points
(Establishing a self-governance model) Upgrading the model of special self-governing cities and provinces for specialized regional development and establishing a customized collaborative system to reinforce inter-regional connection and collaboration	<ul> <li>Identifying special cases that fit the geographical and administrative characteristics* of each special self-governing city and province</li> <li>* (Jeju) Free International City, (Sejong City) Administrative City, (Gangwon Province) Global Future Industry City, (North Jeolla Province) Global Life Economy City</li> <li>Promoting special-purpose local governments that support megacities and metropolitan economic zones</li> </ul>
(Enhancing accountability and expertise) Enhancing the functions of local audit institutions to establish local accountability mechanisms and improving personnel systems to enhance local competencies	<ul> <li>Ensuring local management accountability by reinforcing the audit and assessment roles of local governments</li> <li>Increasing personnel exchanges between the central government, cities, and provinces and gu (district) / si (city) / gun (county) and establishing a customized training system (2023-)</li> </ul>

Source: Presidential Committee for Decentralization and Balanced Development, 2023, 1<sup>st</sup> Comprehensive Plan for the Local Era (2023-2027), p. 5.

# Integrate housing into urban development plans

South Korea is integrating housing into urban development plans in public development projects. Typical examples are urban and housing site development and urban improvement projects, through which urban development plans are formulated for each region, including measures related to housing, with specific systems established to carry the projects forward. An urban development project is a project implemented to build a complex or town having a single or multiple functions (e.g., residence, commerce, industries, distribution, information and communications, ecology, culture, health, and welfare) in an urban development zone. A housing site development project is a project to develop housing sites available for housing construction and residence through utilizing land collectively to contribute to the stability of national housing and the promotion of welfare by providing for the special cases of the acquisition, development, supply, and management of housing sites necessary for housing construction to solve the housing shortage problem swiftly in urban areas. An urban improvement project is a project to improve urban environments and the quality of the residential environment by providing necessary resources to improve areas that require recovery of their urban functions or areas with a substandard residential environment and ameliorate dilapidated and substandard structures efficiently in such areas. Additionally, housing construction and industrial complex development projects are carried forward by reviewing coherence with local conditions and urban planning through traffic and environmental impact assessments, deliberation, and public hearings.

Table 36 | Comparison of similar acts regarding urban development

Classification	Urban development project (Urban Development Act)	project (Housing Site	
Purpose	· ·	Applied to new town development on the outskirts of the city for housing supply purposes as a special law	l areas le d redevelonment
Higher-level plan	Urban master plans	Comprehensive housing plans	Master plans for improvement
Method	Expropriation, replotting, or the combined method thereof	Expropriation	Management and disposal
Can implement various projects, (e.g., public, private, and joint public-private)		Can be implemented by only public businesses (joint implementation with the private sector is allowed)	Implemented mostly by the private sector (associations)

Source: Ministry of Land, Infrastructure, and Transport website http://www.molit.go.kr/USR/policyData/m\_34681/dtl.jsp?search=&srch\_dept\_nm=&srch\_dept\_id=&srch\_usr\_nm=&srch\_dept\_id=

http://www.molit.go.kr/USR/policyData/m\_34681/dtl.jsp?search=&srch\_dept\_nm=&srch\_dept\_id=&srch\_usr\_nm=&srch\_usr\_titl=Y&srch\_usr\_ctnt=&search\_regdate\_s=&search\_regdate\_e=&psize=10&s\_category=p\_sec\_9&p\_category=&lcms\_page=10&id=87

(final search on July 14, 2023)

## Include culture as a priority component of urban planning

### • (Related policy) Cultural impact assessment

Cultural impact assessment (or evaluation) is a system that evaluates the impacts of various plans and polices formulated by the national and local governments on citizens' quality of life from a cultural perspective. Since the "participatory government" in 2003 adopted the cultural impact assessment system as one of its national policy tasks, cultural impact assessment has been adopted and implemented with the establishment of the Framework Act on Culture in 2013. According to Subparagraph (4), Article 5 (Responsibility of the State and Local Governments) of the Framework Act on Culture<sup>29)</sup>, cultural impact assessment diagnoses policies from a cultural perspective, analyzes cultural impacts, and suggests alternatives to reflect cultural values in policies and plans, inducing and supporting the formation of desirable policies. Since the implementation of five policy projects and pilot assessments of the plans in 2015 (Ministry of Agriculture, Food and Rural Affairs, Small and Medium Business Administration, Seoul Special City, Gangwon Province), 247 projects had been assessed by 2022.

<sup>29)</sup> When formulating various plans and polices, the national and local governments must evaluate the impacts of such plans and policies on citizens' quality of life from a cultural perspective to spread cultural values in society.

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Figure 62 | Government departments and local governments participating in cultural impact assessment

Source: Cultural Impact Assessment website https://cupact.mcst.go.kr/intro/current.do (final search on July 14, 2023)

(Legal) A city of culture is a policy project designated by the Ministry of Culture, Sports and Tourism and is legally designated to promote regional development utilizing the cultural resources of the relevant regions, seek sustainable regional development through culture, and promote the cultural life of local residents according to Article 15 of the Regional Culture Promotion Act. The Ministry of Culture, Sports and Tourism has been developing specialized business models for each region by designating cities of culture according to the Regional Culture Promotion Act since 2018 and had designated 24 cities of culture as of 2022. It continues to discover cities of culture in each region.

Table 37 | Designation of cities of culture by phase (Total: 24)

구분	지정 Year	사업 기간	Local governments	Cities of culture 사업명
			Bucheon	A speaking and listening living culture city, Bucheon
			Seogwipo	Noji (open ground) culture, cared for by 105 villages, Seogwipo
Phase 1			Yeongdo District (Busan)	An island of art and city, Yeong-do
cities of culture	December 2019	2020-2024	Wonju	365,000 cultural cities, Wonju
(7 cities)	2019		Cheonan	An independent cultural city that fulfills the cultural independence of citizens, Cheonan
			Cheongju	A creative city of archiving culture, Cheongju
			Pohang	Steel city, culture city, Pohang
			Gangneung	A beautiful, pleasant, and fun cultural city, Sinami Gangneung
Phase 2			Gimhae	A history and culture city dreaming of an old future, Gimhae
cities of culture	January 2021	2021-2025	Bupyeong District (Incheon)	A culture city in which citizenship grows from the sounds of life,  Bupyeong
(5 cities)	2021		Wanju County	A community where life changes through shared culture, cultural city, Wanju
			Chuncheon	From citizens to romantic neighbors, cultural city Chuncheon
			Gongju	A legacy embracing life, future memory city, Gongju
DI O			Mokpo	A new open port, cultural port city, Mokpo
Phase 3 cities of	December		Miryang	Recovery of life, new future, cultural city Miryang
culture	2021	2022-2026	Suwon	Caring for one another and confronting problems, culture city Suwon
(6 cities)			Yeongdeungpo District(Seoul)	A neighborhood of friendship and hospitality, colorful cultural production city, Yeongdeungpo
			Iksan City	A culture city with many benefits of history, Iksan
			Gochang County	Healing with culture, cultural city, Gochang
			Dalseong County (Daegu)	A city of culture generous to anyone who comes and goes, Dalseong
Phase 4	Danamban		Yeongwol County	Blessed with citizen behavior, cultural city, Yeongwol
	2022	2023–2027 2022	Ulsan Metropolitan City	Dreaming culture city, Ulsan
			Uijeongbu City	A city that remembers its citizens, citizens who prepare for the future, a livable city, Uijeongbu
			Chilgok County	A common ground for human experience, Chilgok

Note: Local government names arranged in South Korean alphabetical order

Source: Ministry of Culture, Sports and Tourism, 2022, Plans for the Promotion of Cultural Cities in Korea (12.8), p. 11

Table 38 | Designation of cities of culture by region

Region	① Metropolitan region	② Gyeonggi region	③ Chungcheong region	④ Gangwon region	⑤ Gyeongsang region	6 Jeolla region	⑦ Jeju region
Cities of culture	Busan Yeongdo District Incheon Bupyeong District Seoul Yeongdeungpo District Daegu Dalseong County Ulsan Metropolitan City	Gyeonggi Province, Bucheon City Gyeonggi Province, Suwon City Gyeonggi Province, Uijeongbu City	South Chungnam Province, Cheonan City North Chungbuk Province, Cheongju City South Chungnam Province, Gongju City	Gangwon Province, Wonju City Gangwon Province, Gangneung City Gangwon Province, Chuncheon City Gangwon Province, Yeongwol County	North Gyeongsang Province, Pohang City South Gyeongsang Province, Gimhae City South Gyeongsang Province, Miryang City South Gyeongsang Province, Miryang City South Gyeongsang Province, Chilgok County	North Jeolla Province, Wanju County North Jeolla Province, Iksan City South Jeolla Province, Mokpo City North Jeolla Province, Gochang County	Jeju Seogwipo
24 cities	5 cities	3 cities	3 cities	4 cities	4 cities	4 cities	1city

Note: Local governments arranged in the order of phase (Phases 1-4), and in South Korean alphabetical order within each phase Source: Ministry of Culture, Sports and Tourism, 2022, Plans for the Promotion of Cultural Cities in Korea (12.8), p. 11

# Implement planned urban extensions and infill, urban renewal, and regeneration of urban areas

"Urban regeneration" refers to the economic, social, physical, and environmental revitalization of a city declining due to depopulation, changes in the industrial structure, urban sprawl, and deterioration of dwelling conditions by strengthening local capacity, introducing and creating new functions, and utilizing local resources. In 2013, South Korea established the Special Act on Promotion of and Support for Urban Regeneration and began to conduct urban regeneration projects legally. The government selected 13 leading areas in 2014 (11 sites in the neighborhood regeneration type, two sites in the urban economy-based type) and 33 general areas in 2016 (nine sites in the central urban area type, 19 sites in the general neighborhood type, five sites in the economy-based type). After Moon Jae-in took office in 2017, the Legal Urban Regeneration project was renamed the Urban Regeneration New Deal project. As a result of selecting over 100 project sites every year, 571 urban regeneration projects had been selected and conducted in South Korea as of 2023.

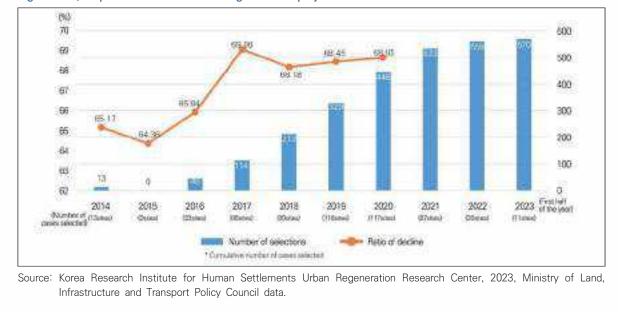


Figure 63 | Implementation of urban regeneration projects

# Improve capacity for urban planning and design and training for urban planners at all levels of government

The government has established urban regeneration college programs for general residents at 571 urban regeneration project sites nationwide since 2014 to support capacity building and selected urban regeneration base colleges within local universities since 2020 to train experts in urban regeneration.

Table 39 | Selection of urban regeneration base colleges

City/ province	University	Main education program
Seoul Special City	South Korea University	<ul> <li>Using field-based curriculum and textbooks, providing field education by inviting external experts, and providing convergence education by establishing a multi-disciplinary education system specializing in engineering and the humanities</li> <li>Forming a regional base education alliance to promote the establishment of an ecosystem of experts necessary for a central urban area and economy-based new deal projects as well as projects led by the private sector</li> </ul>
Incheon Metropolitan City	Inha University	<ul> <li>Opening and operating specialized field-based courses to train experts in ports, original downtowns, industrial complexes, and urban regeneration</li> <li>Developing and operating a problem-solving urban regeneration studio that involves joint participation of industry, academia, government, and research institutes</li> <li>Supporting job creation by discovering excellent entrepreneurial ideas and start-ups through entrepreneurship education, mentoring, and consulting</li> </ul>
Chungcheong buk-do	Chungbuk National University	<ul> <li>Providing expert training programs for each job field, divided into three tracks: urban regeneration planners, activists, and entrepreneurs</li> <li>Offering customized education for students of various levels and groups, such as graduates of related departments, public officials, support center employees, non-governmental organizations (NGOs), residents willing to participate, and those seeking to start related businesses</li> </ul>

City/ province	University	Main education program	
Daegu Metropolitan City	Kyungpook National University	Offering curricula based on theory and practice, divided into two tracks: sustainal regeneration and urban regeneration activists     Forming a mega-region regional base education alliance encompassing Daegu Metropolitan City and North Gyeongsang Province to train field-based innovative creative urban regeneration experts to lead the local community through metropolitield-based practical education	
Busan Metropolitan City	Kyungsung University	<ul> <li>Establishing an education system that integrates five fields: cities, financial economy, governance, culture and arts, and architectural design</li> <li>Implementing Project-Based Learning and capstone design that integrate theory, practice, and monitoring</li> <li>Forming a regional base education alliance with Busan Metropolitan City, the Busan Development Institute, etc., and providing field experience by activating internship programs for master's students in association with cooperative agencies.</li> </ul>	
Gwangju Metropolitan City	Gwangju University	<ul> <li>Providing education programs (e.g., welfare, tourism, and property technology) associated with related university departments</li> <li>Strengthening field education by operating a living lab for urban regeneration in which a living space is set up in a specific area for the public and private sectors and citizens to solve problems collaboratively</li> <li>Actively participating in improving regional capacity by forming a regional base education alliance with Gwangju Metropolitan City, South Jeolla Province, etc.</li> </ul>	

Source: Urban Regeneration Information System website https://www.city.go.kr/index.do (final search on July 14, 2023)

## Strengthen the role of small and intermediate cities and towns

### • (Related policy) Village development

Village development refers to a "movement that derives regional problems through resident participation and improves the living environment beyond massive reorganization." Thus, the core concept is "resident participation" or "resident autonomy," which can lead to improvements in the living environment in the process of resolving local issues through resident participation. However, improving the living environment may not be the ultimate goal.

Led by local activists in the 1990s, the village development movement focused on civil society was transformed into a policy led by the public sector in the 2000s. The village development project was legislated in the 2010s and was gradually supported by central government departments and local governments. The project has been carried forward in earnest with the emergence of metropolitan-level intermediate support organizations through the enactment of ordinances.

Table 40 | Status of Village Development Projects by Ministry

Ministry	Project	Period (year)	Purpose	
	Urban vitality development project	2010-2017	Development that guarantees the minimum basic standard of living for local residents and preserves regions' distinct features	
Ministry of Land, Infrastructure and Transport	Saeddeul Maeul project	2015- Present	<ul> <li>Renovating basic living infrastructure and improving deteriorated housing environments, creating sustainable regional vitality and improving quality of life to revitalize the village community</li> </ul>	
	Small-scale regeneration project	2018- Present	Encouraging local residents to make plans voluntarily and participate in small-scale projects	
	Village enterprise development project	2011- Present	<ul> <li>Activating village-level enterprises so that local residents can generate income and jobs and revitalize the local community through profitable businesses using various local resources</li> </ul>	
Ministry of the Interior and Safety	Integrated support project for areas with declining population	2017- Present	Promoting specialized projects that can prevent population outflow from areas with population decline and driving population inflows	
Ministry of Culture, Sports and Tourism	Tour Dure project	2013- Present	<ul> <li>Generating profits and jobs within the region, promoting a community spirit, and revitalizing regional tourism through the establishment and fostering of tourism businesses led by local communities</li> </ul>	
	Creating a living and cultural community	2009- Present	<ul> <li>Resolving cultural and social gaps in culturally underprivileged areas and laying the groundwork for residents' daily cultural activities through cultural community activities</li> </ul>	

Source: Park, Lim, & Kim, 2019, Sustainable village development, tasks, and implementation plans in small and intermediate cities, KRIHS Policy Brief No. 736, p. 2.

### • (Related policy) Regional Vitality Town

The Regional Vitality Town is a project that aims to create a livable rural village by providing integrated support for housing, living infrastructure, and living services to support the regional settlement of retirees and young people turning to farming and rural areas. It has been carried forward by seven ministries in collaboration since 2023 (the Ministry of the Interior and Safety, the Ministry of Culture, Sports and Tourism, the Ministry of Agriculture, Food and Rural Affairs, the Ministry of Health and Welfare, the Ministry of Land, Infrastructure and Transport, the Ministry of Oceans and Fisheries, and the Ministry of Small- and Medium-sized Enterprises and Start-ups). As a result of a joint public contest on Regional Vitality Town back in June 2023, Inje-gun, Gangwon-do, Goesan -gun, Gyeongsangbuk-do, Yesan-gun, Chungcheong nam-do, Namwon-si Jeollabuk-do, Damyang-gun, Jeollanam-do, Cheongdo-gun, Gyeongsangbuk-do, and Geochang-gun, Gyeongsangnam-do were selected. The Ministry of the Interior and Safety plans to support the efficient use of funds and achieve economies of scale by linking the local extinction reserve fund (worth KRW 1 trillion per year) with the

creation of a "Regional Vitality Town." Various amenities and facilities will be built in the selected areas, such as sports complexes or community centers, for residents to enjoy a leisurely country life. Local residents can also use the existing living infrastructure in nearby urban areas, such as medical care and educational facilities. Once the Regional Vitality Town is established, various services will be provided to facilitate the smooth settlement of residents, including childcare, employment, entrepreneurial support, and university-based lectures.

Table 41 | Details of each Regional Vitality Town project

Table 41   D	etalis of each	Regional Vitality Town project
City/ county, province	Project	Description of major projects
Inje-gun, Gangwon-do	From Inje	<ul> <li>Total project cost: KRW 50.2 billion, area: 29,640 m²</li> <li>To start a new life, the From Inje project will construct 90 townhouses and rental housing units for young people at the target site, located within a walking distance of the KTX Inje Station, which is scheduled to open in 2027.</li> <li>A sports center to improve residents' health and quality of life will be constructed, and residents will be provided with job opportunities in the agricultural industry.</li> </ul>
Goesan-gun, Chungcheong buk-do	Seongsan Byeolbit (Starlight) Village Sings Happiness!	<ul> <li>Total project cost: KRW 24.3 billion, area: 34,866 m²</li> <li>40 townhouses and 15 single-family home lots will be supplied for retirees and those turning to farming and rural areas, and smart farms for garden plants and social farms (care farms) will be created to turn the entire village into a garden.</li> <li>Various experiences are provided by establishing a village travel agency to get to know Goesan better, along with senior jobs in the form of social services.</li> </ul>
Yesan-gun, Chungcheong nam-do	New Vitality Up Town Development Project	<ul> <li>Details of the total project costs and area will be discussed and finalized later.</li> <li>An apartment complex for 25 households will be constructed for the settlement of local youth who are starting businesses within and around Yesan Market.</li> <li>A youth residence, including a self-reliance center and youth sports facilities, and a bus station will be created for tenants and local residents to use.</li> </ul>
Namwon-si, Jeollabuk-do	Jirisan Vitality Town	<ul> <li>Total project cost: KRW 27 billion, area: 33,993 m²</li> <li>36 townhouses, 32 single-family homes, and 10 tiny houses (temporary housing facilities) will be built at an altitude of 600 m above sea level at the foot of Jirisan Mountain, with excellent natural conditions for the settlement of those turning to farming and living in rural villages.</li> <li>A community center, small gym, and vegetable garden are provided in the town, and leisure and jobs are offered through Herb Valley Theme Park nearby.</li> </ul>

City/ county, province	Project	Description of major projects
Damyang-gun, Jeollanam-do	Daedeok Maesan Regional Vitality Town	<ul> <li>Total project cost: KRW 126.7 billion, area: 268,377 m²</li> <li>500 housing units will be developed, mainly for retirees returning to farming and rural villages, as a large-scale public-private partnership project in an area where existing infrastructure can be used, approximately 20-minute drive from Gwangju Metropolitan City.</li> <li>An environment where residents can enjoy leisure activities and hobbies will be created by providing a specialized complex for artists, learning facilities, community facilities, and a golf course.</li> </ul>
Choengdo-gun, Gyeongsang buk-do	Cheong (Chun) Ryeo (Yoo) DO-ONE	<ul> <li>Total project cost: KRW 39.6 billion, area: 38,889 m²</li> <li>20 single-family homes and 30 rental houses will be developed to provide customized housing that integrates housing and job/business space for young people and those who have turned to farming. A living culture center and an employment/entrepreneurial support center will also be provided.</li> <li>Start-ups will be supported by attracting investment companies, and a child-friendly sports center will be established to create an environment for children to play.</li> </ul>
Geochang- gun, Gyeongsang nam-do	Jisik (Knowledge)–I N Geochang Arori Town	<ul> <li>Total project cost: KRW 27.7 billion, area: 29,995 m²</li> <li>32 townhouses, 18 single-family homes, a complex cultural center, and a sports center will be created for the settlement of professionally retirees.</li> <li>Research and lecture opportunities will be provided using Gyeongnam Provincial Geochang College and South Korea Lift College, as well as a lifelong learning service to create a university-based retirement community (UBRC).</li> </ul>

Source: Ministry of the Interior and Safety press release (June 2, 2023) "Seven ministries are jointly promoting development of Regional Vitality Town to prevent local extinction"

# Implement sustainable multimodal public transport systems, including non-motorized options

To seek citizen convenience and distribute public transport demands, many local governments in South Korea are operating bicycle sharing service as part of a short-distance means of transport.

Table 42 | Public bicycles in South Korea

Region	Public bicycles					
Seoul Metropolitan Area	9,	• Cookie (Incheon) • Pedalro (Ansan)*	Fifteen (Goyang)*	마르말 마르털- 건국 공유지전기 지드		
Chungcheong region	, , ,	<ul><li>Tashu (Daejeon)</li><li>Dalryeo Boryeong (Boryeong)</li></ul>				
Gyeongsang region	, ,	<ul> <li>Yangsan Public bicycles (Yangsan)</li> <li>Tagogaya (Gimhae)</li> <li>Tabanna (Busan Gijang)</li> </ul>	Tasila (Gyeongju) Gyeongsan Happy Bike (Gyeongsan)*			
Jeolla region	Kkotsing-i (Jeonju)	<ul><li>Onnuri Bike (Suncheon)</li><li>Taranke (Gwangju)</li></ul>		CXO		

Note: The symbol "\*" indicates the number of projects withdrawn as of 2023.

Source: Namuwiki public bicycles status

https://namu.wiki/w/%EA%B3%B5%EA%B3%B5%EC%9E%90%EC%A0%84%EA%B1%B0 (final search on October 18, 2023)

Additionally, various other projects are being implemented. Examples include the following: establishing transportation infrastructure (e.g., cycling lanes, parking lots, and safety facilities); issuing free welfare transportation cards for persons with disabilities, the elderly, and persons of national merit that are compatible throughout the nation; operating call- and voucher-based taxis for persons with disabilities; issuing Affordable Transportation Cards, on which mileage is accumulated according to the distance traveled on foot or by bicycle to use public transport.

Table 43 | Results of the Affordable Transportation Card



Source: Ministry of Land, Infrastructure, and Transport Metropolitan Transport Commission https://www.molit.go.kr/mtc/USR/WP GE0201/m\_36935/DTL.jsp (final search on July 27, 2023)

#### Text Box 10 | Jeonju Happy Bus

Jeonju Happy Bus is an example of bus route reform that involves the actual participation of citizens. As there is no subway in Jeonju, intra-city buses are the only means of public transport connecting the city, with an average of more than 130,000 citizens using them each day. However, despite many environmental changes around intra-city buses, such as deteriorating profitability and urban expansion to new cities, intra-city bus routes remain antiquated. Moreover, as bus route reform was previously led by administrative agencies and experts, it was difficult to reflect the diverse needs of citizens for the routes. To innovate intra-city bus routes, Jeonju established a bus policy implementation group in 2019 and gathered opinions from various citizens via roundtable meetings, surveys, and regional workshops through the Jeonju Happy Bus Project in collaboration with Jeonju Council for Sustainable Development. The city also operated governance involving diverse stakeholders, such as administrative agencies (Jeonju City, Wanju County), bus companies, workers, and civic groups, and has continued to hold numerous discussions. Through this process, new intra-city bus routes, designed and completed with citizen input, began operation on February 19, 2022. In April 2021, a "Route Reform Business Agreement" involving Jeonju City, Wanju County, and bus companies was signed to confirm the implementation of the route reform. In June 2021, the Jeonju-Wanju route system was launched in the direction of Wanju County Iseo. In February 2022, the Jeonju-Wanju route system was extended to the towns of Sanggwan, Gui, and Soyang in Wanju County as part of Phase 2. In particular, the "subway route" derived from the process of collecting citizens' opinions was renamed the "main bus," with 102 buses newly arranged in ten routes. The "Route Reform Promotion Team" was formed for operation starting October 2021 to minimize citizen inconveniences due to the reform. In particular, the "Jeonju Intra-city Bus Promotion Group," which comprises 30 members led by civic groups, met with over 6,000 citizens at various sites (e.g., platforms, traditional markets, schools, and public institutions) for ten weeks to engage actively in promotional activities.

Reform of intra-city bus routes is a tough process in itself because various interests are in a sharp conflict, and changes directly affect citizens' lives. This first attempt by Jeonju at reforming the bus routes is expected to become a new standard for the public transport policy in Jeonju and a good reference for other local governments preparing to reform their routes.

Figure 64 | Jeonju Happy Bus Citizen Participation Group recruitment notice (left), Jeonju Happy Bus webpage (right)



Source: Jeonju Happy Bus website https://www.facebook.com/jjhappybus365/ (final search on July 27, 2023)

• (Associated indicator) K-SDG 11-2 Provide access to safe and affordable transport systems for all and improve road safety by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities, and older adults.

According to an analysis by the Ministry of Land, Infrastructure and Transport and the Ministry of the Interior and Safety, as traffic congestion becomes more widespread and permanent due to the extension and densification of metropolitan areas, traffic congestion costs are increasing, and there are shortages in the public transport supply during peak travel times. While public transport users are showing higher expectations, the competitiveness and convenience of public transport are at a standstill, with its convenience lacking compared to that of private cars owing to long travel times and inconvenient transfers. Furthermore, there is a need to improve user convenience regarding means of transport and passenger facilities and ensure safe and convenient mobility rights for mobility-disadvantaged persons in pedestrian environments. Considering the increase in mobility-disadvantaged persons upon entering a super-aging society, it is necessary to set and maintain a high target for the installation rate of convenient mobility equipment from a long-term perspective.

Against this backdrop, the central government is working on policy tasks related to expanding public transport infrastructure, eliminating blind spots in public transport, and promoting green transportation. First, regarding the expansion of public transport infrastructure, the government is adopting high-speed, high-capacity rail networks and metropolitan express buses, expanding median bus lanes and public transport-only districts, and establishing and improving metropolitan/complex transfer centers and small-scale transfer facilities. Second, regarding the elimination of blind spots in public transport, the government is making efforts to expand regular pass bus routes, increase demand-responsive means of public transport, and adopt late-night intercity buses and demand-responsive means of public transport. Third, to promote green transportation, the government seeks to transform all intra-city buses into eco-friendly buses to improve access to environmental services and reduce fine dust levels by expanding the base for bicycle use to greenways, pedestrian walkways, and living areas. Fourth, to improve convenient mobility equipment and pedestrian environments for mobility-disadvantaged persons, the government is implementing overall improvement projects to enhance means of transport, passenger facilities, waiting facilities, and sidewalk facilities. Fifth, to increase the supply of low-floor buses and special means of transport, the government is working to increase the supply of low-floor buses according to the goals set by Seoul, Gyeonggi Province, and other metropolitan cities and regions in light of regional conditions and promote equity between regions and classes in terms of special transport service benefits.

Table 44 | K-SDG 11-2 current values and targets

Indicator	Current value	Target
(1) Modal share of public transport	• 2016: 44.6%	<ul><li>2030: Continuous increase</li><li>2040: Continuous increase</li></ul>
(2) Supply rate of low-floor buses	• 2018: 23.4%	<ul><li>2030: Continuous increase</li><li>2040: 50%</li></ul>
(3) Modal share of bicycles	• 2015: 1.43%	<ul><li>2030: Continuous increase</li><li>2040: Continuous increase</li></ul>

Source: Ministry of Environment, 2022, 4<sup>th</sup> Basic Plan for Sustainable Development (Part 2), p. 111.

#### 2.3 Means of implementation

## 2.3.1 Mobilization of financial resources

## Develop financing frameworks for implementing the NUA at all levels of government

In South Korea, the fiscal system is divided into central and local finance, and a local finance system for implementing the NUA has been developed. Comprising 243 entities, local finance involves receiving or transferring financial resources from or to the central government and other local governments. To promote financial equity between local governments and supply public goods efficiently, which has a huge ripple effect throughout the nation, the central government transfers local<sup>30)</sup>, local education<sup>31)</sup>, and government (national) subsidies to local governments. Local subsidies and government (national) subsidies are transferred for local general finance (upperand lower-level local governments) and local education subsidies. Government (national) subsidies and money transferred to special accounts for educational expenses are subsequently transferred for local education financing (Metropolitan and Provincial Offices of Education). Funds are also transferred between local governments to improve financial equity between them and support specific areas such as education finance. Grants-in-aid for adjustment<sup>32)</sup> and urban si (city) / do (provincial) subsidies are transferred from upper- to lower-level local governments. The total amount of local education taxes, a portion of tobacco consumption and municipal/provincial taxes, and statutory (consisting of school land fees) and non-statutory (according to ordinances) transfers are transferred from upper-level local governments to autonomous bodies of education. Lower-level local governments also transfer a part of non-statutory transfers to autonomous bodies of education.

<sup>30)</sup> Local subsidies are finances handed over to local governments (city/province and Si/Gun), such as an amount equivalent to 19.24% of internal taxes, total amount of comprehensive real estate holding taxes, and an amount equivalent to 45% of individual consumption taxes imposed on cigarettes and tobaccos, and these are used as tax revenues and general finances for local governments.

<sup>31)</sup> Local education subsidies are finances handed over to autonomous bodies of education (Metropolitan and Provincial Offices of Education), such as an amount equivalent to 20.79% of internal taxes and a part of education taxes.

<sup>32)</sup> Grants-in-aid for adjustment are finances handed over to lower-level local governments by upper-level local governments as prescribed by ordinances, which comprises certain amount of ordinary tax revenues to adjust finances between lower-level local governments.

· Local subsidy taxes (special, real estate) · Sovemment subsidies · Grants-in-aid for adjustment · Non-stabilitary transfers Urban (city) sybardea. Statutory transfers

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 Special Autonomous metropolitan cities DEWINDS Local education subsidies Government subsidies Central poverryment · Grants-in-aid for adjustment · Provincial autorides Si (cityl) Province: Gun (county) Coexisting local development funds · Local subside teens Government subsidius

Table 45 | Financial system in South Korea

Source: Ministry of the Interior and Safety; as cited in National Assembly Budget Office, 2023, 2023 Local Finance of South Korea, p. 24.

## Mobilize endogenous (internal) sources of finance and expand the revenue base of subnational and local governments

• (Related policy) Special Accounts for Balanced Development<sup>33)</sup>

Special Accounts for Balanced Development are implemented to resolve regional imbalances and facilitate self-sufficient development that considers regional characteristics by integrating and efficiently supporting various regional projects conducted individually by several government departments and local governments into a single form of special accounts, based on Chapter 5 Special Accounts for Balanced National Development (Articles 30-48) of the Special Act on Balanced National Development. Special Accounts for Balanced Regional Development was renamed several times, becoming Special Accounts for Balanced National Development Roh Moo-hyun administration), Special Accounts for Area and Regional Development (Lee Myung-bak administration), Special Accounts for Regional Development (Park Geun-hye administration), Special Accounts for Balanced National Development (Moon Jae-in administration), and Special Accounts for Balanced Regional Development (Yoon Suk-yeol administration). The current Special Accounts for Balanced Regional Development are divided into local autonomous accounts, local support accounts, the Jeju Special Self-Governing Province account, and the Sejong Special Self-Governing City account.

<sup>33)</sup> https://www.nabis.go.kr/contentsDetailView.do?menucd=143&menuFlag=Y

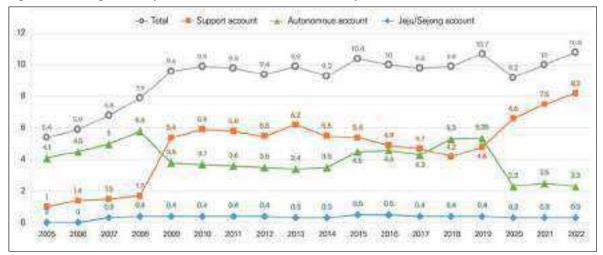


Figure 65 | Budgets for Special Accounts for Balanced Development

Note: The special account for balanced development is divided into four accounts: a local autonomous account, a local support account, a project directly organized by the central government, and a Jeju Special Self-Governing Province account and a Sejong Special Self-Governing City account

Source: https://www.nabis.go.kr/contentsDetailView.do?menucd=143&menuFlag=Y

#### • (Related policy) Resident participation renewable energy project

In the resident participation renewable energy project, implemented to overcome resident opposition in the process of establishing renewable energy facilities and increase resident acceptance, residents living near renewable energy power plants invest in the project and share the revenues. By adopting a system in which residents in the community are involved and share the project revenues, unlike previous large-scale power generation projects, it is possible to contribute to generating profits and securing regional competitiveness. There are various forms of participation, such as a local government profit cooperative, equity participation, or bond purchases. Some examples include the Ansan Citizens Solar Power Plant, the Gangwon Taebaek Gadeoksan Wind Farm, and the South Jeolla Sinan Solar Power Plant.

#### Text Box 11 | Resident participation renewable energy project: Sinan Solar Power Plant

#### A. Sinan Solar Power Plant

Sinan County constructed a resident-participation solar power plant on an abandoned salt farm site. KRW 12.8 billion, which is 4% of the total project cost, comes from resident participation, and profits of KRW 2.7 billion are shared annually by the residents' association. As a form of investment, 3,145 residents (as of November 2021) had formed a residents' association and invested in bonds. Approximately 90% of the KRW 12.8 billion invested by residents was raised through the government's resident participation policy funds. On November 29, 2021, the dividends from resident participation profit-sharing were paid for the first time in Jido eup (a city with less than 500,000 residents), Sinan County. Approximately KRW 110,000-350,000 per person was paid to over 3,500 Jido eup residents, with one household receiving up to KRW 2.08 million in dividends. An analysis shows that the project was also effective in promoting population growth, with 324 new residents moving into Jido eup in 2021.

The Ordinance on New and Renewable Energy Development Profits (hereinafter referred to as the Ordinance on New and Renewable Energy in Sinan County), which is the first ordinance of its kind to be enacted in South Korea, played a critical role in Sinan County's resident participation renewable energy project. Sinan County allowed all renewable energy power generation business operators to obtain permission if they formulate and submit a profit–sharing system (Article 3 Responsibilities of the head of the county). Moreover, the head of the county may provide support and loans within the budget if the residents of the county or the residents' association wish to purchase equity in a resident participation corporation or business operator of the power generation project (Article 4 Support). The participation shares of residents and Sinan County were set at more than 30% of the shares of the power plant corporation or more than 4% of the total project costs. Additionally, to revitalize the regional economy, it was prescribed by the Ordinance (Article 16 Matters regarding resident participation shares) that resident participation profits were to be paid in the form of "1004-Island Sinan Gift Certificates."

#### B. Taebaek Gadeoksan Wind Farm

Taebaek Gadeoksan Wind Farm, which began commercial operations in September 2020, is South Korea's first resident participation onshore wind farm. Residents invested KRW 5 billion, which is 4% of the total project costs, and Gangwon Province and Taebaek City invested KRW 11 billion (6.5 billion and 4.5 billion, respectively), which is 8.8% of the total project costs. Residents participate in the form of bonds with fixed returns every year and receive an annual investment return of 8.2%. The beneficiaries of the profit—sharing system for Gadeoksan Wind Farm are residents living near the wind farm (those living in eup (a city with less than 500 residents) / myeon (town) / dong (neighborhood) located within a 1 km radius of the wind farm) and Taebaek City residents. Residents of Wondong Village, situated nearby the wind farm, established a village enterprise and raised funds worth KRW 1.7 billion from Taebaek Citizens. They also received KRW 3.3 billion in national policy funds, investing KRW 5 billion in Taebaek Gadeoksan Wind Farm.

Source: Fiscal Reform Institute website http://firiall.net/wiki/1278

# Formulate sound systems of financial transfers from national to subnational and local governments based on needs, priorities, and functions

#### • (Related system) Local Finance Equalization Scheme

The South Korean government has been establishing a local finance system for sound financial transfers from national to subnational and local governments. The Local Finance Equalization Scheme is a system that transfers a part of the central government's finances to local governments, assuming two roles simultaneously. First, it compensates for financial shortfalls so that even local governments with weaker financial power compared to administrative demands can provide residents with administrative services above the minimum level. Second, it equalizes the financial gap between governments by adjusting the financial imbalance between the central and local governments and between local governments.<sup>34)</sup> South Korea's Local Finance Equalization Scheme includes local subsidies, government (national) subsidies, and Special Accounts for Balanced Regional Development, through which the central government supports local governments. It also provides regional synergy development funds and grants-in-aid for adjustment, through which one local government can support another local government.

Table 46 | Comparison of the Local Finance Equalization Scheme

	Central governm	nent supporting lo	Support between local governments		
Classification	Local subsidy	Government (national) subsidies	Special account for balanced regional development	Coexistent local development fund	Grants-in-aid for adjustment
Introduction	1962	1963	2005	2009	1988
Legal basis	Local Subsidy Act	Subsidy Management Act	Special Act on Local Government Decentralization and Balanced Regional Development	Framework Act on the Management of Local Government Funds	Local Finance Act
Purpose	Financial preservation and fiscal equalization	Support and encouragement of national subsidy programs	Support of balanced national development projects	Coexistence of metropolitan and non-metropolitan areas	Financial preservation and fiscal equalization
Character	General revenues (special subsidies and firefighting safety subsidies are specific) revenues)	Specific revenues	Specific revenues	General revenues	General revenues (special subsidies are specific revenues)

<sup>34)</sup> Ryu, 2023, Status and future tasks of the Local Finance Equalization Scheme: Focusing on local subsidies, National Assembly Research, p. 6

	Central governn	nent supporting loc	Support between local governments		
Classification	Local subsidy	Government (national) subsidies	Special account for balanced regional development	Coexistent local development fund	Grants-in-aid for adjustment
Source of finance	A part of national taxes	National budget	National budget	A part of Seoul Metropolitan Area's local consumption tax	A part of ordinary taxes of upper-level local governments

Note: 1. Local grant tax is a grant paid by the state for financial support necessary for the administrative operation of local governments pursuant to the provisions of the Local Grant Tax Act, and is also called a local grant tax. Local grant tax is divided into ordinary grant tax and special grant tax, which is issued annually to local governments whose standard financial income falls short of the standard financial demand based on the amount below.

- 2. The government subsidy is to delegate the implementation of the project to the local government and provide some of the expenses when the central government carries out the national project.
- 3. The Regional Sangsal Development Fund is a fund created by cities and provinces for financial support for win-win development among local governments and the efficient management and utilization of surplus funds of the fund.
- 4. Adjustment grants are subsidies to compensate for the collection costs of metropolitan tax and provincial tax by devoting part of the metropolitan city tax and provincial tax collected by the headquarters of the metropolitan government as a financial resource, and to ease the financial gap and encourage specific policies.

Source: Ryu, 2023, Status and future tasks of the Local Finance Equalization Scheme: Focusing on local subsidies, National Assembly Research Service, p. 12

As a governance system for sound operations of local finance, local governments are expanding their finances through their local bonds and non-tax and conservation revenues. Moreover, upper- and lower-level local governments are managing local finance by mandatorily designating financial planners and officers for financial transparency and efficient operations. Local governments are also operating systems related to deliberation, resolution, and consultation on sound financial activities through investment appraisal, finance plan deliberative, and local subsidy management committees.

# Mobilize and establish financial intermediaries (e.g., multilateral institutions, regional development banks, subnational and local development funds, and pooled financing mechanisms) for urban financing

• (Related system) Regional synergy development funds

Regional synergy development funds based on the Framework Act on the Management of Local Government Funds are finances contributed by Seoul metropolitan upper-level local governments (Seoul, Incheon, and Gyeonggi) to support non-metropolitan upper-level local governments for revitalizing the regional economy by adjusting the financial gap between regions. Established in 2010, regional synergy development funds use a portion of local consumption taxes collected by Seoul metropolitan upper-level

local governments as the financial resource and are operated temporarily for 20 years (2010–2029). (Table 47) shows that the size of regional synergy development funds has grown since 2020, as the transferred project compensation account has been newly established to compensate for temporary costs incurred by transferring some of the national subsidy programs to local governments.

Table 47 | Size of regional synergy development funds

(Unit: KRW million)

Classification	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Financial support account	3,711	1,807	1,915	2,169	2,215	2,340	2,226	2,436	2,503	3,468
Loan management account	-	_	3,756	2,120	2,400	2,727	3,263	4,802	4,150	3,472
Transferred project compensation account	ı	-	-	_	-	_	35,681	35,681	45,992	58,202
Total	3,711	1,807	5,671	4,289	4,615	5,067	41,170	42,919	52,645	65,142

Note: Loan management account managed since 2016, transferred project compensation account established in 2020 Source: Ministry of the Interior and Safety, 2023, Regional Synergy Development Fund, data submitted by National Assembly Research Service; as cited in Ryu, 2023, Status and future tasks of the Local Finance Equalization Scheme: Focusing on local subsidies, National Assembly Research, p. 10

## 2.3.2 Capacity development

The NUA emphasizes efforts at the city level to reduce disparities in access to education across society, inclusive of all economy, gender, and social sectors. South Korea is developing and implementing several urban regeneration and education programs in local governments to ensure the participation of various city residents while providing related talent development programs for public officials, which are supported by the central government.

In this regard, the South Korean government is setting the key policy goal as the expansion of tailored education for capacity development of related managers, such as central/local governments and public institutions. The main objective is to establish and implement inclusive and responsible government policies and systems by making it a principle to support and guarantee the participation of various socially disadvantaged people in the policy process.

In particular, the proportion of the local budget compared to the total national budget is maintained at a certain level so that local governments can efficiently perform the aforementioned roles. Official educational institutions specializing in financial planning and management of subnational and local governments have been established, and multi-year e-learning programs are in operation to develop the capacity of related experts.

While striving to train experts, the South Korean government has recently established acts to support citizen participation in urban and regional development decision-making processes to ensure the participation of non-experts or vulnerable groups within the cities. Thus, local residents can voice their opinions and propose plans when drafting or formulating urban management plans.

# Expand opportunities for city-to-city cooperation and fostering exchanges of urban solutions and mutual learning

• (Associated indicator) Promoting city-to-city cooperation – Mutual cooperation between Innovative Cities

Innovative Cities (or Innovation Cities) refer to cities created in growth hubs based on the relocation of public institutions (e.g., local universities, research institutes, industries, local governments) to regional areas. Innovative Cities are classified by the theme of the city which is connected to the regional industries of each city and province. Example themes include the following: an innovation hub city that creates innovation through industry, academia, research institute, and government collaborations; a special city with unique flairs and local themes; an environment-friendly green city; education/culture city (Ministry of Land, Infrastructure and Transport, 2022). Based on this, the South Korean government is making significant efforts to promote cooperation between Innovative Cities and the original downtown areas. The Ministry of Land, Infrastructure and Transport has established the Innovative City Development Promotion Team to promote mutual development between Innovative Cities and surrounding areas and operates a mutual development council to support activities at the regional level. Furthermore, the Ministry regularly selects best practices that have shown good performance in the Urban Regeneration New Deal project for original downtown associated with Innovative Cities.

Table 48 | Best practices of the Urban Regeneration New Deal project associated with Innovative Cities

Region	Innovation City	Gangwon Innovation City	Gyeongnam Innovation City
Project	A historic and cultural restoration city re-examined by modernization	A space of harmony in old downtown Wonju sharing memories from the past	Sharing and emptying, healing the urban center

Region	Gwangju-Jeonnam Innovation City	Gangwon Innovation City	Gyeongnam Innovation City
Characteristic	Created a specialized street centered on the student movement history and culture in old downtown Naju	Regeneration New Deal project	Conducted the old downtown regeneration project led by public institutions in old downtown Jinju
Budget	KRW 39.6 billion	KRW 40 billion	_

Source: Ministry of Land, Infrastructure and Transport, 2019, Press release on best practices in mutual cooperation

• (Related case) Water supply management capacity development - Local government field training site for waterworks

Seoul plans to be the first local government to operate a waterworks field training site 8,000 m² in size for practical training on water quality control and has begun constructing facilities in the second half of 2023. At the indoor training site, trainees will learn the theories of water supply facilities and receive safety education, along with training on how to control various valves, pipes, and water meters. For the outdoor training site, mandatory courses will be developed, and ten training zones will be created for the safe management of water supply facilities in various fields, such as pipe inspection, cleaning, water system conversion, leak detection, and response to leak accidents. Once the construction is complete, the site will be test-operated on employees at the Office of Waterworks, after which the site will be open to other local governments or heads of related agencies in other cities of the world.

Figure 66 | Waterworks field training sites (indoor/outdoor)



Source: Seoul Special City press release, February 24, 2023, "Seoul to be the first local government to create a field training site for water supply"

- Implement capacity development as an effective, multifaceted approach to formulate, implement, manage, monitor, and evaluate urban development policies
  - (Related system) National land management talent training programs Training Institute of Land, Infrastructure, and Transport

The South Korean government designs curricula for public officials working in land, infrastructure, and transport on various topics related to the relevant occupations, and the Ministry of Land, Infrastructure and Transport offers specialized multi-disciplinary training courses on the National Land Planning and Utilization Act, road policies, Building Act, apartment housing management, and Smart Cities for public officials in related public institutions. For example, the course on the National Land Planning and Utilization Act is conducted in the form of e-learning and seeks to improve the job skills of public officials in related organizations by offering education that covers general knowledge related to the occupation, such as urban planning, district unit plans, and permission for development activities.

Figure 67 | Example of curricula in each field (for February 2023)

Period	Curriculum	Target	Capacity
February 13(Monday) -17(Fe)	Construction safety inspection	Construction inspection staff	40
February	National land use information system	Users of national land use information from local governments	35
200Monday) - 24(Fn)	Introduction to Design VE	Design VE staff	40

Source: Ministry of Land, Infrastructure and Transport, 2023, excerpted from p. 1 of the trainee recruitment notice for February 2023.

- Build the capacity of all levels of government to work with vulnerable groups to participate effectively in decision-making about urban and territorial development
  - (Related system) Promoting citizen participation in urban policies Resident proposal system and participatory budgeting

The resident proposal system allows residents to propose bills and plans regarding matters related to urban infrastructure and district unit plans. Residents who wish to

promote regional development through housing construction, industrial distribution, building of tourism or recreation facilities, or construction of streetscapes may formulate a plan to designate and change district unit planning zones. An examination of the number of resident proposals from 2016 to 2021 shows that most local governments recorded the highest number of proposals in 2018 and 2019, although differences existed depending on the year and region. Additionally, these statistics only counted the number of regions that voluntarily participated in the assessment of urban sustainability and living infrastructure by the Ministry of Land, Infrastructure and Transport. Thus, the actual number is expected to be greater. Various other legal and non-legal systems are in operation, including resident audit requests, resident referendums, resident lawsuits, participatory budgeting, and resident recalls.

Table 49 | Number of resident proposals (2016-2021)

Region	2016	2017	2018	2019	2020	2021
Seoul Special City	2,456	2,810	1,419	7,601	6,519	2,895
Busan Metropolitan City	8,672	10,398	12,363	13,740	2,252	3,215
Daegu Metropolitan City	467	924	1,341	1,956	1,419	4,703
Incheon Metropolitan City	394	296	268	628	666	1,213
Gwangju Metropolitan City	379	620	198	198	191	649
Daejeon Metropolitan City	564	189	734	611	895	1723
Ulsan Metropolitan City	570	564	770	499	487	279
Sejong Special Self-Governing City	0	12	59	54	0	0
Gyeonggi Province	7,003	4,451	5,047	16,822	5,591	7,567
Gangwon Province	1,554	376	619	1,108	1,435	1,323
North Chungcheong Province	2,264	497	777	428	836	907
South Chungcheong Province	753	923	849	921	1467	2184
North Jeolla Province	1,715	1,712	841	1,385	1,770	922
South Jeolla Province	6,289	2,208	2,941	4,635	3,179	2,382
North Gyeongsang Province	1,451	4,218	2,967	1,199	1,444	1,846
South Gyeongsang Province	1,478	1,415	2,095	1,871	2,681	2,122
Jeju Special Self-Governing Province	366	32	210	154	598	0

Source: Ministry of Land, Infrastructure and Transport, Sustainability of Cities and Level of Living Infrastructure indicators (2016–20 21)

Participatory budgeting is a system for the direct participation of local residents in local finance operations. It aims to improve transparency in financial operations and fairness in the distribution of financial resources by allowing citizens to participate in the budgeting process and contents, such as budget compilation. The system's implementation became mandatory through the amendment of the Local Finance Act in 2011, and 43 local governments nationwide had enacted ordinances on participatory budgeting by the end of 2018. Accordingly, the Metropolitan and Provincial Offices of Education are striving to reflect the participatory budget transparently by organizing the participatory budgeting committee, subcommittee, and regional board. Various other legal and non-legal systems are in operation, such as resident audit requests, referendums, lawsuits, and recalls.

Recently, the development of ICT and the diffusion of mobile devices have led to the emergence of online participation platforms as an important citizen participation tool for the South Korean government. Based on this, the central government and several local governments are establishing and operating various online participation platforms to reflect citizen demands actively and promote citizen participation from a broader range of classes in the process of making decisions on public urban policies. As of 2023, several local governments were operating online platforms for policy communication, such as Seoul's "Democracy Seoul," Daegu's "Talk Daegu," Gwangju's "Immediate Communication (Baro Sotong) Gwangju," Ulsan's "Citizen Dadeumibang," and North Jeolla Province's "Jeonbuk Communication (Sotong Daero)," through which citizens as policy users can use computers or mobile devices to participate in public administration and policy processes. For instance, Ulsan has an online platform called "Citizen Dadeumibang," on which any citizen can publicize daily agendas through the "Citizen Proposal" page. The agendas that obtain consensus from many citizens are selected as the final agendas for public opinion through the "Citizen Debate" page, which are later reviewed by the relevant policy department of the city.



Figure 68 | Ulsan Citizen Dadeumibang online website

Source: Ulsan Citizen Dadeumibang website https://www.ulsan.go.kr/dadeumibang/index.do (final search on November 21, 2023)

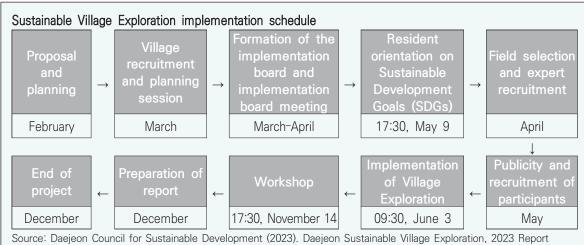
#### Text Box 12 | Daejeon Sustainable Village Exploration

Daejeon's Sustainable Village Exploration is an excellent example of a local government developing resident leadership and participation capacity. Unlike the conventional method of reviewing village sustainability from a broad perspective based on the village's Sustainable Development Goals (SDGs), the Daejeon Council for Sustainable Development is different because it discusses the direction for the village community from a narrower perspective of residents' daily lives. Starting with Sinseong Neighborhood in 2020, this activity has been carried forward steadily in Songchon Neighborhood and Gayang 2 Neighborhood in 2021 and Gwanjeo 2 Neighborhood in 2023.

Daejeon has concentrated on developing related citizen learning and experience programs to meet the need for integrated programs that provide guidance for SDGs to be shared with and implemented by citizens in a way that suits Daejeon's characteristics. The focus was on conducting research and operating experience or deliberative education programs tailored to village characteristics as a living area.

The key points of Village Exploration are as follows: 1) promoting resident activities through SDGs and supporting them to achieve village sustainability; 2) establishing SDGs for the village and preparing a sustainability report; 3) monitoring the status of the village within the categories of SDGs (e.g., the village's ecology, resources, lifestyle, infrastructure, and quality of resident life) and discovering the agendas for the village together via the contributions of experts in each field and village residents; 4) presenting practical tasks for village residents to learn about environmental, social, and economic sustainability so that they can participate in global issues; 5) discovering learning content for village residents of all ages to experience so that they can relate to the fact that the village is a venue for sustainable education.

Specific examples of resident activities include monitoring healthy and safe food stores, forming living labs as a shared space for adolescents, and discovering the cultural and historical contents of the village.



Planning session and implementation board meeting

Session/ meeting	Proposal and planning session	Planning session	1st Implementation board meeting	2nd Implementation board meeting
Date and time	February 21 (Tuesday) 10:00	March 28 (Tuesday) 16:00	April 18 (Tuesday) 10:00	April 26 (Wednesday) 10:00
Place	Daejeon Village Community Support Center	Haeddeul Village Library	Haeddeul Village Library	Haeddeul Village Library
Participant	Village Community Support Center	Gwanjeo Village Community Association, Gwanjeo 2 Neighborhood Residents' Association, Village Community Support Center Gwanjeo 2 Neighborhood residents	Gwanjeo Village Community Association, Gwanjeo 2 Neighborhood Residents' Association, Village Community Support Center	Gwanjeo Village Community Association, Gwanjeo 2 Neighborhood Residents' Association, Education community Dream Seed
Description	<ul> <li>Propose Village Exploration</li> <li>Request cooperation (recruit villages within Seo District and others)</li> </ul>	<ul> <li>Explain about the Village Exploration project</li> <li>Discuss and select exploration topics</li> <li>Hold implementation board meeting</li> </ul>	<ul> <li>Provide reasons for selecting the exploration topics</li> <li>Organize activity contents</li> </ul>	<ul> <li>Finalize exploration topics and activity contents</li> <li>Recruit locations and experts</li> <li>Discuss the schedule for participant recruitment</li> </ul>
Photo				

Source: Daejeon Council for Sustainable Development (2023). Daejeon Sustainable Village Exploration, 2023 Report

# Engage local government associations as promoters and providers of capacity development

• (Associated indicator) Proportion of local budget - Less than half of the total budget

The proportion of the local budget in South Korea is maintained at approximately 40% of the total national budget. The indicator representing the proportion of local government budget compared to the total national budget is based on the amount of the main budget allocation of local governments and is used as the basis for analyzing the dependence of local governments on national finance and the financial independence ratio. The local budget in 2023 was KRW 305.4 trillion, which is 38.7% of the total budget for the year (KRW 789.8 trillion). As the figure was 37.3% approximately ten years ago in 2014, the proportion of local budget in South Korea has consistently remained at the upper 30% level.

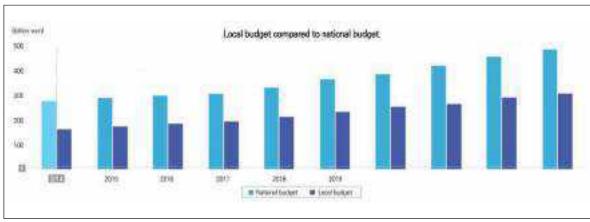


Figure 69 | Local budget compared to national budget (2014-2023)

Source: e-National Index, Local budget compared to national budget, https://www.index.go.kr/unity/potal/main/EachDtlPageDeta il.do?idx\_cd=1045 (final search on August 1, 2023) Reprocessed from the raw data by the Ministry of the Interior and Safety

# Implement capacity development programs on the use of legal land-based revenue, financing, and other tools

 (Related system) Land-based revenues and financial education - South Korea Real Estate Board

South Korea established the South Korea Real Estate Board, a government-funded organization related to the real estate market, in 1969, and continuously operates programs to build the capacity of real estate development experts through this organization. After its establishment, the board was designated as an educational

institution for real estate development experts by the Ministry of Land, Infrastructure and Transport (Ministry of Land, Infrastructure and Transport Notification No. 2023-347, June 23, 2023) and has been conducting various training sessions related to land-based revenues and financial management since 2014. For example, the program "Education for Real Estate Development Experts," operated by the South Korea Real Estate Board, mainly seeks to train experts to meet the requirements for real estate development business according to detailed legal regulations based on the Act on the Management and Promotion of Real Estate Development Business. The training comprises real estate development business and professional ethics, policy changes, public laws related to real estate development, and related taxation and accounting rules. This capacity development program seeks to enhance the social responsibility of public institutions and support the development of the real estate industry.

## Implement capacity development programs of subnational and local governments in financial planning and management

• (Related system) Financial management training for local governments – e-Fiscal Training Integrated System

Via the Ministry of Economy and Finance, the South Korean government operates various training programs related to the national financial system. For example, the Ministry of Economy and Finance introduces the basic system of national finance and budget through the "e-Fiscal Training Integrated System" website and conducts and manages various training sessions in relation to this. The programs generally comprise details about the national financing and budgeting systems, such as South Korea's budget compilation system, the National Finance Act, the Management of the National Funds Act, budget execution and management, central-local finance relationships, and pre-feasibility studies. The targets of training are those in charge of national subsidy programs or related affairs at central government departments, local governments, and public institutions. Such training programs have been in operation as monthly and annual programs every year from 2017 to the present.

Office training Online training Online and office training Content Process of financial affairs related to national Sottlement of accounts/ evaluation Budget Deliberation Execution finance Statistica/avolys dersande ed allocation Balk dentanding from trough helicitors diffi outy corps and includes Ting-like Coresi of accounts oteaau Understanding d-Etim

Figure 70 | Fiscal training system

Source: Ministry of Economy and Finance e-Fiscal Training Integrated System website, http://finedu.moef.go.kr/html.do?menu\_c ode=0206 (accessed: August 1, 2023)

## 3 Information technology and innovation

Information technology and innovation are essential elements to respond adequately to various problems caused by urbanization. Innovation in the NUA is not limited to the "Smart City" discourse in the physical domain but refers to both types of innovation in urban policies that can support technology.

Related key policy tasks in South Korea include developing data talent and the digital capacity of the public sector to enhance digital literacy and improve the efficiency of digital-based administrative affairs. Here, the major issue is to establish a smart work environment that supports the automation of simple and repetitive tasks based on digital technology and field-oriented collaboration to facilitate data accumulation and utilization.

South Korea is also striving to develop practical technologies for collecting and managing spatial data and establish an urban development policy monitoring system that promotes the sustainability of those technologies. The e-government system in South Korea has maintained the world class position in the last few years, and capacity development programs to operate a national land information platform and foster talent in spatial information have been

implemented by establishing the National Geographic Information Institute for better access to national land planning and urban services.

- Develop user-friendly, participatory data and digital platforms through e-governance and citizen-centric digital governance tools
  - (Related status) South Korea's e-government system Digital Platform Government

Key tasks for the South Korean government include fostering national strategic industries based on AI data and streamlining government system establishment procedures. According to the United Nations Public Administration Network (UNPAN) E-Government Survey, South Korea has consistently maintained its place among the top nations since taking first place in the overall evaluation in 2010 and ranked third as of 2022.

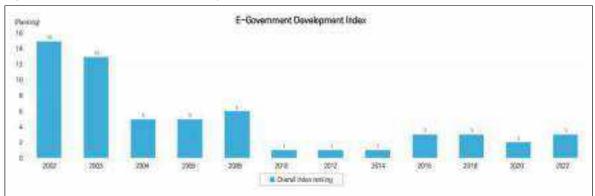


Figure 71 | UN E-Government Development Index

Source: e-National Index, UN E-Government Survey, https://www.index.go.kr/unity/potal/main/EachDtlPageDetail.do?idx\_cd=10 27 (final search on August 2, 2023), Reprocessed from the raw data by UNPAN

- Implement digital tools, including geospatial information systems, to improve urban and territorial planning, land administration, and access to urban services
  - (Related status) Digital tools for geographic information systems Digital Twin National Land (or Digital Twin for Land) and the National Geographic Information Institute

Digital Twin National Land, also referred to as V-World, is a major online spatial information service platform managed and operated by the Ministry of Land, Infrastructure and Transport. Anyone can obtain various types of administrative information related to South Korea's national land space using a metadata-based search

assist engine. Various types of metadata are available, including three-dimensional (3D) buildings, image maps, serial cadastral maps, urban areas, aesthetic districts, development restriction zones, urban natural park zones, and national land planning zones. Moreover, national focus data—spatial information constructed and operated by the Ministry of Land, Infrastructure and Transport by integrating or linking spatial information constructed by central government departments, local governments, and public institutions—are provided separately to support pan-government policy establishment. This data show land use and regulations data of each ministry or department, and 28 types of data are open (e.g., building age, real estate development business, apartment price information, status by national land category, and specific use area and district information) so that the data can be used by other portals, mobile carriers, and private companies in updating navigation or map services or building the latest information.

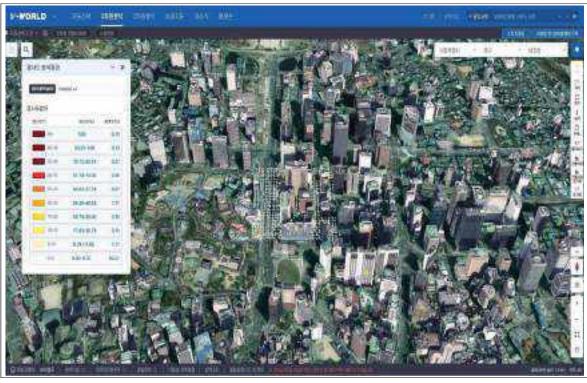


Figure 72 | Example of 3D analysis map

Source: Digital Twin National Land website, https://www.vworld.kr/dtna/dtna\_guide\_s001.do (final search on Jan. 16, 2024)

The National Geographic Information Institute is a spatial information management institute under the Ministry of Land, Infrastructure and Transport that provides the public with all kinds of national-level spatial data using geospatial information systems (GIS) through the National Land Information Platform. Specifically, digital maps, aerial photographs, and survey control points are available nationwide after upgrading the national basic map database(DB) production system and building a multi-disciplinary spatial information DB. For example, the public can download a national land information map that shows grids, legal boundaries, specific use areas, and basic areas based on population, buildings, land, and national land indicators through the platform. Furthermore, any citizen can access and acquire spatial data in more diverse fields, including history and satellites, without any restrictions.

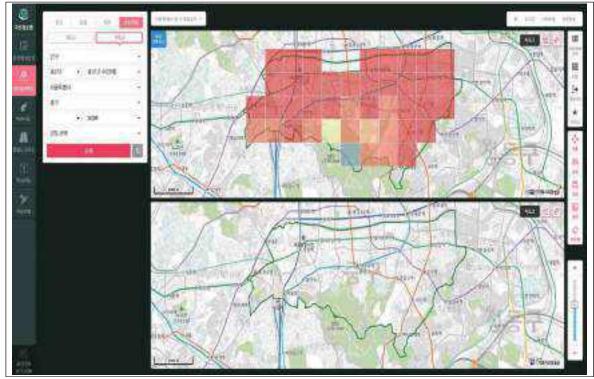


Figure 73 | Example of a national statistical map

Source: National Geographic Information Institute website, https://map.ngii.go.kr/ms/map/NlipMap.do?tabGb=statsMap (accessed: Aug. 2, 2023)

# Build capacities at all levels of government to monitor the implementation of urban development policies effectively

(Related policy) Spatial information management training program - National information talent development curriculum

The aforementioned National Geographic Information Institute is also operating an official training program called the "Spatial Information Talent Development Curriculum." The National Geographic Information Institute has been operating specialized spatial information training courses for practitioners since 2005, which mainly comprise practical training for those majoring in fields related to surveying and GIS. In particular, as the application scope of spatial information has expanded due to the 4<sup>th</sup> Industrial Revolution, training for non-experts has also been provided since 2016 to improve the technology convergence capabilities of public officials (non-majors) in charge of work related to spatial information, soldiers and civilian workers in the military, and teachers at specialized vocational high schools. The content of this training comprises theory and practice to increase data access and usability based on basic knowledge of spatial information. The goal is to contribute to the cultivation of knowledge related to spatial information laws and systems, national atlas, location-based systems, and spatial information services and training talents suitable for monitoring the implementation of the nation's urban development policies.

# Strengthen all levels of government and the civil society in the collection, disaggregation, and analysis of data

(Related status) Local government network related to SDGs - Local Sustainability
 Alliance of South Korea

In 2018, the South Korean government established the South Korean Sustainable Development Goals (K-SDGs) based on the UN SDGs and has since been continuously inspecting the implementation according to the relevant indicators. K-SDGs are based on the framework of the five pillars and 17 goals of the UN SDGs, such as economy, society, environment, peace, and global cooperation, and are restructured into five major strategies, 17 goals, and 122 targets in line with the South Korean government's Vision 2030. The South Korean government established the Local Sustainability Alliance of South Korea to share the results of the inspection of K-SDGs and assessment of indicators with other countries, which gained special consultative status with the UN Economic and Social Council (ECOSOC) since its foundation in June 2000 as a national consultative body of local councils for sustainable development installed by local governments based on the recommendations of Agenda 21, which was the result of the Rio Conference in 1992. The council is a non-governmental organization (NGO) that is a national organization of local councils for sustainable development located

across the country, and its main goal is to inspect each local government's implementation of the K-SDGs. Based on this, the Local Sustainable Development Goals (L-SDGs) were established as a subsystem to emphasize the role of local governments, supporting local councils for sustainable development through policy proposals and legislative activities related to sustainable development.

Figure 74 | Governance of K-SDGs



Source: Local Sustainability Alliance of South Korea website, http://www.sdSouth Korea.org/contents/information/list.php?page= 1&menu=information&bd\_type=info (accessed: August 2, 2023)

# Conclusions

1. Follow-up and Review

## 01 Follow-up and Review

PART III

# 1.1. Policy Recommendations based on South Korea's implementation Review of the New Urban Agenda (NUA)

- Achievements and Opportunities in Transformative and inclusive urban policies responding to social issues in South Korea
  - Over the past decade, significant progress has been made in Korea's implementation
    of the New Urban Agenda, as evidenced by improvements across most UN-Habitat
    indicators.
  - Continuous efforts have been made to systemize and advance policies in areas such
    as climate response and smart cities. To build on these achievements, more proactive
    reviews and improvements of inclusive urban policies, as suggested by the NUA,
    are necessary.
  - Although considerable strides have been made, further engagement and innovative strategies are needed to effectively address challenges like population decline, local extinction, and population aging. Efforts to integrate and support multiculturalism have been initiated, but enhancing policy frameworks to better embrace immigrant issues remains a key area for development. There has been progress in developing inclusive urban policies for vulnerable groups, yet there is potential for more robust measures to bolster resilience against extreme situations like climate change and infectious diseases. A reimagined approach to treating urban spaces as public space can foster greater community cohesion and enhance public well-being.
- The need for a stakeholder engagement platform in monitoring the implementation of the NUA
  - The New Urban Agenda highlights the importance of broad stakeholder participation and the localization of initiatives.

South Korea has made significant progress in deploying systems and policies across various sectors. To further enhance this development, it is essential to expand and improve the channels that facilitate collaboration among local governments, civil society, local residents, and stakeholders at all levels. Establishing a platform that allows these diverse stakeholders to express their opinions and collaborate will ensure that diverse perspectives and needs are effectively incorporated into urban planning and governance.

#### 1.2. Follow-up

### Development of a comprehensive NUA implementation plan

• This first report assesses the current policy landscape and the implementation status of the New Urban Agenda (NUA), following the guidelines provided by UN-Habitat. For continuous monitoring and to prepare for subsequent reports, it is crucial to develop a tailored NUA implementation plan. This plan should include specific improvement targets for areas that are lacking, to encourage sustained implementation efforts and ensure ongoing monitoring. This approach will help maintain alignment with the NUA's objectives and enhance the effectiveness of urban policy strategies in South Korea.

# Establishing and enhancing monitoring systems for NUA implementation in South Korea

• To enhance the implementation of the New Urban Agenda (NUA) in South Korea, it is crucial to select and finalize monitoring indicators that are specifically tailored to the national context. This report has utilized available indicators and data from South Korea, aligned with the global monitoring standards set by UN-Habitat. Moving forward, it will be necessary to adjust these quantitative indicators and refine the qualitative indicators to better fit South Korea's specific needs as outlined in the NUA implementation plan. Moreover, establishing a continuous monitoring system is essential. To increase the effectiveness of this system, there is also a need to develop a platform that can collect and analyze the necessary data based on these finalized indicators. Integrating this platform with other relevant indices, such as those used in the Assessment of Sustainability of Cities and Level of Living

Infrastructure, will further enhance the monitoring process, ensuring that it not only aligns with but also complements other national development efforts

### Global engagement and sharing of South Korea's NUA implementation insights

• To effectively share South Korea's results from implementing the New Urban Agenda (NUA) with the global community, it is essential to expand cooperation with UN-Habitat. Hosting an international seminar would be a strategic approach to communicate South Korea's experiences, achievements, and challenges in NUA implementation. Additionally, utilizing platforms like the World Urban Forum, sponsored by UN-Habitat, to present these outcomes from an international perspective will not only enrich the global discourse but also support the ongoing NUA efforts both within South Korea and internationally, particularly in developing countries. This approach will facilitate mutual learning and foster stronger international collaboration in urban development.

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