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## Growth Solutions for Non-Capital Regions through Decentralization and Balanced Development Principles

### 01 The Role of Regional Universities in South Korea for Balanced National Development

1. Research Background
2. Flow and limitations of Existing Policies Related to Regional Universities
3. Empirical Analyses of the Role of Universities in the Regional Innovation System
4. Key Findings from the Case Study of Regional Universities
5. Plan to Strengthen the Role of Regional Universities for Balanced Development

### 02 Strategies for Fostering a New Industrial Cluster in a Non-metropolitan Area: A Case Study of the Biohealth Industry in the Chungcheong Region

1. Research Background and Significance
2. Research Purpose and Reason for Selection of the Case Study
3. Analysis of the Formation Process, Strengths, and Weaknesses of the Biohealth Industry in the Chungcheong Region
4. Policy Implementation Measures to Activate a New Industrial Cluster in Non-metropolitan Areas

### 03 Expansion Strategies of Regional Development Investment Agreement for the Realization of the Local Autonomy

1. Introduction
2. Outline of Regional Development Investment Agreement System
3. Results and Implications of the Regional Development Investment Agreement Pilot Project
4. Improvement Directions for Expanding Regional Development Investment Agreements

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# The Role of Regional Universities in South Korea for Balanced National Development

Sungchul Cho

## 1. Research Background

Regional universities in South Korea are facing the dual pressures of a declining school-age population and a shrinking population in rural cities. At the same time, the government is transferring the authority and resources for university development policies to local governments and universities themselves to support the active reshaping of the role of the latter through regional cooperation; the establishment of a special account for higher and lifelong education support is a prime example of this. These environmental changes call for the strengthening of the role of regional universities as hubs for balanced national development and regional innovation, but existing research on the topic often lacks discussion of the local context in which universities are located.

In this regard, as a policy study to explore the role of regional universities as hubs for balanced development and regional innovation, this study focuses on the following research objectives. First, we examine existing regional university development policies from the perspective of balanced development, discuss the main issues and limitations, and suggest directions for policy improvement. Second, we conduct an empirical analysis using alternative data to evaluate the role and limitations of regional universities in each regional innovation system and draw policy implications. Third, through in-depth interviews with regional university officials and surveys of representatives of university-originated startups, this study identifies the limitations and policy needs in the field and suggests policy directions to link the new role of regional universities with balanced national development policies.

## 2. Flow and Limitations of Existing Policies Related to Regional Universities

Since the period of deindustrialization, the state has

recognized regional universities as a source of manpower and technology, thereby endeavoring to strengthen their connections with local industries. During the 1970s and 1980s, the establishment and transfer of universities and research institutes to rural areas as the base institutions for balanced development continued, and in the 1990s, investments were concentrated on establishing base facilities and operational organizations to foster a regionally based industry–academia cooperation ecosystem. Since the 2000s, mid- to long-term projects to build regional universities as industry–academia cooperation hubs have been readily promoted with the goal of balanced development, and institutional foundations such as industry–academia cooperation groups and technology holding companies have been established. This has led to 1) a steady increase in the quantitative scale of industry–academia cooperation activities, 2) the establishment of professional organizations and systems within universities to support cooperation activities with local industries, and 3) meaningful institutional improvements to strengthen the role of universities and the effectiveness of policy implementation.

Several structural limitations have become apparent in the existing policies. First, because of the hierarchical evaluation system and the pressure of restructuring, the relationship between regional universities has not matured into a system of cooperation and sharing. This has led to the worsening of investment overlaps and fragmentations and to continued hinderance in the ability to build consensus and organize collective action on common regional issues. Second, because of perfunctory and short-term industry–academia cooperation practices that rely heavily on government support, the development of substantive cooperation with local industries was sluggish. Finally, a significant proportion of the workforce and business outcomes of universities are structurally fixed to flow out to other regions, such as the capital area, thus limiting the spillover effect of industry–academia cooperation.

### 3. Empirical Analyses of the Role of Universities in the Regional Innovation System

This study comprehensively examines the role and performance of regional universities within the regional innovation system through empirical analyses and surveys. In the first analysis, university-originated technology startups in 2015 and 2020 were extracted from the corporate database of Korea Rating & Data (KoDATA), and subsequently the relocation and expansion path of the startups after incubation were tracked. A total of 13.7% of the startups that started their business at regional universities shut down within five years, and 16.0% moved to the capital area and other regions. However, the remaining 70.3% survived and expanded their business within the same municipal and provincial areas. In particular, a large number of innovation companies continued their growth path by concentrating in policy-oriented planned locations such as industrial complexes (29.3%) and research and development (R&D) zones (11.3%). Although the proportion of companies that left the region was not high, much is implied in the fact that the performance of companies that left for the capital area and other regions was superior to that of the those that remained in the region. **Figure 1**

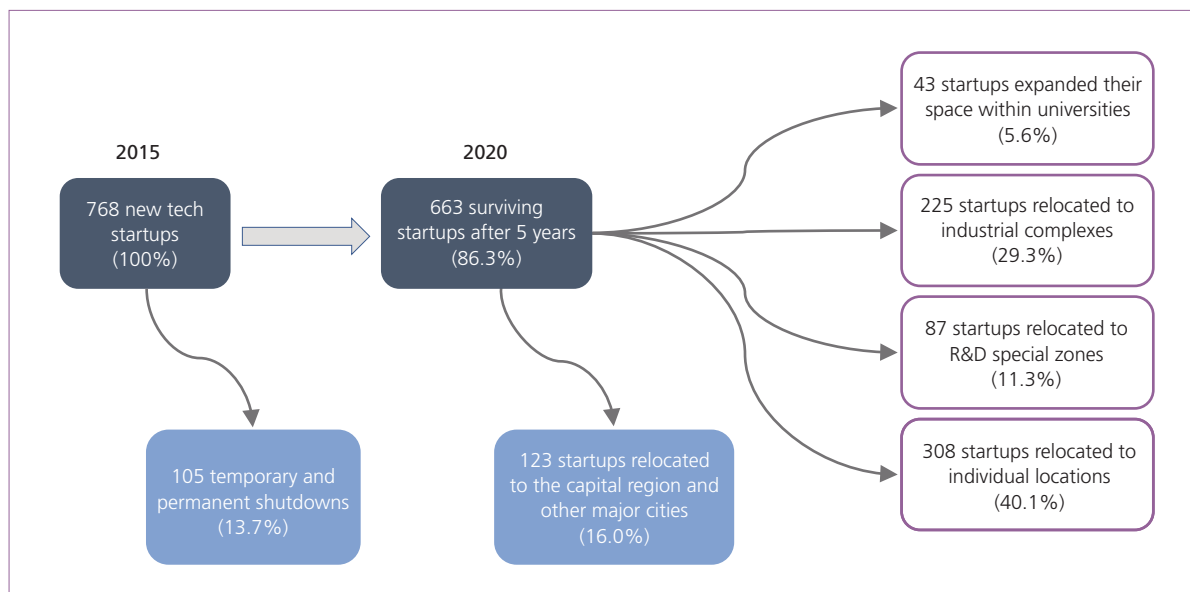
The second analysis explores the network of technology transfer, commercialization, and joint patent creation through joint R&D with universities on the basis of the data of jointly filed patents from 2004 to recent years. The results demonstrate

that regional universities served as the base of wider collaborative research networks across all indicators, including connection centrality and mediation centrality. They not only formed networks with a large number of small and medium enterprises (SMEs) and public and research institutions but also played a bridging role in mediating the exchange of knowledge and technology across various sectors. However, the following limitations are also apparent: industry–academia collaborations with SMEs were mostly one-time collaborations that lacked sustainability; large-scale technological collaborations were still highly dependent on innovation actors outside the region; and collaborative research among universities was still underdeveloped. **Figure 2**

### 4. Key Findings from the Case Study of Regional Universities

To explore the new policy trends, limitations, and constraints of regional universities, we conducted a case study based on field visits and interviews. Kangwon National University and Kyungnam University were selected as an example of a regional public hub university and a regional small and medium-sized private university, respectively. In addition, the collaborative system of Busan Metropolitan City was examined as an example of promotion policies of university cooperation by metropolitan municipalities. Lastly, the case of

**Figure 1.** Relocation and expansion path of tech startups originating from regional universities in five years (2015–2020)



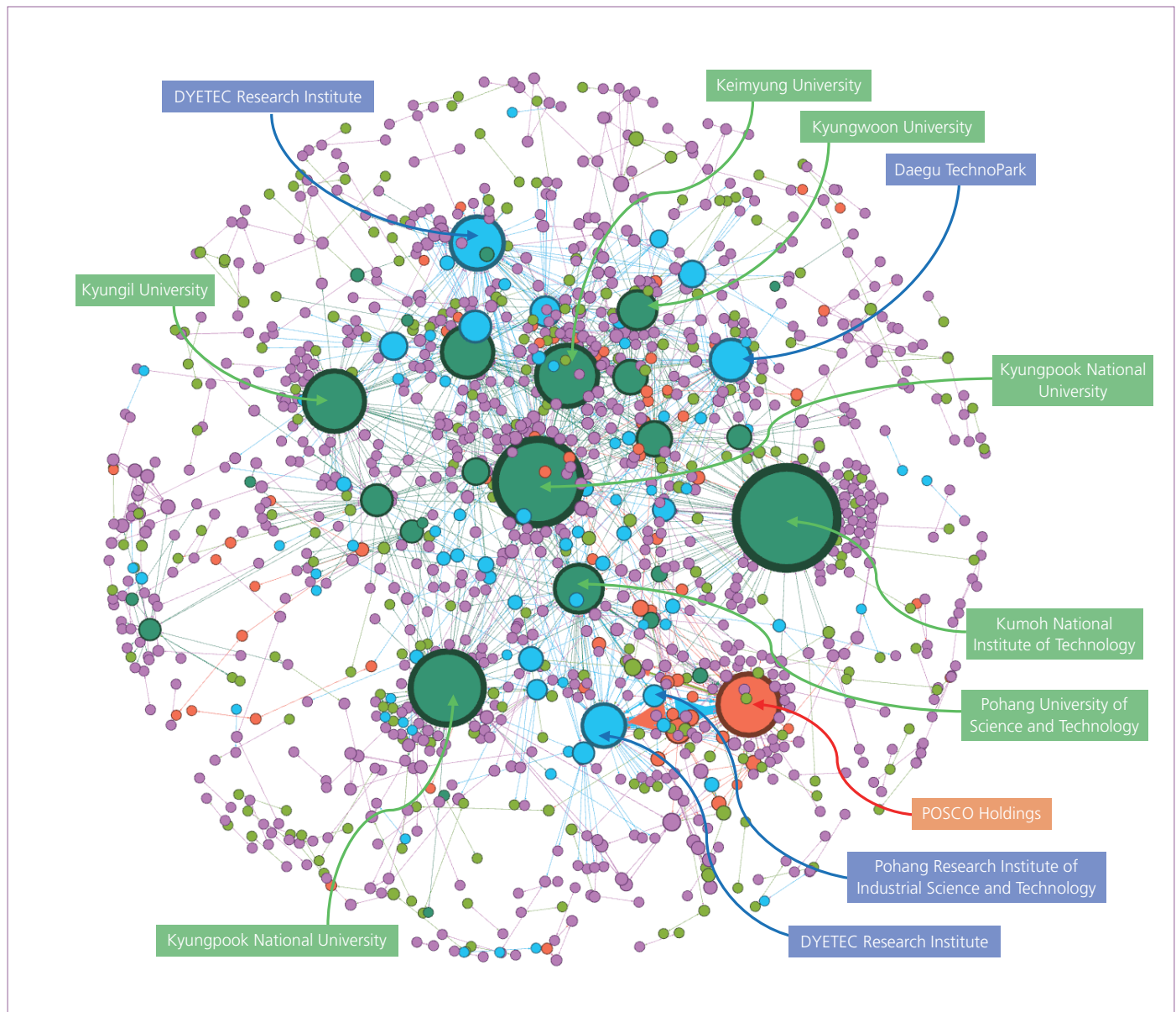
**Source**  
Created by the author  
using data from  
KoDATA

Osong Biotech University Consortium in Chungcheongbuk-do, which is the outcome of a regional innovation project based on local government–academia cooperation recently promoted by the Ministry of Education, was reviewed.

The main implications of the case study are as follows. First, the support programs of ministries and local governments related to universities are expanding significantly in both volume and scope, but the connections between projects and systems are weak, and continuous business promotion is often not achieved, thereby dispersing the effectiveness of the businesses. Second, the role of local governments needs

to be strengthened to overcome the limitations of existing approaches and establish a comprehensive support system for regional universities, but the participation of local governments in university policies remains peripheral, and their capacity to coordinate policy resources at the local level is still lacking. Third, while a number of meaningful attempts have been made to strengthen the foundation for cooperation between local governments and universities, such as university consortiums and living labs, various institutional improvement tasks are needed to ensure a long-term operational foundation for the business model to stabilize.

**Figure 2.** Industry–academia cooperation network in Daegu and Gyeongsangbuk-do region



**Source** Created by the author using full data until 2020 from the Korean Patent Information Service Patent Registration Publication

## 5. Plan to Strengthen the Role of Regional Universities for Balanced Development

On the basis of the above analysis, this study proposes three policy measures to strengthen the role of regional universities for balanced development. First, the mission-oriented support system needs to be reorganized according to the categorization of regional universities. Specifically, this study proposes the classification of regional universities into three categories: research-oriented, vocation-focused, and region-centered. Research-oriented universities should be selectively designated as innovation hubs for national basic research and for developing strategic regional industries, and then fostered as hubs for mid- to long-term collaborative research by directing comprehensive bundled budget support led by the Ministry of Science and Technology (Min et al., 2012). Next, vocation-focused universities, which are shaped into hubs for lifelong and vocational education linked to local industries, should be supported as institutions for higher lifelong education, which are actively connected to the employment fund project and employment service support project of the Ministry of Employment and Labor. Finally, as universities that serve as a base for training human resources for essential services and local community innovation activities, region-

centered universities should be supported through campus-type urban regeneration projects that are linked to the change of use and function of marginal universities and the relocation of campuses to original cities. **Table 1**

Second, this study discusses policy recommendations to strengthen the linkages between universities and local industries. A key policy issue is to discourage the existing practice of industry–academia cooperation that is divided into departments and laboratories, and to focus investments on aggregated mid- to long-term industry–academia cooperation activities centered on base research institutes linked to local industries (Ahn, 2022). To support this, overlapping industry–academia and technology transfer organizations should be integrated across ministries to create a regional-level technology support platform. Lastly, the study recommends the designation and development of campus innovation parks centered on regional hub universities. This type of campus innovation park designates the university campus and the local industrial area within the scope of a single project, promoting shared infrastructure (such as SME R&D aggregation facilities) and support programs to link the university’s innovation achievements to local industries through collaboration with various ministries.

**Table 1.** Comparison of main fostering direction according to university classification

Classification	Research-oriented universities	Vocation-focused university	Region-centered university
Key functions	Innovation hub for national basic research and development of regional strategic industries	Operation of vocational education and lifelong education system linked to local industries	Training of essential service personnel in the region and take on role as a base for local community innovation activities
Direction of designation	Selectively designate one or two projects per region and promote linkages with research universities in related fields	Designate specialized universities in consideration of each region’s strategic industries	Designate projects in connection with the change of use and function of marginal universities and the relocation of campuses to the original city
Linked projects	Run projects with hub campus innovation parks and regional research centers, and specify overlapping and operate related special zones	Link regional human resource platforms, and package support for employment fund projects and employment service support projects	Promote projects in connection with urban regeneration projects by the Ministry of Land, Infrastructure, and Transport, and rural space restructuring plans by the Ministry of Agriculture, Food, and Rural Affairs
University case	Yonsei University Mirae Campus (foster local industry in the medical device sector)	Andong Science College (human resource training for bio GMP)	Kyungnam University (local community innovation center)
Promotion plan	Promote cross-ministerial projects led by the Ministry of Science and ICT	Foster institutions specializing in higher lifelong education under the Ministry of Employment and Labor	Integrated operation of local government lifelong education centers and related institutions and businesses

**Source**  
Drafted by the author

Finally, this study proposes policy recommendations to strengthen the linkage between universities and local communities in two main aspects. First, as a way to strengthen the lifelong vocational education function linked to the local community, the creation of social innovation spaces in connection with the lease, disposal, and repurposing of unused basic education properties at universities needs to be expanded, which should then be fostered as a base for community cooperation projects (e.g., lifelong vocational education and local startups) (Cho et al., 2022). At the same time, this study also recommends the relocation of educational functions of small universities outside the city (prioritizing culture, art, and design-related departments) to their original city to promote urban regeneration in the form of joint campuses and campus towns.

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# Strategies for Fostering a New Industrial Cluster in a Non-metropolitan Area: A Case Study of the Biohealth Industry in the Chungcheong Region

Bongkyung Jeon

## 1. Research Background and Significance

### ■ The need to foster new industries in non-metropolitan areas

The lack of quality jobs in non-metropolitan areas has led to a constant outflow of the youth population, resulting in the loss of the dynamics of the regional economy and industries. Factors that negatively affect the competitiveness of local industries in non-metropolitan areas include (1) relocation of leading firms from non-metropolitan areas to a metropolitan area owing to the deregulation of factories in metropolitan areas, (2) shutdown of production plants in non-metropolitan areas owing to changes in the business strategies and value chains of conglomerates and multinational companies, and (3) concentration of promising companies in high-tech industries, such as the semiconductor and biotechnology industries, in the metropolitan area.

Moreover, many of the regional industries that had been fostered as key industries during the era of industrialization in the 1960s–1970s still comprise a significant proportion of the regional economy even after half a century. This has resulted in a structural lock-ins in the industrial structure in non-metropolitan areas. In particular, the regional economy of non-metropolitan areas has been gradually declining owing to conglomerates relocating their production plants—which had played a critical role in the regional economy and industries by providing quality jobs—to metropolitan areas.

The external environment is also unfavorable to the industrial structure in non-metropolitan areas. The COVID-19 pandemic revealed the structural limitations of the global value chain. Moreover, as the trade disputes between the U.S. and China has led to reshoring (a practice in which the overseas manufacturing plants of multinational companies are relocated to their home countries), a fundamental change is needed in the industrial structure of non-metropolitan areas that is centered on low value-added production plants.

Therefore, a new industrial cluster needs to be fostered for non-metropolitan areas to secure sustainable competitiveness and respond to their internal and external environments.

## 2. Research Purpose and Reason for Selection of the Case Study

### ■ An in-depth case study to clarify the problems of a new industrial cluster in non-metropolitan areas and to present development strategies

The purpose of this study is to derive policy implementation measures to activate a new industrial cluster in a non-metropolitan area. To this end, Daejeon and Chungcheongbuk-do (hereinafter referred to as “Chungbuk”) were set as the spatial scope of the study. The reason these two areas in the Chungcheong region have been selected as research sites is that both have clusters related to the biohealth industry. Daejeon’s Daedeok Innopolis and Chungbuk’s Osong Biovalley have a relatively well-established physical infrastructure for fostering related industries, and the local governments have implemented various policies to foster the biohealth industry in the long run.

Consequently, this study focused on discussing the imperceptible elements within the clusters that had been largely disregarded in previous studies. This was done through a case study of the Chungcheong region and in-depth interviews with 61 individuals.

## 3. Analysis of the Formation Process, Strengths, and Weaknesses of the Biohealth Industry in the Chungcheong Region

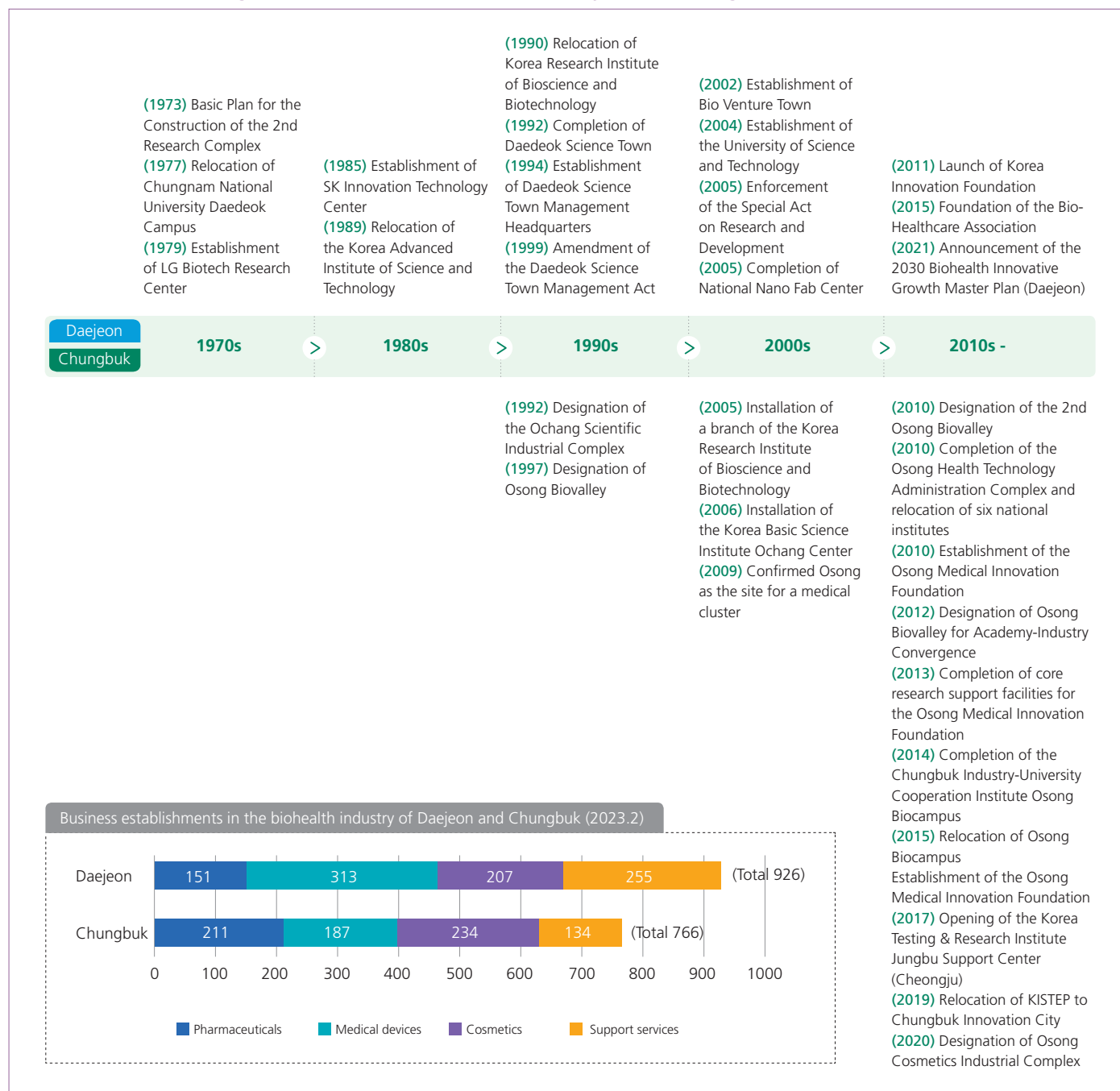
### ■ The formation of biohealth clusters is led by the government and the private sector in Daejeon and by

## the government in Chungbuk

Government-funded research institutes, such as the Korea Advanced Institute of Science and Technology and Korea Research Institute of Bioscience and Biotechnology, were relocated to Daejeon in accordance with the Basic Plan for the Construction of the 2nd Research Complex in 1973, and the foundation for fostering related industries was established as

private research and technology centers, such as “LG Biotech Research Center” and “SK Innovation Technology Center,” were built. Meanwhile, the Ochang Scientific Industrial Complex was designated in 1992 (completed in 2002) in Chungbuk and the Osong Biovalley was designated in 1997 (completed in 2008), with the formation of related clusters led by the central and local governments. **Figure 1**

**Figure 1. Formation and growth of the biohealth clusters in Daejeon and Chungbuk**



**Note** In terms of the number of business establishments in the biohealth industry of Daejeon and Chungbuk, Daejeon has more business establishments, but the size of each business is generally larger in Chungbuk (average site area: Daejeon 13,352m<sup>2</sup>, Chungbuk 25,885m<sup>2</sup>).

**Source** Prepared by the authors based on data from previous studies and data on business establishments obtained from Korea Enterprise Data (as of February 2022).



The most significant feature and advantage of Daejeon's biohealth clusters is that their infrastructure for science, technology, and knowledge industries is rich. The region has government-funded research institutes, such as the Korea Research Institute of Bioscience and Biotechnology and the Korea Research Institute of Chemical Technology, as well as universities such as KAIST and Chungnam National University, which can provide direct assistance in the discovery and testing of new drug substances, which is the early stage and basic research of the biohealth industry. Moreover, many first-generation venture entrepreneurs from the LG Biotech Research Center and Korea Research Institute of Bioscience and Biotechnology are still running businesses in Daejeon, thus forming a strong bond among venture entrepreneurs.

On the other hand, Chungbuk has continued to expand the scale of related industries with a focus on industrial complexes and medical clusters related to the biohealth industry. Unlike Daejeon, Chungbuk has many private companies that can conduct non-clinical tests, such as efficacy and toxicity tests and primate experiments, along with the Ministry of Food and Drug Safety, which is the regulatory agency. Furthermore, Chungbuk also has a competitive advantage in the back-end process of the biohealth industry, as public institutions such as Osong Medical Innovation Foundation are located within the region. In addition, it also has advantages in product manufacturing, as many production plants of pharmaceutical conglomerates have been established within the Ochang Scientific Industrial Complex and Osong Biovalley of Chungbuk.

#### ■ Strengths of the biohealth clusters in Daejeon: R&D infrastructure and venture business ecosystem

Startups in the biohealth industry are mostly founded by professors, researchers, and doctors who have acquired related knowledge through long-term study. In particular, Daejeon has many first-generation venture entrepreneurs from LG Life Sciences and Korea Research Institute of Bioscience and Biotechnology who have been operating businesses they started within the region since the early and mid-1990s. Since many of these venture entrepreneurs started their own businesses after working together at a company or a research institute, a strong bond and active knowledge exchange exist among entrepreneurs in related industries. Hence, entrepreneurs starting businesses in Daejeon have the advantage of not only forming human networks with researchers and entrepreneurs, but also accessing well-established physical infrastructure within the region, such as equipment and laboratories.

*"Entrepreneurs can observe all kinds of difficult situations faced in the process of business growth and learn from one another. (...) Having others running businesses in a similar environment together not only creates a bond but also provides great emotional help in the form of stability to entrepreneurs. This is why some of the companies that moved to the metropolitan area end up returning to Daejeon." (Interviewee [1], president of an association of private support agencies; April 18, 2022.)*

#### ■ Strengths of biohealth clusters in Chungbuk: The desire of the central and local governments to actively foster the industry

Chungcheongbuk-do has created clusters such as the Ochang Scientific Industrial Complex and Osong Biovalley based on stable and continuous investment to foster the biohealth industry. In particular, Chungbuk is the only local government that is managing nearly 70 workers to foster related industries by creating a "Bio Industry Bureau." Moreover, it strives to attract and relocate related companies from metropolitan areas by actively undertaking activities to attract companies at the local government level.

*"At first, we identified all the CEOs of bio-related companies with connections in Chungcheong-do and contacted all of them from Chungbuk. We pursued them in this manner for 5–10 years to attract them to the region. Local government officials and heads of institutions are still holding investment briefing sessions in Seoul. (...) We also met with representatives of Chungcheong-do in conglomerates like Samsung and LG to convince them to introduce the CEOs of primary and secondary subcontractors. We pursued them for years and convinced them to relocate their plants to this region by offering sites and all kinds of tax benefits in return. We are still in charge of three companies each, which we can attract to this region and manage them." (Interviewee [24], head of a local government support agency; May 27, 2022.)*

Chungbuk lacks Daejeon's infrastructure for science and technology. However, it has a rather superior industrial value chain. There are government agencies related to health and medical care that play a key role in the biohealth industry within the region, such as the Korea Disease Control and Prevention Agency and the Ministry of Food and Drug Safety. Moreover, the region also has service organizations such as CMOs and CROs that play a major role in the ecosystem of the biohealth

industry, animal testing institutes for primate experiments required in the preclinical stage, and non-clinical centers for the testing of new drugs.

■ **Weaknesses of biohealth clusters in the Chungcheong region: (1) Outflow of companies and talent due to inadequate settlement conditions**

Settlement conditions present problems for most non-metropolitan regions with clusters in the Chungcheong region. Along with settlement conditions that do not meet the expectations of excellent research personnel, there are issues of the continuous outflow of companies and talent due to relative deprivation caused by rising housing prices in the metropolitan area.

Moreover, the transportation service between major institutions within the region is inconvenient, and the metropolitan transportation service between clusters is inadequate. Hence, despite the presence of adjacent clusters to cooperate with, each cluster is, in effect, isolated and functionally fragmented.

*"On the outside, Daejeon has great conditions to start a business. In particular, for bioindustry ventures like us, it is good that there are several government-funded research institutes, including the Korea Research Institute of Bioscience and Biotechnology, as well as research-oriented universities like KAIST. There are quite a few hospitals in Daejeon, contrary to what people say. However, why do people not come here? (...) Even if we have the right physical environment, does everything work naturally? (...) Why are all the conglomerates moving to the metropolitan area? They say it is difficult to recruit young workers if they are in the provinces. If even conglomerates have this kind of trouble, how about venture companies --- would anyone come? What younger people value most is good living conditions, that is, a good settlement environment. (...) I have been constantly talking to the head of the local government for 20 years about improving the settlement conditions, but nothing has changed. In the meantime, the conglomerates have all moved to the metropolitan area. As such, improving the settlement conditions is the most urgent matter that must be addressed immediately, not gradually." (Interviewee [30], CEO of a medium-sized enterprise in Daejeon; June 3, 2022.)*

*"Transportation is the limitation for clusters in the non-metropolitan area. Although the basis of clusters is knowledge sharing through communication between human resources, the transportation network does not connect Daedeok, Osong, Ochang, and Sejong even though they are all located within one*

*hour of each other, since they have different local governments. Even though each local government is aware of this problem, one of them cannot take the initiative in solving this. Consequently, the clusters are isolated like islands standing alone. It is actually faster to reach Seoul from each region than to travel between Daejeon and Osong in the Chungcheong region." (Interviewee [45], CEO of a venture company in Chungbuk; August 5, 2022.)*

■ **Weaknesses of biohealth clusters in the Chungcheong region: (2) Lack of opportunities to attract private investment and stagnation in the venture ecosystem**

Owing to the nature of the biohealth industry, a huge investment must be attracted at each stage of growth for product development. However, since most investment companies and financial institutions, including venture capitalists, are concentrated in Seoul, venture entrepreneurs in non-metropolitan areas have limited opportunities for investment attraction. The lack of investment in venture companies led to a decrease in the number of new venture startups, thus causing stagnation in the venture ecosystem of Daejeon.

*"This could be a difference in biocompanies between Pangyo and Daejeon. When those in Daejeon are raising funds to receive capital investment after R&D, venture capitalists in Seoul are reluctant to come down here. Most of them willingly visit Pangyo, but not Daejeon, even if we recommend companies with excellent technology. Hence, CEOs must go to Seoul and do their own legwork to raise funds. Venture capitalists usually request CEOs to come visit Seoul so they can learn more about the technology; they rarely volunteer to go to Daejeon themselves." (Interviewee [26], managing director of a venture investment institution; May 30, 2022.)*

*"Bio venture companies in Korea seem to be stagnating these days. Companies are created and collapse every day in the U.S., but there is nothing dynamic in Daejeon, and the key players (major venture entrepreneurs) have really aged. Older entrepreneurs tend to avoid risk-taking, so they focus more on keeping things as they are. Now the first-generation venture entrepreneurs in Daejeon should exist and reinvest, and the next generation must replace them (management specialists) or receive investment to start a new business, but this is not happening. There must be constant generational shifts so that new original ideas come up and the ecosystem can operate dynamically, but this is not so easy at the moment." (Interviewee [10], CEO of a company in Daejeon; April 26, 2022.)*

#### 4. Policy Implementation Measures to Activate a New Industrial Cluster in Non-metropolitan Areas

##### ■ (Central government) “Choice and concentration” strategy

New industries such as the biohealth industry require a concentration of limited talent and capital since they seek global excellence. Since the biohealth industry requires highly specialized knowledge, astronomical amounts of capital, and long periods of product development, it is necessary to choose a strategy to efficiently concentrate the nation's limited resources rather than allocate them as a mere formality.

In fact, the U.S. has clusters across three states, and Denmark and Sweden have created clusters in their border areas so that these clusters can achieve global competitiveness. Considering that only a few clusters are operating properly even in advanced countries, we need to ask ourselves whether there are too many related clusters, bearing in mind our small territory and limited human resources.

##### ■ (Local government) Creation of an open cluster

It is impossible to handle all the production processes in the biohealth clusters of non-metropolitan areas. Considering the reality of the region, a realistic plan may be to build an open cluster model that turns to other regions to compensate for insufficiencies with the goal of fostering a specialized cluster that maximizes only a single advantage. For the Chungcheong region, it is necessary to consider creating a specialized cluster that links prototype development and non-clinical stages in basic research. Daejeon can concentrate on basic research such

as exploring and testing new drug substances and establishing analytical methods, and Chungbuk can develop CROs and CMOs in association with the Ministry of Food and Drug Safety and specialize in non-clinical trials for a competitive edge.

##### ■ (Central and local governments) Urgent need to improve settlement conditions to resolve the issue of the “uneven playing field”

The biggest obstacle in fostering a new industrial cluster in non-metropolitan areas is not the lack of physical infrastructure but the lack of specialized human resources. Accordingly, the central and local governments must establish exceptional welfare measures, such as housing for clusters in non-metropolitan areas. From a long-term perspective, the central government must provide a special supply policy plan for the working-age population to settle in non-metropolitan areas, and local governments must concentrate on improving settlement conditions by continuously undertaking urban renewal projects.

Meanwhile, medium-sized enterprises listed on the stock market have offices in metropolitan areas or overseas to recruit key personnel and run the business. Therefore, it is necessary to prevent companies from leaving the region and moving to another and to create an environment in which they can continue to grow by providing benefits (incentives) for conglomerates to other promising or medium-sized companies within the region.

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\* This article summarized the report “Strategies for Fostering a New Industrial Cluster in a Non-metropolitan Area” by Jeon, B., Kim, S., Kang, M., Cho, S. 2022. Sejong: Korea Research Institute for Human Settlements.

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# Expansion Strategies of Regional Development Investment Agreement for the Realization of the Local Autonomy

Wooseong Jeong

## 1. Introduction

The central government in Korea has led regional development projects and promoted them sporadically via individual ministries. This approach has faced considerable criticism in terms of efficiency and effectiveness. To overcome the limitations of the government-led approach to regional development, which was planned and compartmentalized by individual ministries and focused on short-term and one-time support, the Regional Development Investment Agreement (Investment Agreement), a Korean planning contract system, was introduced. The Investment Agreement was introduced to transition from a nationally-led to a regionally-led balanced development policy and to overcome the problems of the fragmented and sporadic support for regional development provided by various entities and to support regions comprehensively, systematically, and multidimensionally through cooperation among support agencies. However, owing to immature institutional conditions, it has not been effectively implemented thus far. Under the former president, Moon Jae-in administration, the government-initiated pilot projects by signing investment agreements with 11 local governments for “region-led, multi-ministry, multi-year package projects.” Starting in 2019, these projects aimed to secure new funding of KRW 100 billion over three years to support the projects. This study examines the background and process of introducing the investment agreement system in South Korea and suggests the future direction of the system based on the experience of pilot projects.

## 2. Outline of Regional Development Investment Agreement System

### 1) Concept

An investment agreement is a system where local

governments establish optimized plans for promoting regionally-led balanced development projects and enter into agreements with the central government to pursue them jointly. Under this system, the central government supports multi-ministry, multi-year projects in a comprehensive manner (Park and Lee, 2000). In legal terms, it refers to an agreement (Article 31, Paragraph 1 of the Special Act on Local Autonomy and Regional Balanced Development, (Local Autonomy and Regional Balanced Development Act)) aims at jointly promoting projects for balanced development between the central and local governments or among local governments, specifying the project contents and investment sharing.

### 2) Introduction

The need for the investment agreement system was first presented while formulating the 4th National Comprehensive Land Plan (Korea Research Institute for Human Settlements, 1998). According to this, the problems identified during the implementing of three previous national land plans highlight deficiencies in comprehensive government-wide execution capability and national determination for enforcing the plans, including laws, funding, and organizational aspects necessary to realize them. As a result, a lack of overall policy coordination and integration within the government has arisen and a significant discrepancy between planning and implementation has been highlighted. To overcome these limitations, a need arose to introduce a system inspired by France’s “contrats de plan” to enhance the effectiveness of national land planning and strengthen cooperation and coordination functions.

Thereafter, the investment agreement was officially included in the 4th National Comprehensive Land Plan (2000-2020) and formally emerged as a Korean planning contract within government policy. At that time, the government of former President Roh enacted the Special Act on Balanced Development to create a society where regions across the nation could prosper equally and uniquely. In the Special Act,

the investment agreement was introduced to implement the National Balanced Development 5-Year Plan coordinated with the government budget, known as the Special Account for National Balanced Development (Balanced Development Account). In other words, the investment agreement was introduced to transition from the existing fragmented and sporadic support provided by individual entities to a comprehensive, systematic, and multidimensional support system through collaboration among support agencies (Planning and Budget Office, 2003). **Figure 1**

### 3) Progress

In 2018, the investment agreement system, which had been put on hold due to immature overall introduction conditions such as duplication of evaluation and lack of awareness, received renewed momentum when it was included in the “Vision and Strategy for National Balanced Development” announced by the Moon administration. Under the awareness

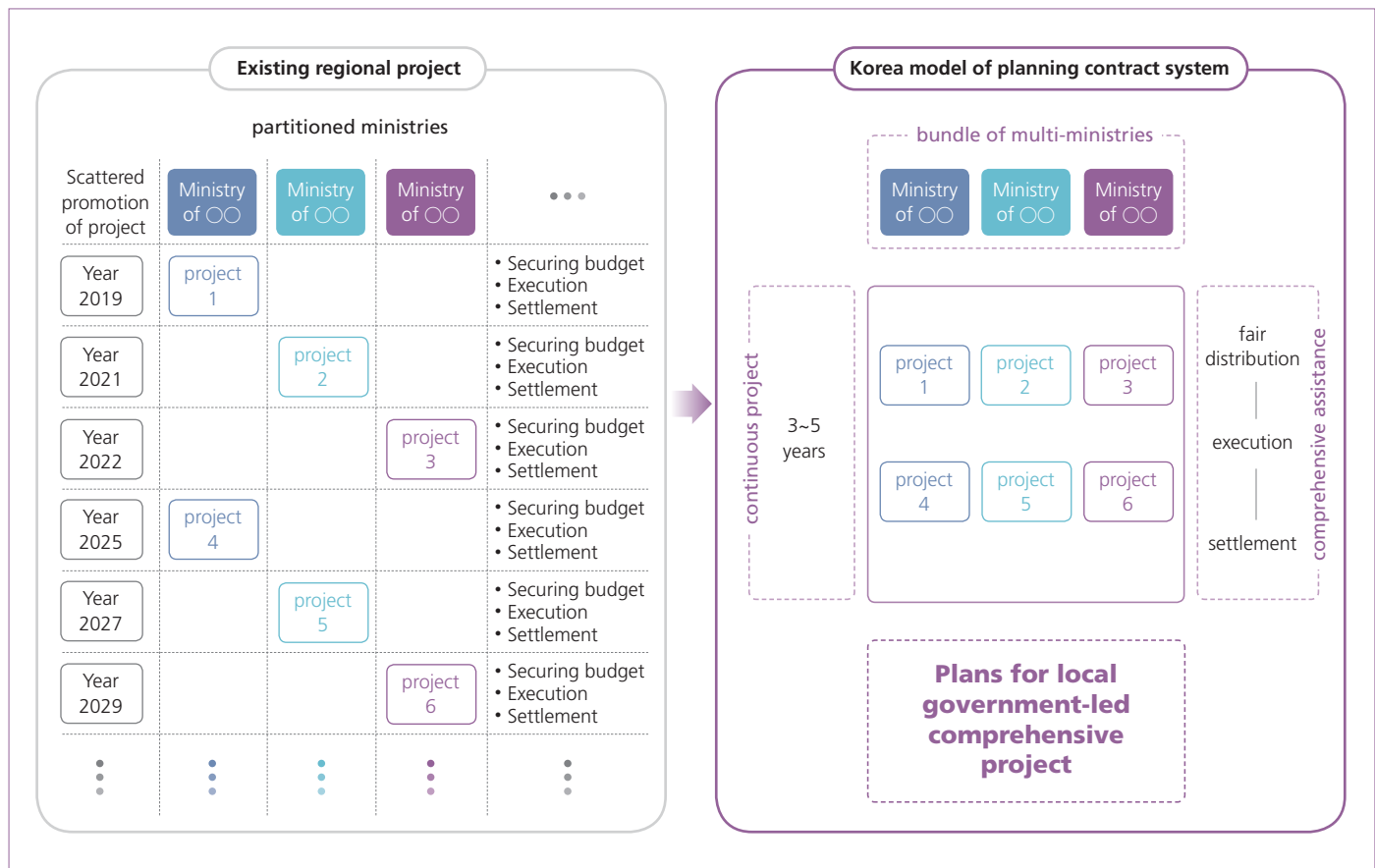
of the problem that the current regional projects are planned in a compartmentalized manner by individual ministries and are supported on a short-term and one-time basis, which limits the optimized policy implementation in the region, the background and aim of reintroduction are to promote the introduction of planning contracts that support comprehensive assistance once local governments formulate optimized plans and enter into contracts with central ministries.

In November 2018, the National Balanced Development Commission (from July 2023 the Decentralization and Balanced Development Committee) proceeded with pilot projects to experimentally operate and validate collaboration methods between the central and local governments before the full-scale implementation of investment agreements.

### 4) Institutional Advantages

The significance of introducing the investment agreement system to transition from a government-led to a regionally-

**Figure 1.** Comparison of the existing regional development project promotion approach and the Korean planning contract approach



**Source** Local Autonomy Decentralization and Balanced Development Committee, Ministry of Land, Infrastructure, and Transport. 2019. Study on the Development Directions of the Korean Planning Contract System based on Government-Local Government Cooperation. p. 92.

led approach in implementing balanced development policies can be summarized into three points (National Balanced Development Commission, Ministry of Land, Infrastructure, and Transport, 2020). First, it enhances local autonomy and responsibility by enabling regions to pursue the most needed

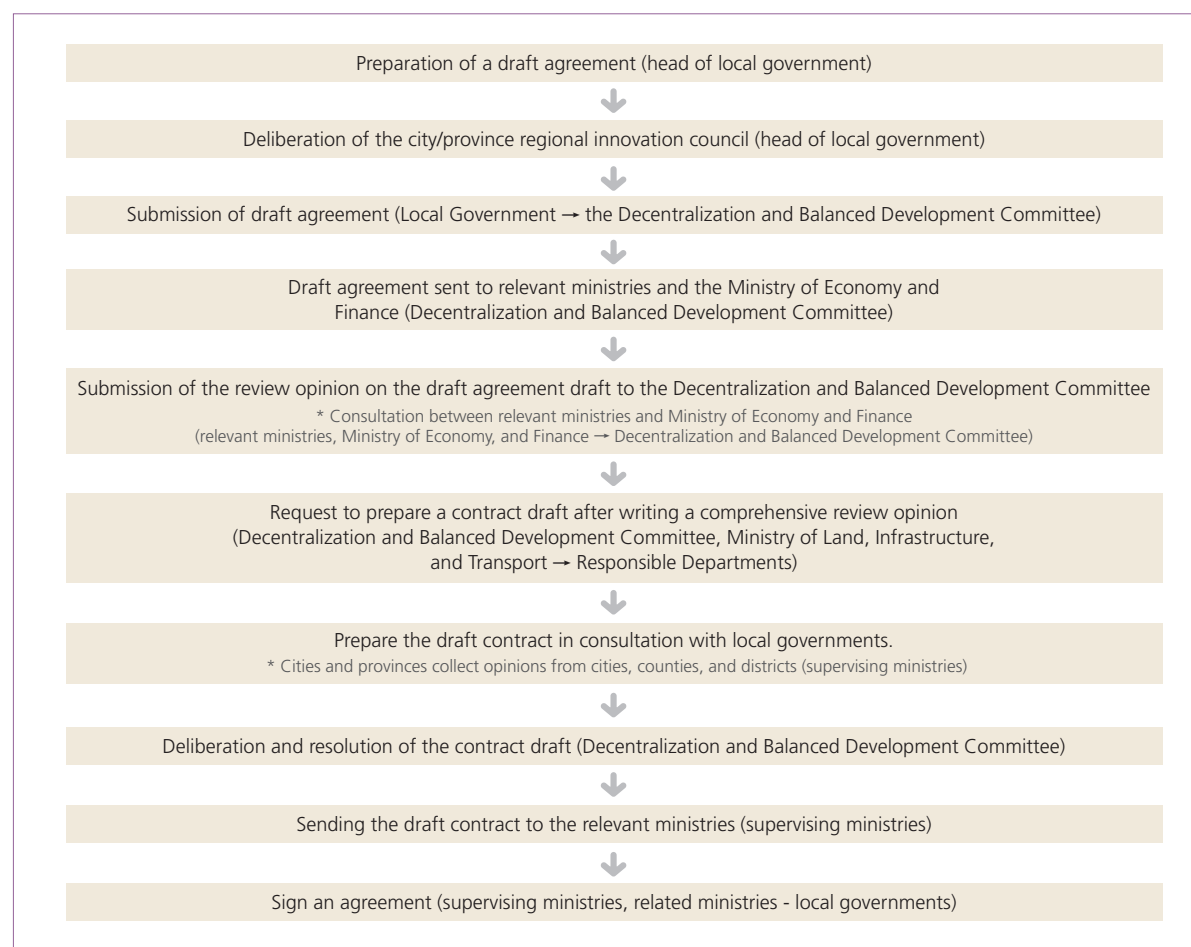
projects according to the principle of complementarity. Second, the system enables stable project implementation by providing comprehensive support and removing barriers between ministries, and budgets can be secured through investment agreements. The project details, scale, timing, cost-sharing,

**Table 1.** Comparison between the conventional approach and investment agreement approach of regional development projects

Category	Conventional approach	Investment agreements
Purpose	• Promotion of government-led balanced development policies	• Promotion of regionally-led balanced development policy
Decision-making Process	• Formal bottom-up	• Practical bottom-up
Nature of projects	• Nationwide uniform projects	• Regionally tailored projects
Financial support	• Separate support for each account, project, and year, focusing on public participation	• Fair distribution, comprehensive assistance, multi-year bundled support
Performance Management	• Output-oriented management for each project	• Outcome-oriented management of the entire investment agreement
Promotion system	• Under the responsibility of each ministry and local government, individual agreements are pursued	• The Decentralization and Balanced Development Committee mediates and coordinates between ministries and local governments

**Source**  
National Balanced Development Commission, Ministry of Land, Infrastructure and Transport. 2019. Study on the Development Directions of the Korean Planning Contract System based on Central-Local Governments Cooperation. p. 94.

**Figure 2.** Investment agreement signing procedure



**Source**  
Ministry of Land, Infrastructure, and Transport. 2022. Operating Guidelines for Regional Development Investment Agreements.



and performance management are finalized when signing the investment agreement. This allows local governments to pursue projects consistently and stably over the agreement period, spanning multiple years. Third, under the Decentralization and Balanced Development Act, investment agreements can be considered a public-law-based contractual system, as they are acts of agreement between parties (Ministry of Government Legislation, 2006). Therefore, even if changes in the political environment occur, such as in the leadership of agencies during the investment agreement, the project can be consistently pursued, thus ensuring the continuity of the project. [Table 1](#)

### 3. Results and Implications of the Regional Development Investment Agreement Pilot Project

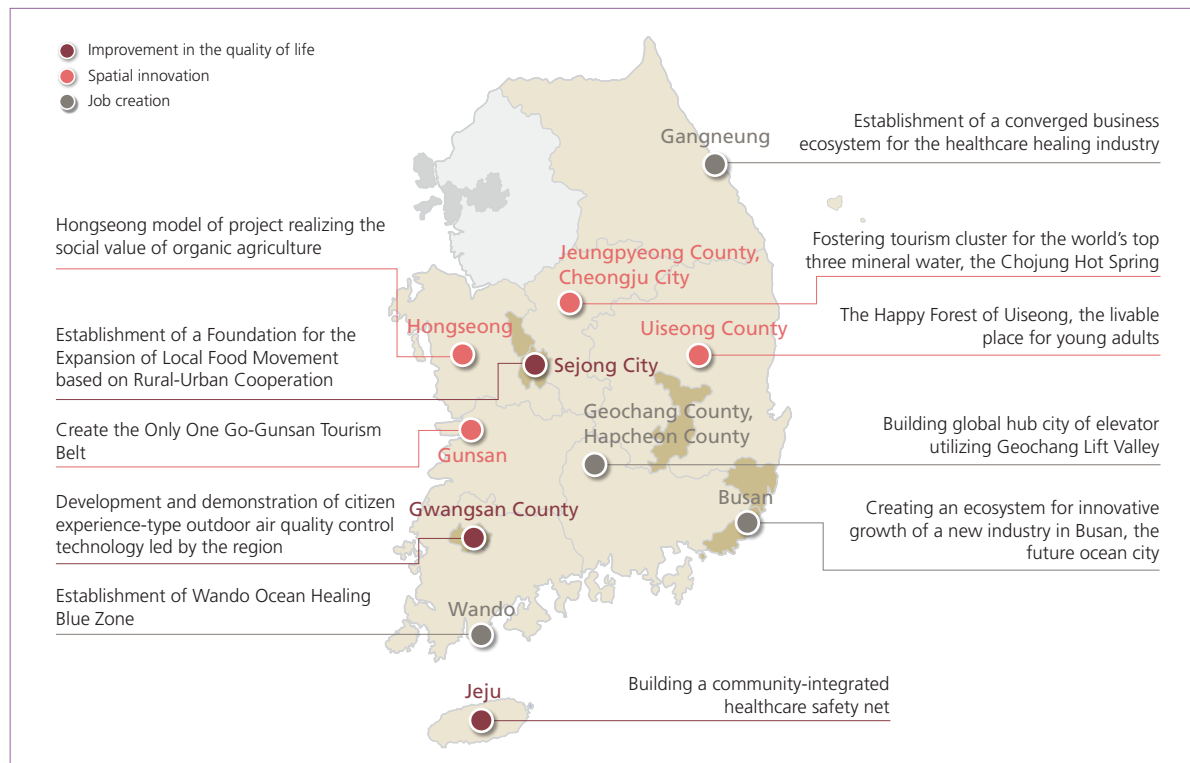
#### 1) Overview of the Pilot Project

The National Balanced Development Commission and the Ministry of Land, Infrastructure, and Transport are conducting pilot projects to operate, validate, and systematically design collaborative methods between the central and local governments before fully implementing the investment agreement system. The pilot projects aim to achieve four

objectives: i) transforming the control and dependency relationship between the central and local governments into a cooperative one, ii) innovating the fragmented and unfair financial support system into an autonomous and performance-oriented approach, iii) enhancing coordination among ministries, policies, and projects to prevent duplication and create synergy effects, and iv) strengthening the control tower function of the National Balanced Development Commission (National Balanced Development Commission, Ministry of Land, Infrastructure, and Transport, 2019). [Figure 2](#)

The National Balanced Development Commission selected and promoted 11 final projects out of 26 applications submitted in April 2019. In terms of sectors, there are four projects each for job creation and spatial innovation, and three projects for improving quality of life. Regarding the responsible local governments, nine projects are led by local governments, and regional governments lead two projects. A total of nine projects are independent, but Cheongju and Jeungpyeong in North Chungcheong Province and Geochang and Hapcheon in South Gyeongsang Province have linked projects between local governments. The number of related ministries for each pilot project is three, five, and three for two, three, and four ministries, respectively. [Figure 3, Table 2](#)

**Figure 3. 2019 Areas selected for the investment agreement pilot project**



#### Source

Ministry of Land, Infrastructure, and Transport. 2019. "National Balanced Development Commission - Cooperating with the Ministry of Land, Infrastructure and Transport to Foster Regionally-led Tailored Projects." Press Release, June 27th.



## 2) Achievements and Implications

The achievements of the pilot project can be summarized in three main points.

### (1) Implementation of regionally-led, multi-departmental, multi-year, and tailored package projects

The pilot project was carried out through an agreement between the central and local governments of the multi-

ministry package project. Through this, i) the regional and local governments directly devised projects and strengthened their capacity for project planning and implementation by promoting multi-agency package projects tailored to local needs and circumstances. ii) Not only was it possible to increase the effectiveness of the projects compared to the individual projects in which the bundled projects were intertwined with a large theme, but the time efficiency was also achieved by promoting

**Table 2. Overview of the Selected Investment Agreement Pilot Project**

Sector	Region	Project Name	Related Ministries	Project Expenses (100 million KRW)
Improvement of quality of life	Jeju Seogwipo City	Building a community-integrated healthcare safety net	Supervised by the Ministry of Health and Welfare Assisted by the Ministry of Agriculture, Food, and Rural Affairs	182 (National Budget 91)
	Gwangju Gwangsan County	Development and demonstration of regionally-led outdoor air quality control technology led by the community	Supervised by Ministry of Industry Assisted by the Ministry of Science and ICT, Ministry of Environment, Ministry of SMEs and Startups	182 (National Budget 91)
	Sejong City	Establishment of a Foundation for the Spread of Rural-Urban Cooperation and Local Food Movement	Supervised by Ministry of Agriculture and Forestry Assisted by the Ministry of Culture, Sports and Tourism; Ministry of Environment	361 (National Budget 91)
Space innovation	Jeonbuk Gunsan City	Creating the Only One Go-Gun San Tourism Belt	Supervised by Ministry of Oceans and Fisheries Assisted by the Ministry of the Interior and Safety, Ministry of Land, Infrastructure, and Transport	182 (National Budget 91)
	Chungbuk Cheongju City, Jeungpyeong County	Fostering tourism in the world's top three mineral water, the Chojung cluster	Supervised by the Ministry of Culture, Sports and Tourism Assisted by the Ministry of Environment, Ministry of Land, Infrastructure, and Transport	250 (National Budget 91)
	Gyeongbuk Uiseong County	The Happy Forest of Uiseong, where young people want to live	Supervised by the Ministry of Land, Infrastructure, and Transport Assisted by the Ministry of Culture, Sports, and Tourism, Ministry of Agriculture, Food, and Rural Affairs, Ministry of Health and Welfare	182 (National Budget 91)
	Chungnam Hongseong County	The Hongseong Project realizing the social value of organic agriculture	Supervised by Ministry of Agriculture and Forestry Assisted by the Ministry of Education	182 (National Budget 91)
Job Creation	Gyeongnam Geochang County, Hapcheon County	Creation of a global elevator hub city utilizing Geochang Elevator Valley	Supervised by the Ministry of the Interior and Safety Assisted by the Ministry of Trade, Industry, and Energy, Ministry of Employment and Labor	241 (National Budget 91)
	Busan	Creation of a new industry innovation growth ecosystem in Busan, a future ocean city	Supervised by Ministry of Industry Assisted by the Ministry of Science and ICT, Ministry of Oceans and Fisheries, Ministry of SMEs and Startups	182 (National Budget 91)
	Jeonnam Wando County	Establishment of Wando Ocean Healing Blue Zone	Supervised by Ministry of Oceans and Fisheries Assisted by the Ministry of Health and Welfare, Korea Meteorological Administration	182 (National Budget 91)
	Gangwon Gangneung City	Establishment of Healthcare Healing Convergence Business Ecosystem	Supervised by Ministry of Industry Assisted by the Ministry of Culture, Sports, and Tourism	181 (National Budget 90)

**Source** Data taken from internal materials of the Ministry of Land, Infrastructure, and Transport (Investment agreements by pilot project area).

a large number of unit projects in a linked manner. iii) In most projects, the utilization of existing local infrastructure and resources helped preserve the characteristics of the region and reduced the potential for spatial sprawl. iv) Budget allocation was more flexible, thereby allowing for easier utilization compared to department-specific support programs, as it was executed at the level of comprehensive grants. v) Since the investment agreement is a kind of contract, the head of the local government could not arbitrarily change the contents of the project, and the stability of the project could be ensured.

**(2) Autonomy for local projects is guaranteed, but continuous collaboration is carried out through integrated consulting**

The pilot project allowed the Decentralization and Balanced Development Committee to secure a separate budget for execution, thus providing relatively more freedom for local governments from control by relevant ministries. In the process of selecting and executing the project, a consulting process consisting of practitioners and experts from each ministry was accompanied to provide practical help for the successful implementation of the project, and collaboration between the central and local governments was carried out.

**(3) Streamlining of the agreement signing and execution processes is necessary**

Complaints regarding the pilot project generally arise during the execution process, particularly concerning the matching process between the supervision and assisting ministries and reporting and approval involving project changing procedures. Therefore, simplifying the complexity during the agreement signing and project execution processes is necessary.

#### **4. Improvement Directions for Expanding Regional Development Investment Agreements**

First, the participating entities should be expanded. Currently, regional development and investment agreements are signed between 1) the central and local governments (including special local autonomous entities under Article 199(1) of the Local Autonomy Act and integrated local governments under Article 2(4) of the Special Act on Local Autonomy and Regional Balanced Development), and 2) local governments; therefore

it can be expanded and promoted in various forms such as single regional multi-ministry and multi-regional multi-ministry, but the private sector cannot participate as a party to the agreement.

In a situation where projects utilizing private sector participation and vitality are prominently highlighted in response to local population decline, various government ministries are currently implementing diverse public-private partnership projects. In the future, actively consider expanding agreement projects as part of a tentative initiative called the “Public-Private Partnership Platform Project,” which can comprehensively integrate various ministries, local governments, private sector entities, and projects needs to be considered.

Second, the diversification of the project subject of the agreement. Under the current Decentralization and Balanced Development Act, projects subject to regional development investment agreements are defined as 1) projects for national balanced development, and 2) projects jointly promoted between the central and local governments or among local governments. Since investment agreements are based on the principle of selecting projects through consultation between the central government’s policies and local government plans, investment agreement projects should encompass a variety of types and contents to enhance regional autonomy, including bundled projects linked to existing government initiatives, policy-integrated projects such as spatial innovation combined with job creation and quality of life improvement, as well as community engagement projects where the private sector leads with support from local governments and the central government.

Third, the use of public offering by ministries needs to be reduced as well as to flexibly change the competition method itself by integrating the competition method between ministries, simplifying the competition procedure and method, strengthening the government’s guiding role such as prior consulting, and providing menu-style support from ministries.

In addition, to promote the investment agreement system in earnest, the business options of local governments need to be expanded. If the scale of investment or the number of projects increases, policy tasks, and priorities may differ depending on the conditions of individual local governments. To digest the diverse needs of local governments, expanding the project options of local governments is desirable in principle.

Fourth, fiscal autonomy needs to be strengthened to induce self-reliant regional development based on the creativity

of local governments. This is because for the investment agreement system to work effectively, the use and conditions of the budget must be widely permitted, rigorous performance evaluation must be conducted, and the process of leading the results of the performance evaluation back to the determination of the size of financial support is carried out smoothly. Since the current budget is a government subsidy under the Subsidy Act, local governments have many restrictions in securing and executing the budget. Comprehensive support methods like the Balanced Development Account's city and county autonomous budget allocation projects should be introduced into the investment agreement system.

Lastly, an efficient promotion system needs to be established to promote active participation of stakeholders, cooperate with policies, and mediate conflicts in the event of conflicts of interest. Execution and management are carried out by multiple stakeholders such as local governments, the Decentralization and Balanced Development Committee, the Ministry of Economy and Finance, the relevant ministries

(such as the Ministry of Land, Infrastructure, and Transport), and assisting ministries. Therefore, the unclear allocation of responsibilities needs to be addressed. Consideration needs to be given to strengthening the coordination role of the ministries in charge of the project or the secretarial ministries (MOLIT) with a high proportion of projects in addition to the Decentralization and Balanced Development Committee in the reporting and approval procedures such as the search for project departments, signing of agreements, and project changes, and the strengthening of the authority of the Decentralization and Balanced Development Committee to mediate and adjust conflicts between ministries and between the central and local governments, or the introduction of an organization such as the CGET (formerly DATAR), a government-wide coordination organization dedicated to planning contracts in France.

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