OECD Rural Studies

Perspectives on Decentralisation and Rural-Urban Linkages in Korea

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Foreword

This study examines rural development in Korea in the context of ongoing decentralisation reforms. In particular, it examines the effects that Korea's balanced national development policy is having on rural development. As the government's decentralisation agenda advances, new efforts are underway to devolve competencies and fiscal capacity to regional and local governments. This is expected to provide local governments with a greater control of their development strategies, foster urban-rural linkages and promote inclusive growth. These efforts are making some headway. The high levels of concentration in the capital city of Seoul have started to decline in recent years with a concomitant positive population growth observed in some rural regions. Notwithstanding those positive developments however, the balanced national development initiative could further promote inclusiveness of, and growth in, rural communities to enhance well-being and further leverage on specific place-based advantages.

The COVID-19 pandemic that swept the world shortly after this study began has increased the importance of inclusive growth, especially during the recovery, as well as the need to make effective use of public resources across different levels of government. It has also emphasised the critical role that digital technology and connectivity can play in enabling rural areas to participate more broadly and more equally in the modern economy. Looking ahead to the post-pandemic period, there is an opportunity to revisit the benefits and opportunities of rural places to continue to drive the implementation of a balanced national development strategy.

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The OECD team elaborating and drafting the report included Gareth Hitchings, Lisanne Raderschall, Mai Sasaki and Laura-Sofia Springare with input from Fernando Riaza Fernandez, under the supervision of Jose Enrique Garcilazo, Head of the Regional and Rural Policy Unit in the Regional Development and Tourism Division, led by Alain Dupeyras. The OECD is also grateful for comments and guidance received from the delegates to the OECD RDPC and the Working Party on Rural Policy. Pilar Philip (OECD) co-ordinated the production process of the report and Francois Iglesias (OECD) contributed the cover art. Eleonore Morena provided editorial assistance and Jeanette Duboys (OECD) prepared the manuscript for publication.

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Executive Summary

Over the last 60 years, the Republic of Korea has experienced among the fastest growth rates in the OECD. An export-driven industrialisation has delivered a dramatic increase in income per capita and overall living standards. Korea is considered one of the most successful stories of productivity catch-up across OECD member countries. The country has become highly urbanised, with only 11% of Koreans living in rural regions in 2018 (based on the OECD's regional definition based on access to cities). This is less than half of the OECD average rural population (29%). Furthermore, Korea's rural population tends to live within a short journey of cities, with a median travel time of just 25 minutes compared to an OECD average of approximately 114 minutes.

Korea's rural regions have contributed much to national prosperity. Indeed, in 2017 their GDP per capita, was on average, 13 per cent higher than the national average. Although Korean rural regions are less diversified than urban ones, they are highly specialised in tradable sectors, particularly in manufacturing, which are a key driver of regional competiveness. Manufacturing alone contributes to over two-fifths of rural regions' GVA. However, despite this relatively strong economic performance, rural regions in Korea are facing demographic challenges brought by ageing and shrinking populations, in part driven by migration of young people to urban places. This has increased the pressure on the capital city region and has drained the vitality of rural places. The capital region of Seoul and its surrounding province of Gyeonggi-do are home to 45% of the national population and produce a similar share of national GDP. This high level of concentration has contributed to several pressures, notably high housing costs and congestion. This situation has mitigated the well-being of both rural and urban inhabitants.

Against this backdrop, the national government has implemented a policy to promote a more balanced national development. The goal is to foster growth more widely throughout the country, in order to reduce pressures on the capital region and rebalance the rest of the economy. This policy has been built around a number of initiatives, such as the development of 10, so-called, "Innovation Cities" and the new multifunctional administrative city, Sejong. Evidence shows that these initiatives are having an impact, with the pace of the country's geographic concentration slowing and indeed contracting in recent years. However, the impact of these policies more broadly on rural communities is still mixed. For example, the population in rural regions close to large cities has grown, while in regions close to small/medium size cities it has declined.

This study examines rural development policy in Korea in the context of decentralisation reforms. With the central government devolving some policy lines and fiscal resources, regional and local governments, will be expected to benefit through greater control of their development strategies, and in turn by fostering stronger rural-urban linkages. In this context, the key recommendations from this report and the two case studies are as follows:

- **Further decentralisation should proceed with close monitoring of fiscal and human capacities at the regional and local level.** While there are mechanisms to help subnational governments acquire human capital and capacity, there is a risk that a one-size-fits-all approach may not deliver its expected results. Indeed, capacity development should be tailored to local needs and the characteristics of local governments, following a holistic assessment of their needs.

The government could experiment with an asymmetrical, context-dependent, approach to decentralisation, which would adjust to the different capacities of territories, at least in the near-term. Looking further ahead, the decentralisation process should also be accompanied by fiscal resources and authority that goes beyond additional grants or shared taxes. For a sound and larger autonomy, subnational governments should develop their own revenues.

- **To broaden the benefits of major initiatives, like Innovation Cities and Free Economic Zones, linkages between urban and rural areas should be strengthened.** This may include:
  - working with urban business incubators and accelerators, and with cluster organisations to expand the availability of their services to rural entrepreneurs;
  - expanding local hiring and procurement mandates for public institutions;
  - creating incentive programmes to encourage cities and their surrounding rural counties to forge regional brand identities, co-operation agreements for service delivery and regional development strategies; and,
  - strengthening emerging clusters by taking steps to identify and leverage the geographical assets and talents of rural areas in support of Innovation Cities.
- **Strengthen horizontal co-ordination including with external stakeholders** through co-operation agreements among subnational governments. This would help to deliver more efficient public services and achieve shared priorities by pooling resources and talent. Consultation forums, such as the Central & Local Governments Policy Council could be expanded to share good practice and identify spatial complementarities across regions. With respect to external stakeholders, more incentives for participation and meaningful citizen involvement along with digital tools would facilitate participatory processes, especially in rural places.

Support service delivery in rural communities through innovative, efficient channels. For example, by leveraging Korea's very good connectivity to deliver telemedicine, online learning and other key public services, through digital channels. Service delivery could also be further integrated across central government departments and aligned regional and local governments.

1 Assessment and recommendations

Assessment

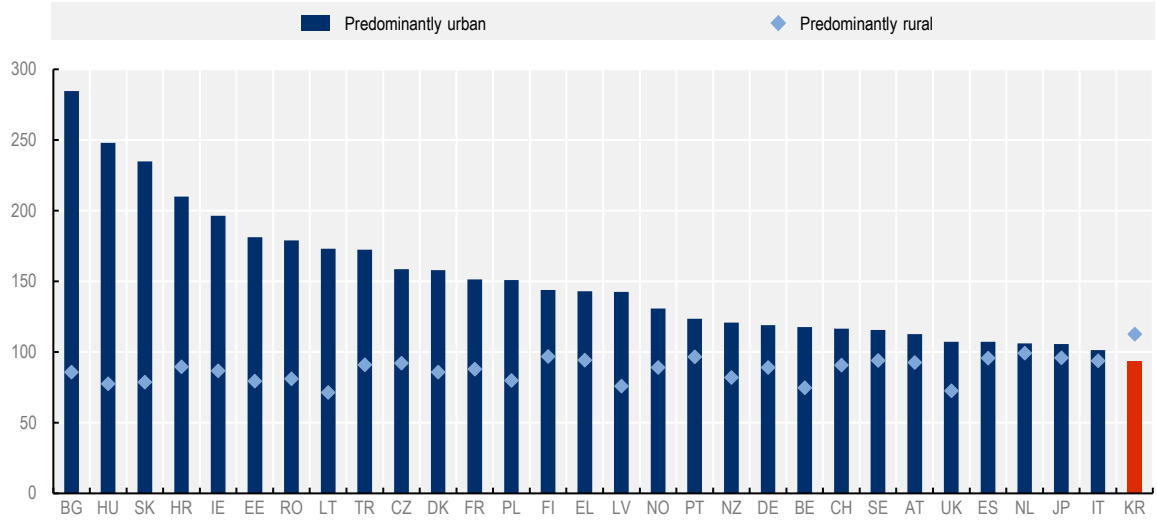
Korea has experienced strong growth, including in rural regions, yet some gaps remain in areas far from large cities and in places that have not benefitted from targeted development initiatives

Korea is one of the countries that achieved the fastest growth in the latter half of the 20th century. An export-driven industrialisation has delivered a dramatic increase in the income per capita and in overall living standards. Entering the 21st century, Korea's ongoing economic expansion has made it one of the most successful stories of productivity catch-up across OECD member countries. The industrialisation of Korea's economy over the last 60 years has shifted its specialisation from agricultural to industry and now to services and has been largely responsible for the country's convergence. In 2003, Korea's gross domestic product (GDP) per capita was 28 percentage points below the OECD average. In just a decade, the country was able to reduce the gap by 8 full percentage points. The annual GDP per capita growth rate has been 2.6 times higher in Korea than in OECD member countries on average, growing annually at a rate of 3.07 in GDP per capita during 2003-16.

Korea's rural regions have contributed much to national prosperity and have performed well when compared to OECD countries in terms of GDP per capita growth. The majority of Korea's predominantly rural regions also recorded GDP per capita growth that was higher than the national average during 2000-17 and this was achieved despite more than half of the rural areas having had initial levels of GDP per capita in 2000 that were already higher than the national average. Uniquely within the OECD, GDP per capita in Korea's rural regions is higher than the GDP per capita in urban regions (Figure 1.1). The average level of GDP per capita in rural regions was USD 41 302 in 2017, which was USD 5 310 higher than the national average of USD 35 992 and USD 13 140 higher than the OECD predominantly rural region average of USD 28 162.

Closer examination reveals that the high level of GDP per capita in rural regions is driven by those regions close to the large cities, while lower levels are seen in regions closer to small/medium-sized cities. Examining the economic performance within rural regions, growth is seen to be concentrated in specific areas that are the subject of government intervention; for example, in Jeollanam-do, the areas around the Gwangyang Bay Free Economic Zone and the Bitgaram Innovation City have been economic drivers.

Figure 1.1. GDP per capita gap between predominantly urban and rural regions, 2017



Source: OECD (n.d.[1]), *OECD Regional Statistics (database)*, http://dx.doi.org/10.1787/region-data-en.

Though Korea's rural regions are in general less economically diversified than its urban areas, they are highly specialised in tradeable sectors including agriculture and fisheries, mining and, in particular, manufacturing. These sectors are a key driver of competitiveness in Korea's rural regions given that they compete in global markets. The share of tradeable goods and services to rural regions' gross value added (GVA) was 58% in 2017, 8 percentage points higher than the national average of 50%. Manufacturing alone contributed to over two-fifths of the rural regions' GVA and was also higher (42%) than the national average (32%). While jobs in the manufacturing sector support high regional GDP in rural areas, a relative dearth of jobs in the skilled professional occupations that are favoured by young people has been cited as a driver of youth outward migration from rural areas.

Despite promising economic performance, population ageing and decline pose significant challenges for rural Korea

Approximately 17.1% of Koreans lived in rural regions in 2018, based on the OECD TL3 regional typology, or 11% if applying the OECD regional definition based on access to cities (see Chapter 2 for details). This 11% under the access to cities definition compares with 29%, on average, across the OECD. Furthermore, most of Korea's rural population lives with easy access to a city. Compared to OECD TL3 rural regions, rural regions in Korea have the fourth shortest travelling time to the closest city. On average, the median travel time to the closest city is about 25 minutes. Of the 11% of the population who are rural dwellers, 7.8% lived in regions near a large city, while 3.4% lived in regions near a small/medium-sized city. Korea does not have any region that is considered remote rural (by the OECD definition).

In terms of population growth, according to the OECD TL3 regional typology, predominantly urban regions in Korea experienced the largest increase in their population share over the period 2001-17, increasing by 2.3 percentage points over this period. In contrast, the population share declined in intermediate and rural regions by 0.6 and 1.6 percentage points respectively. The fall in rural population is driven mainly by a decline in Jeollanam-do, the only Korean TL3 region categorised as having access to small- and medium-sized cities (but which is relatively distant from a large city). Jeollanam-do's population shrank annually by an average of 0.7% over the period. Migration patterns offer an explanation for the population decline in rural regions. These patterns show that predominantly urban regions are net recipients of migrants from other types of regions within Korea and that young people, aged 15-29, disproportionally leave regions

with access to a small/medium-sized city compared to other age groups. This age group is also particularly attracted to the country's large metropolitan areas.

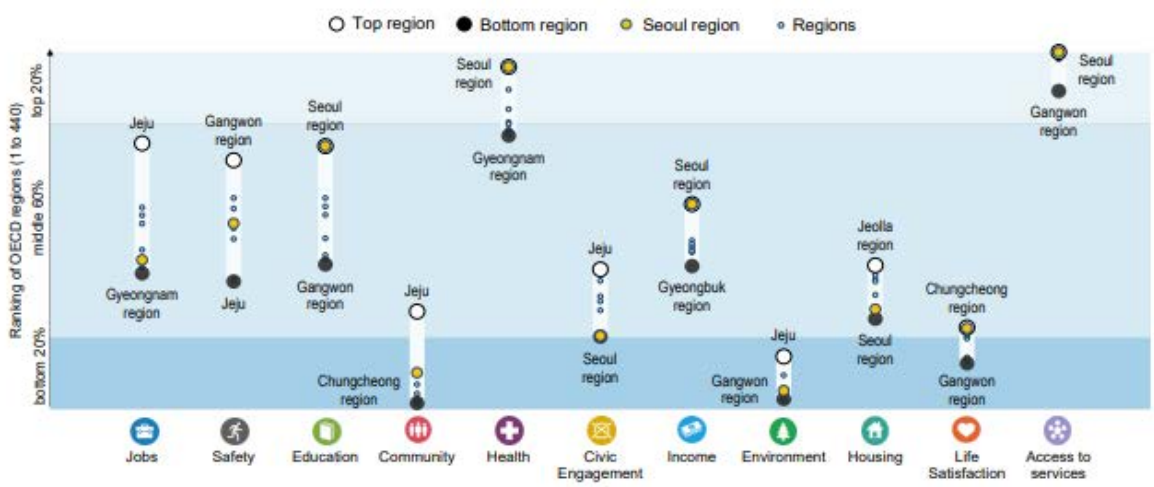
Consequently, the composition of the population differs between urban and rural regions and in particular the share of the elderly population is higher in rural regions. Approximately 18.3% of the rural population is elderly (+65 years of age), which was 4.5 percentage points larger than the share in metropolitan regions. On the contrary, the proportion of the working-age population in rural regions is 68.6%, 4.7 percentage points smaller than the proportion of the working-age population of the total population in metropolitan regions. The result is that the age dependency ratio in Korea's rural regions, at 27% in 2018, is considerably higher than in urban regions and is in fact the 7th-largest gap among OECD countries. Though this dependency ratio was slightly below the OECD average in TL3 regions, by 2.7 percentage points, it is increasing at a fast pace in rural regions, particularly in regions close to small- and medium-sized cities. In some rural counties, already upwards of 40% of the population is elderly.

The combination of a population that is both declining and ageing is creating significant challenges for rural communities. Local and regional governments are struggling to maintain adequate service levels in the face of fiscal constraints, rising costs and a diminishing labour market. In Chungcheongbuk-do and Jeollanam-do, two regions studied as part of this report, local respondents reported that they were failing to meet national service standards in 11 of 14 and 13 of 14 service areas respectively (2018 data), spanning issues such as healthcare, education and living infrastructure (e.g. water, heating, transit). Regional governments have been responding to these challenges by adopting innovative approaches, such as the use of subsidised taxis as a way of maintaining transit services in those areas where bus services are no longer viable.

Public well-being in rural regions show scope for improvement, with all regions showing a need for improvement in environmental and community life indicators

Recent years have seen an increased focus across the OECD on performance measures that go beyond GDP to examine more broadly the quality of life that people enjoy. This includes factors such as leisure time, health, social connections and environmental quality. Rural life, with its proximity to green spaces and nature, stronger community bonds and more relaxed pace can offer an outstanding quality of life. To examine well-being across countries at the regional level, the OECD developed the regional well-being framework, which in Korea is applied at the TL2 level.

Figure 1.2. Distribution of Korean TL2 regions compared to all OECD TL2 regions, 2020



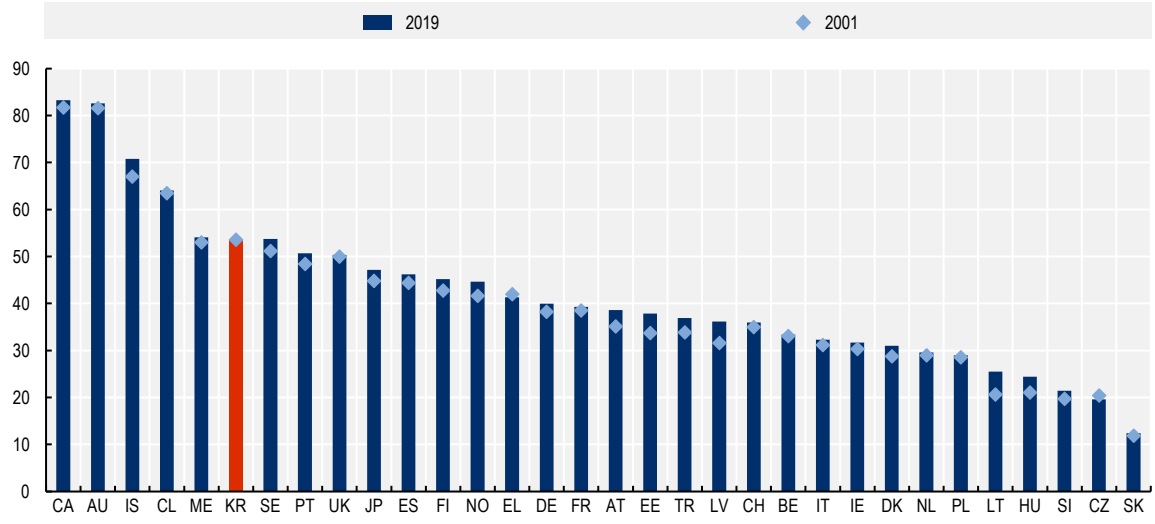
Note: Relative ranking of the regions with the best and worst outcomes in the 11 well-being dimensions, with respect to all 440 OECD regions. The eleven dimensions are ordered by decreasing regional disparities in the country.
Source: OECD (2020[2]), *Regions and Cities at a Glance 2020 – Korea*, https://www.oecd.org/cfe/Korea-Regions-and-Cities-2020.pdf

Korea has achieved virtually equitable access to broadband (depicted as access to services) throughout the country, with all of its regions performing in the top 20%. Its rural dwellers, therefore, do not suffer the impediments of access that are common to rural people in several other OECD countries. However, all regions of Korea score poorly on the environment and on the strength of community, areas where rural regions might be expected to have some advantage. Survey respondents reported that a lack of recreational green space was among the factors making it difficult for Chungcheongbuk-do to attract and retain young professionals. Meanwhile, in both Chungcheongbuk-do and Jeollanam-do, poor air quality as a result of industrial discharges was cited as a significant concern, one exacerbated by the regional government's lack of an air quality management system and limited oversight capabilities of their region's industrial facilities. Resolving these issues may help rural regions deliver higher well-being so that their people can enjoy more of the benefits inherent to rural life, thereby making them more attractive and competitive places to live *vis-à-vis* the country's major urban centres.

The policy of balanced national development has yielded results but further efforts are needed to include rural areas

Compared to other OECD countries Korea's population is very concentrated (Figure 1.2). This high level of concertation (both in terms of population and economic output) has driven national policy responses over the past decades, with measures put in place in an effort to reduce the high level of concentration and instead promote balanced national development. The balanced national development agenda is multifaceted but includes major initiatives such as the establishment of the multifunctional administrative city of Sejong and ten Innovation Cities, along with the relocation of hundreds of government ministries, agencies and other public institutions (with many of their employees and families) from the capital region to these new developments across the country.

Figure 1.3. Index of geographic concentration of population, TL3, 2001 and 2019



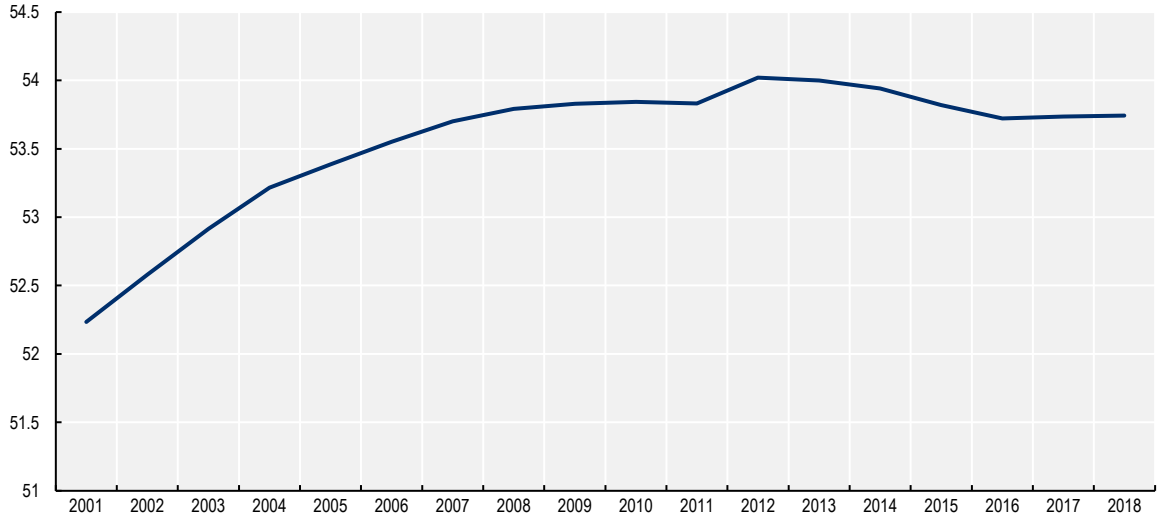
Source: OECD (n.d.[1]), *OECD Regional Statistics (database)*, http://dx.doi.org/10.1787/region-data-en.

There are indications in the data that this major national endeavour is yielding results. Seoul's share of the national population has declined from 21.3% in 2001 to 18.8% in 2018. Meanwhile, in absolute terms, Sejong saw its population more than double from 2012 to 2018, adding 219 161 more residents. The neighbouring rural region of Chungcheongnam-do also increased its population, by 284 160 during 2001-18, representing a 13% increase. According to the geographic concentration index, Korea's high

level of demographic concentration (Figure 1.4) first increased from 2001 to 2011 and then this trend reverted and started to decline from 2011 to 2018.

The extent to which this represents a true rebalancing of the country, as opposed to merely a more spread out capital region, is unclear. Within functional urban areas (FUAs), the commuting zones of large metropolitan areas grew by 48% over the period of 2000-15, the highest growth over this period. Similarly, the commuting zones of medium-sized urban areas grew by 23%. Notably, the share of the national population living in Gyeonggi-do, the province surrounding Seoul whose residents may commute into the capital, grew from 20% in 2001 to 25% in 2018. The population share amongst region types, according to the access to cities definition, shows that the large metropolitan regions of the country increased their share of the national population by 1 percentage point (from 65.7% to 66.8%). Meanwhile, amongst rural regions, those with access to large cities increased by 0.6 percentage points and those close to small- and medium-sized regions decreased by 0.8 percentage points. Efforts to rebalance the country have so far been a largely urban story, with some evidence that people have moved from one urban area (Seoul) to other urban areas elsewhere in the country. There has been relatively little change in the country's settlement patterns with respect to the relationship between urban and rural areas, indicating that further steps may be needed to achieve balanced national development that is more inclusive of rural regions.

Figure 1.4. Geographic concentration index among Korean TL3 regions, 2001-18



Note: The geographic concentration index depicts the spatial distribution of the population within Korea, comparing the resident population weight and the land area weight over all TL3 regions. The index ranges between 0 and 100: the higher its value, the larger the regional concentration.
Source: OECD (n.d.[1]), *OECD Regional Statistics (database)*, http://dx.doi.org/10.1787/region-data-en.

One area of opportunity for rural regions is in strengthening their linkages with urban areas. The close proximity of most rural dwellers to major cities, coupled with investment projects like the Innovation Cities initiative provide several opportunities to better connect rural with urban in ways that can improve the economic performance and well-being of both.

An ambitious decentralisation agenda is creating new opportunities and challenges for subnational governments

Korea is currently undergoing two simultaneous waves of decentralisation. First, through initiatives like Innovation Cities, the institutions, state-owned enterprises and ministries of the government, hitherto

centralised in Seoul, are being relocated to new urban developments throughout the country, including to a new administrative capital in Sejong. Second, the central government is transferring authority over 400 different tasks from national ministries to the local and regional governments, alongside boosted fiscal capacity to help them deliver on these. Greater local autonomy will also extend to the Innovation Cities, where the local and regional governments are expected to have a greater say in how these initiatives proceed in their "second season".

The central premise of the decentralisation agenda is to empower the regions to raise their economic performance and well-being and thereby better compete with Seoul to attract and retain a greater share of the country's talent and enterprise going forward. However, those outcomes will only be possible if the subnational governments are ready to take on all of their new responsibilities and are equipped with the human and fiscal resources needed to make the most of them. While capacity-building efforts are underway, there may nevertheless be a learning curve as the subnational governments adjust to their new role and explore the possibilities these changes will unlock for them in the development of new growth engines, including through working together with other subnational governments.

There may be a risk, especially in the early days of devolution, that subnational governments will take safe harbour in copying each other. Already, several of Korea's regions have adopted similar development strategies, for example targeting the same industrial sectors for growth, and there is a risk that they will compete with rather than complement each other. Going forward, the central government may shift from a role of mandating approaches to one of co-ordinating strategies between subnational governments and facilitating dialogue to identify and develop complementarities across regions instead.

Contracts are opening a new path towards regional development autonomy and local capacity building

The Korean government has recently begun leveraging contracts between the central and local governments as an additional means to foster regional development and greater autonomy. These Regional Development Investment Agreements (RDIA) support comprehensive multi-year regional development plans through which the regions can obtain multi-year financial support from the central government. The rationale behind the agreements is to enhance the local governments' capacity to realise their own regional development agenda and to break the policy silos that exist among central ministries that have hitherto tended to impose sectoral approaches on regional policy. Contracts across levels of government like these represent a practical and flexible option for co-ordination across levels of government, which allow establishing roles and responsibilities without changing the constitution. The RDIA is a type of policy-sharing contract, a form of contract that allows common decision-making, dialogue and collective innovation. These contracts favour information sharing, mutual understanding and can generate trust across levels of government.

Eleven pilot contracts are currently underway following their launch in 2019. Local government participants include major metropolitan areas but also non-metropolitan areas and small cities. A diverse range of existing experience and competencies may therefore be expected and the central government has prepared for this by making consulting support from regional policy experts available to participants. These consulting teams consist of three to five experts from the Korea Research Institute for Human Settlements and a regional innovation committee, and one recommended by a line ministry. Initial results from the pilot projects show that they are having a positive impact, not just in terms of the project being delivered but in helping improve local planning and implementation capabilities in the participating local governments.

Recommendations

Further decentralisation should proceed with close monitoring of fiscal and human capacities at the regional and local level

In January 2021, local and regional governments across Korea will take over the delivery of 400 tasks from the central government. These local and regional governments likely have diverse skill levels and breadth of capacity given that they serve a wide array of populations. For example, the provincial governments, serve populations that range from less than 1 million in Jeju-do to over 10 million in Gyeonggi-do. Small rural counties might be particularly resource- and capacity-constrained. The central government is decentralising both an array of tasks and new fiscal capacity to help deliver those tasks, though a detailed costing for each region remains in development (led by the Special Committee on Assessing Transfer Costs).

Though mechanisms are in place to help subnational governments prepare, there is a risk that a one-size-fits-all approach may not deliver its expected results. Indeed, capacity development should be tailored to local needs and characteristics of local governments, following a careful assessment of systemic needs. When developing capacities all four types of capacities need to be considered: i) administrative capacity; ii) institutional capacity; iii) strategic capacity; and, iv) financial management capacity. As capacities are developed and might change over time, it is important to ensure ongoing monitoring and adaptation of support.

The government could experiment with an asymmetrical, context-dependent approach to decentralisation that adjusts to territorial capacity, at least in the near-term. Looking further ahead, the decentralisation of tasks should be accompanied by the fiscal authorities and go beyond additional grants or shared taxes if meaningful autonomy is to be secured. Subnational governments must develop their own-source revenues and over time achieve a balanced basket of revenue sources that provides them predictability and the capacity to mitigate shocks.

Strengthen co-ordination between subnational governments and with local stakeholders

With decentralisation proceeding across several fronts, regional and local governments in Korea are becoming more empowered to set their own course. This raises the importance of co-ordination between subnational governments and for them to consult closely with local stakeholders to best tailor their approaches to local contexts. Approaches towards this include:

- **Horizontal co-operation agreements** between subnational governments to help them more efficiently deliver public services and achieve shared priorities by pooling resources and talent. Such agreements hold great potential for smaller regions that face the largest capacity constraints.
- **Consultation fora**, such as the Central & Local Governments Policy Council, can be an additional tool to foster co-operation across levels of government. Ad hoc committees have the advantage to address challenges as they arise while standing commissions and intergovernmental consultation boards are important to create a culture of regular co-operation and communication. While it is important to avoid multiplying co-ordination mechanisms with no clear roles or large transaction costs, consideration may be given to setting up a forum specifically to discuss rural and regional development approaches, share good practices and identify complementarities across different parts of the country.
- With respect to **external stakeholders**, reaping the benefits of greater involvement of local actors in policy design and implementation requires that some care be taken in designing participatory processes, especially in legal and regulatory frameworks, as these can impose costs and may result in pro forma or “box-checking” exercises.

- To provide incentives for participation and ensure good quality, government grants can be adjusted based on meaningful citizen involvement in outputs. Tournament-based output grants and recognition awards are another tool to encourage citizen engagement from a higher-order level of government.
- Digital tools can provide an opportunity to facilitate participatory processes, especially in rural areas. Pilot projects can quickly show advantages and challenges.

To broaden the benefits of major initiatives, like Innovation Cities and Free Economic Zones, strengthen the linkages between urban and rural areas.

Korea is making progress in its efforts to achieve more balanced national development but further steps are needed to more fully include rural communities in that process. Opportunities to more tightly integrate rural communities with cities include:

- Working with urban business incubators and accelerators, and with cluster organisations to expand the availability of their services to rural entrepreneurs and small- and medium-sized enterprises (SMEs) through digital delivery channels and co-operation agreements with rural business support organisations.
- Expanding local hiring and procurement mandates for the public institutions and organisations recently relocated to the Innovation Cities. This could also include working with local education institutions to ensure that people are given training that is tailored to the hiring organisation's needs.
- Creating incentive programmes to encourage cities and their surrounding rural counties to forge regional brand identities, co-operation agreements for service delivery and regional development strategies that give them greater weight than the city acting alone.
- Accelerating innovation and strengthening emerging clusters by taking steps to identify and leverage the particular geographical assets of rural areas and the region-specific talents of rural people in support of the emerging clusters in Innovation Cities.

Support service delivery in rural communities through innovative, efficient channels

Subnational governments are struggling to deliver adequate service levels in low-density, depopulating rural areas, particularly in cases of challenging terrain (islands, mountains). The availability of quality public services is important not only to current residents but also as a consideration in attracting and retaining new people. Initiatives are underway that could potentially slow or reverse the depopulation of rural areas, for example the Smart Farm Innovation Valley initiative led by the Ministry of Agriculture, Food and Rural Affairs (MAFRA); however, the success of initiatives like these may be hampered if the young families they intend to attract cannot find good quality schools in the area for their children. To maintain service levels in a cost-effective way, the country may consider:

- Leveraging its very good connectivity to deliver telemedicine, online learning and other key public services through digital channels. Though these services are within the jurisdiction of subnational governments, the technology needed to deliver them digitally may be best developed or co-ordinated at the national level to minimise duplication of effort. For these services to be most effective, it is important that targeted recipients have access to digital devices that they know how to use, which may require training support, particularly for the elderly.
- Integrated service delivery, another approach that may be implemented to improve rural service delivery in an efficient way. Four forms of integration that may be deployed include:
  - **Colocation**: Putting multiple services together in one building to reduce cost. For example, a health clinic, school, post office and other basic public services could be combined into a single community hub in rural areas.

- **Collaboration**: Brings together different departments/agencies to share their information and training. This can help reduce gaps in service provision by providing opportunities for horizontal and vertical service integration. By sharing knowledge, institutions and agencies can ensure rural dwellers have knowledge of and access to services.
- **Co-operation**: Entails different levels of government communicating and working together on multi-agency teams. This form of integration strives to lower the costs of delivering services and reduce duplication. One area identified where deeper co-operation may be possible is between the national government's Smart Farm Innovation Valley and the provincial government's Changnong Town in Jeonnam.
- **Coproduction**: A form of integration that involves the community and non-profit groups, also known as the third sector, in providing services. By partnering with citizens and local organisations, public service providers can ensure products and programmes reflect the needs of the community as identified by the people receiving the services. Engaging citizens and citizen organisations in the design, production and delivery of services leads to higher satisfaction and cost reductions.

2 Trends, opportunities and challenges in rural Korea

Chapter 2 provides a diagnosis of the performance of rural regions as compared to OECD trends. It first examines demographic patterns in rural Korea, focusing on population levels, growth rates and elderly dependency ratios, and how these influence overall settlement structures. The chapter then benchmarks the performance of Korean rural regions, examining trends in gross domestic product (GDP) per capita and productivity. This section also examines the main sectors of specialisation in rural Korea. The chapter finally examines several dimensions of well-being against OECD trends. In order to draw international comparisons, this chapter makes use of the OECD regional typology, the OECD regional definition based on access to cities and the OECD functional urban areas definition (FUAs), as these apply a consistent definition across OECD countries.

Defining rural in Korea

Korea's official definition

The definition of what constitutes rural areas in Korea is not unique or straightforward. Different agencies define rural areas differently. According to the Ministry of Land Infrastructure and Transport (MOLIT), there are no rural areas defined as such, rather they emerge as leftovers of urban areas. Urban areas are areas that require systematic development, maintenance, management and conservation, where population and industry are or are expected to be dense (Article 6 of the National Land Planning Act). Therefore, the areas that are not systematically developed and dense are non-urban areas or, in other words, rural areas.

Rural areas are also defined by policy goals. For instance, the Happy Living Zones policy defines three types of living zones: rural, rural-urban and metropolitan.

- The rural living zone is the smallest with a total population of around 100 000 inhabitants.
- A rural-urban affiliated living zone is centred around a small- or medium-sized city with a population of between 100 000 and 500 000.
- A metropolitan living zone is centred around a large city with a population of more than 500 000.

As of 2015, according to the Happy Living Zones policy, a total of 63 zones have been established so far: 21 rural, 14 rural-urban, 20 metropolitan and 8 pilot zones in the capital area.

From the agricultural policy perspective, the Framework Act on Agriculture, Rural Community and Food Industry defines "rural community" in line with the act's objectives, including *eup* and *myeon*, or other areas designated at the discretion of the minister (MAFRA, 2015[1]).

The OECD regional typology

The OECD regional typology simplifies regional data comparability across OECD countries. It classifies two levels of geographic units within each member country: i) large regions (TL2), which generally represent the first administrative tier of subnational government; and ii) small regions (TL3), which aggregate local administrative units (e.g. *communes* in France or municipalities in Mexico). TL3 regions are divided into predominantly urban (PU), intermediate (IN) and predominantly rural (PR) based on population density and size. Rural areas are further categorised into different types according to their proximity to urban centres for the purpose of defining specific challenges and opportunities related to their geographic location.

Using the OECD typology defining 3 types of TL3 regions (urban, intermediate and rural), there are 17 such regions in Korea, 9 of which are defined as PU, 3 as IN and 5 as PR. Of the five PR regions, all are further categorised as PR close to a city. There are no rural regions in Korea that are considered remote rural regions under the OECD typology.

The OECD uses the concept of functional urban areas (FUAs) as a complementary territorial definition (see Box 2.1). FUAs define urban areas encompassing daily flows of people for work, leisure and social activities as functional socio-economic units, rather than relying on official administrative boundary definitions. Applying the FUA territorial definition, Korea has 22 FUAs covering 26% of the national territory. Out of the 22 FUAs, 5 are classified as large metropolitan areas (with a population of 1 500 000 or more) and 6 as metropolitan areas (with a population of 500 000 to 1 500 000), 8 as medium-sized urban areas (population between 250 000 to 500 000 people) and 3 as small urban areas (population between 50 000 and 250 000 people).

Box 2.1. The EU-OECD definition of an FUA

The EU-OECD definition of FUAs consists of highly densely populated urban cores and adjacent municipalities ("commuting zones") with high levels of commuting (travel-to-work flows) towards the cores. This definition overcomes previous limitations for international comparability linked to administrative boundaries. This methodology is a clear example of how geographic/morphological information from geographic sources and census data can be used together to get a better understanding of how urbanisation develops.

As the first step, the distribution of the population at a fine level of spatial disaggregation of 1 square kilometre (1 km^2) is used to identify the urban cores, which are constituted by aggregations of contiguous municipalities that have more than 50% of their population living in high-density clusters. These clusters are made of contiguous 1 km^2 grid cells with a population density of at least 1 500 inhabitants per km^2 and a total population of at least 50 000 people.

As the second step, 2 urban cores are considered part of the same (polycentric) FUA if more than 15% of the population of any of the cores commute to work to the other core.

The third step defines commuting zones using the information on travel-to-work commuting flows from surrounding municipalities to the urban core. Municipalities sending 15% of their resident employed population or more to the urban core are included in the commuting zones, which thus can be defined as the "worker catchment area" of the urban labour market, outside the densely inhabited urban core.

The methodology makes it possible to compare FUAs of similar size across countries, proposing four types of FUAs according to population size:

- Small urban areas, with a population of between 50 000 and 250 000 inhabitants.
- Medium-sized urban areas, with a population of between 250 000 and 500 000.
- Metropolitan areas, with a population of between 500 000 and 1.5 million.
- Large metropolitan areas, with a population of 1.5 million or more.

The definition is currently applied to 34 OECD countries (of the 37 OECD members, data are not available for Israel, New Zealand and Turkey) and identifies 1 199 FUAs of different sizes. Among them, 351 FUAs have a population larger than 500 000 and 668 FUAs have a population larger than 250 000.

Source: OECD (2018[2]), *OECD Regions and Cities at a Glance*, https://dx.doi.org/10.1787/reg_cit_glance-2018-en.

A regional typology based on access to cities

The two territorial definitions – the OECD TL3 Regional Typology and the complementary FUA territorial definition – lead to different analytic frameworks. The TL3 regions cover the entire territory within countries, while FUAs only capture a subsample of the territory. Furthermore, the OECD typology may lead to a certain dichotomy between urban and rural areas.

Against this backdrop, the OECD has recently developed an alternative definition introducing some spatial continuity between metropolitan and non-metropolitan areas. This definition of FUAs classifies cities and their broader area of influence based on commuting patterns. An FUA is constructed by concatenating grid cells with high population density (above 1 500 inhabitants per km^2) into an urban core. Then, these cells are connected with surrounding lower density cells when the flows of commuting between the two types of cells exceed a given threshold (i.e. at least 15% of the labour force commutes to the urban core).

The alternative TL3 classification is based on the presence of FUAs within TL3 borders and the proximity of regions to FUAs of different sizes. The 5 types of regions include 2 types of metropolitan regions – large metropolitan (with an FUA of more than 1 million people) and metropolitan regions (with an FUA of more than 250 000 people). It also includes 3 types of non-metropolitan regions – regions near a large city (i.e. regions with access to an FUA of more than 250 000 people within a 60-minute drive), regions with a small/medium-sized city or near one (i.e. regions with an FUA of more than 250 000 people or with access to one within a 60-minute drive),and remote regions (see Box 2.2 for details).

Throughout the document, reference will be made to "rural regions" when referring to the group of non-metropolitan regions, to a "large city" when referring to a city with more than 250 000 inhabitants and a "very large" city when referring to a city with more than 1 million inhabitants. Also, the terms "city" and FUA will be used interchangeably. This alternative regional classification, based on access to cities allows measuring socio-economic differences between regions, across and within countries. It takes into consideration the presence of and access to FUAs. Access is defined in terms of the time needed to reach the most proximate urban area; a measure that takes into account not only geographical features but also the status of physical road infrastructure.

Box 2.2. A typology of small regions based on access to cities

The first tier adopts as a threshold 50% population of the TL3 (small) region living in an FUA of at least 250 000 people; the second tier uses as threshold 60 minutes' driving time, a measure of the access to an FUA.

The new methodology classifies TL3 regions into metropolitan and non-metropolitan according to the following criteria:

- *Metropolitan TL3 region,* if more than 50% of its population live in an FUA of at least 250 000 inhabitants. Metropolitan regions (MRs) are further classified into:
  - Large TL3 MRs, if more than 50% of its population lives in an FUA of at least 1.5 million inhabitants.
  - TL3 MRs, if the TL3 region is not a large MR and 50% of its population live in an FUA of at least 250 000 inhabitants.
- *Non-metropolitan TL3 region,* if less than 50% of its population live in an FUA. Non-metropolian regions (NMRs) are further classified according to their level of access to FUAs of different sizes:
  - NMR-M: With access to a TL3 MR, if more than 50% of its population lives within a 60-minute drive from a metropolitan area (an FUA with more than 250 000 people); or if the TL3 region contains more than 80% of the area of an FUA of at least 250 000 inhabitants.
  - NMR-S: With access to a small/medium-sized city TL3 region, if the TL3 region does not have access to a metropolitan area and 50% of its population has access to a small or medium-sized city (an FUA of more than 50 000 and less than 250 000 inhabitants) within a 60-minute drive; or if the TL3 region contains more than 80% of the area of a small- or medium-sized city.
  - NMR-R: Remote TL3 region, if the TL3 region is not classified as NMR-M or NMR-S, i.e. if 50% of its population does not have access to any FUA within a 60-minute drive.

Source: Fadic, M. et al. (2019[3]), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", https://doi.org/10.1787/b902cc00-en.

These definitions, initially elaborated for international comparability, also represent important tools for policymaking purposes. The access to cities regional definition is relevant for rural policies, since it differentiates amongst different types of rural regions – those close to cities and those that are remote. Rural areas close to cities require a much stronger integration of policies with cities in areas such as transportation, land use labour market or housing amongst others. Furthermore, the definition differentiates rural areas with access to large cities *vis-à-vis* small/medium-sized ones allowing to better understand and capture differences in the linkages. In contrast, rural remote regions may require much-differentiated policy responses that address their particularities. Thus, spatial scales are critical tools for the design of regional policies.

For the case of Korea according to the access to cities definition, seven regions are classified large MRs, six are classified as MRs, three (Chungcheongnam-do, Gangwon-do and Sejong Special Self-Governing City), as regions close to large cities and just one (Jeollanam-do) as a region close the small- and medium-sized cities.

Table 2.1. Korean regions using the regional typology based on access to cities

TL3 region	Access to cities definition
KR011: Seoul	Large metropolitan region
KR012: Incheon	Large metropolitan region
KR013: Gyeonggi-do	Large metropolitan region
KR021: Busan	Large metropolitan region
KR022: Ulsan	Metropolitan region
KR023: Gyeongsangnam-do	Metropolitan region
KR031: Daegu	Large metropolitan region
KR032: Gyeongsangbuk-do	Metropolitan region
KR041: Gwangju	Large metropolitan region
KR042: Jeollabuk-do	Metropolitan region
KR043: Jeollanam-do	Near small- and medium-sized cities
KR051: Daejeon	Large metropolitan region
KR052: Chungcheongbuk-do	Metropolitan region
KR053: Chungcheongnam-do	Near a large city
KR054: Sejong	Near a large city
KR061: Gangwon-do	Near a large city
KR071: Jeju-do	Metropolitan region

Source: Fadic, M. et al. (2019[3]), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", https://doi.org/10.1787/b902cc00-en.

Demographic patterns of rural Korea and land distribution

Korea has experienced rapid population changes since the period of industrialisation, which started in the 1960s. The share of the rural population has decreased gradually based on the national definition, from representing 60% of the total population (or 18.2 out of 30.8 million) in the 1970s to only 19% of total population (9.7 out of 51.6 million) in 2018. These trends have been driven by migration patterns from rural to urban due to the rapid industrialisation experience by the country.

Korea has a low share of its national population in rural regions

The OECD has developed regional typologies to allow for international comparisons and to be able to compare regions with similar characteristics as explained in the previous section. Based on the OECD TL3 classification, in 2018, 17.1% of the national population live in rural regions (Table 2.2), namely rural regions close to cities. The population of the PU regions accounted for 69.7% of the total population, while 13.2% lived in IN areas. According to this definition, Korea has the fourth-largest urban population amongst OECD countries after the United Kingdom, the Netherlands and Australia. According to the OECD access to cities definition, rural regions are home to 11.3% of the national population and, according to the FUA definition, the share of the national population living outside of FUAs amount to 17%. In other words, rural regions in Korea are less than 20% but more than 10% according to these indicators.

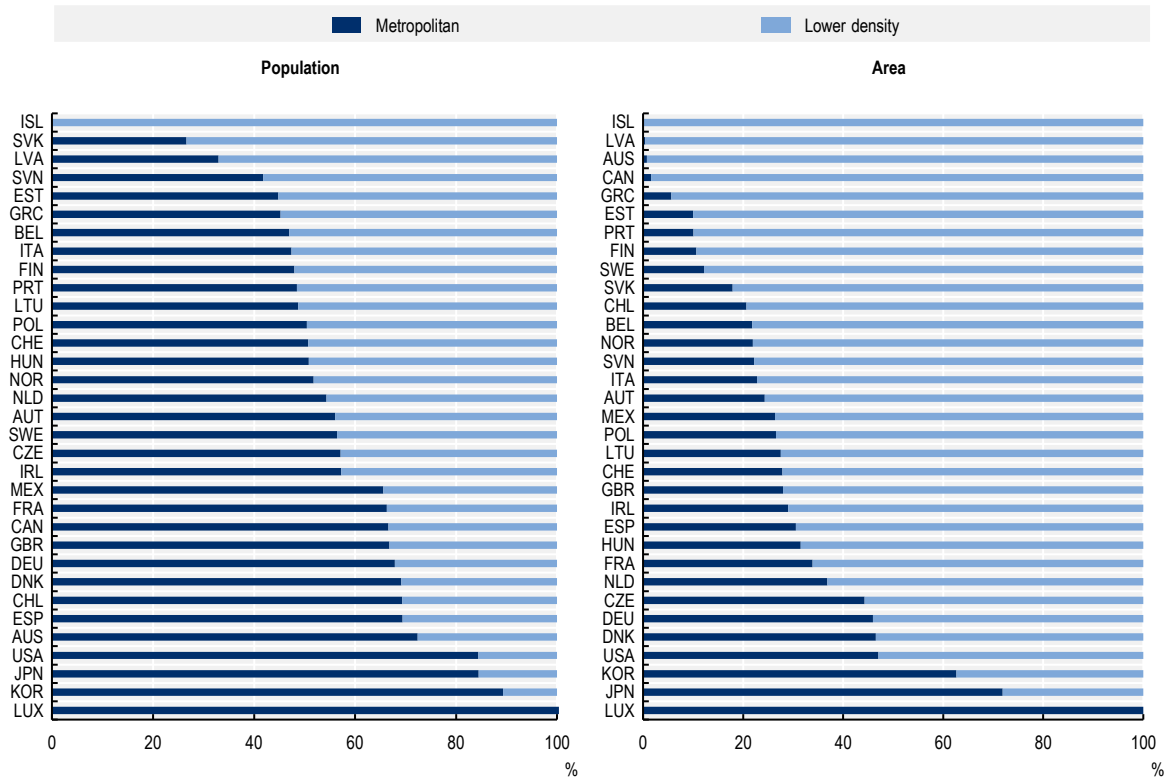
Table 2.2. Share of rural population according to different definitions, percentage, 2018

	OECD TL3 typology	Non-FUA	Access to cities OECD TL3 typology	World Bank
Share of rural population	17.1	17	11.3	18.5

Note: Table refers to year 2015 for FUA.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en; World Bank (2019[5]), *Rural Population, (% of Population) - Korea (dataset)*, https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=KP-KR.

As described in the previous section, different definitions capture different elements of rurality. The OECD regional typology uses density criteria and proximity to urban areas to measure rurality. The FUA captures cities and their broader areas of influence but this definition does not provide any measure or criterion outside FUAs and does not cover the entire country. The access to cities OECD definition overcomes the limitations of both these definitions by providing a territorial definition covering the entire country and using an FUA criterion.

Figure 2.1. Distribution of population by metro and non-metro TL3 regions, 2018

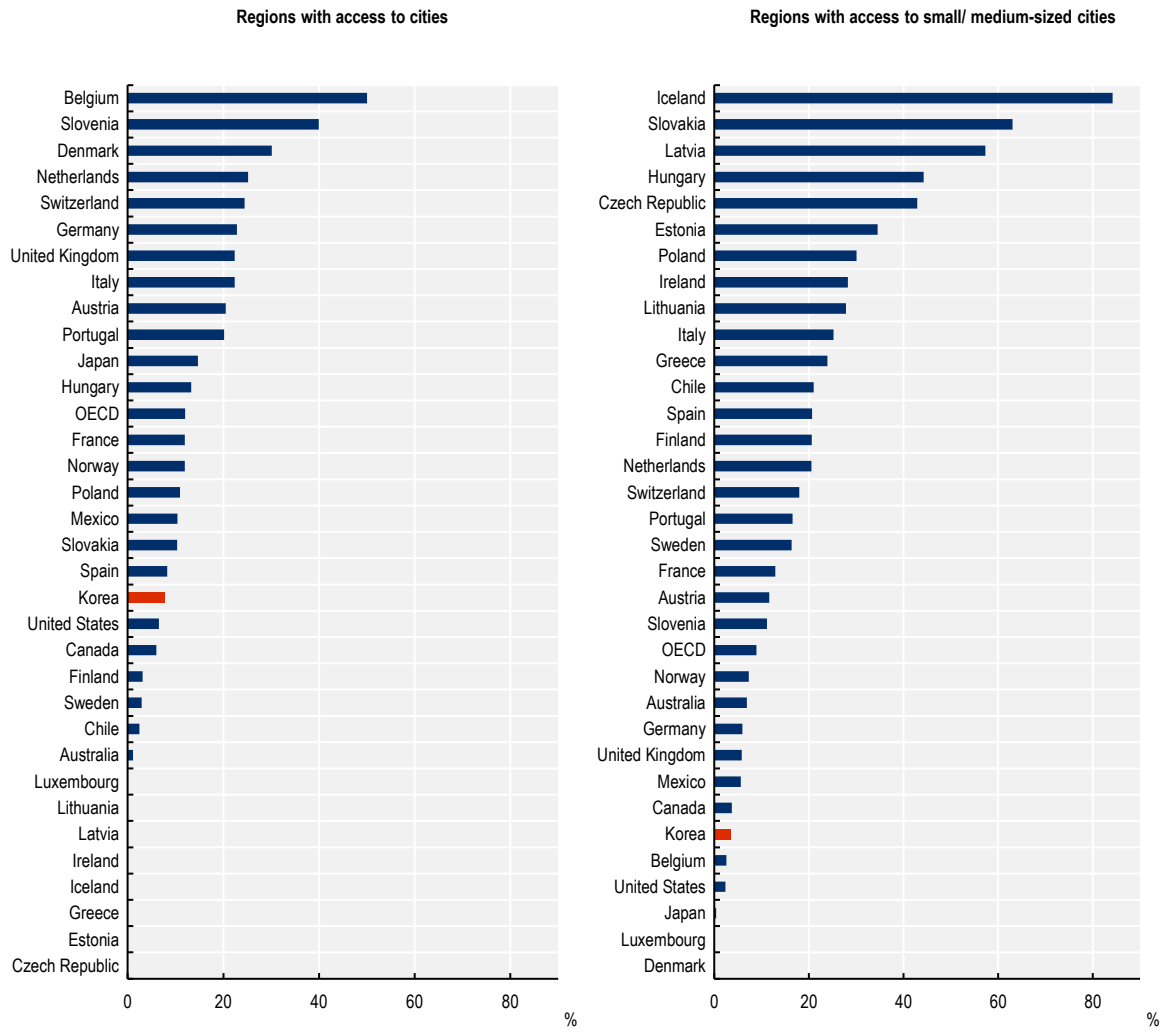


Note: Latest available year 2017 for Australia, Chile, Ireland, Japan and Mexico.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222491

According to the access to cities OECD definition, 11.3% of the national population lived in rural regions in 2018, amongst which 7.8% lived in regions near a large city (Figure 2.2) and 3.4% in regions near a small/medium-sized city (no region of Korea is defined as a remote rural region using this definition). The share of Korea's national population living in rural regions (11.3%) is significantly lower than the OECD average (29%). Furthermore, those Koreans who do live in rural regions have a strong interaction with cities. Understanding and making the most of urban-rural linkages is consequently of paramount importance in the design of rural policies for Korea.

Figure 2.2. Population share by TL3 regions, access to cities OECD definition, 2018



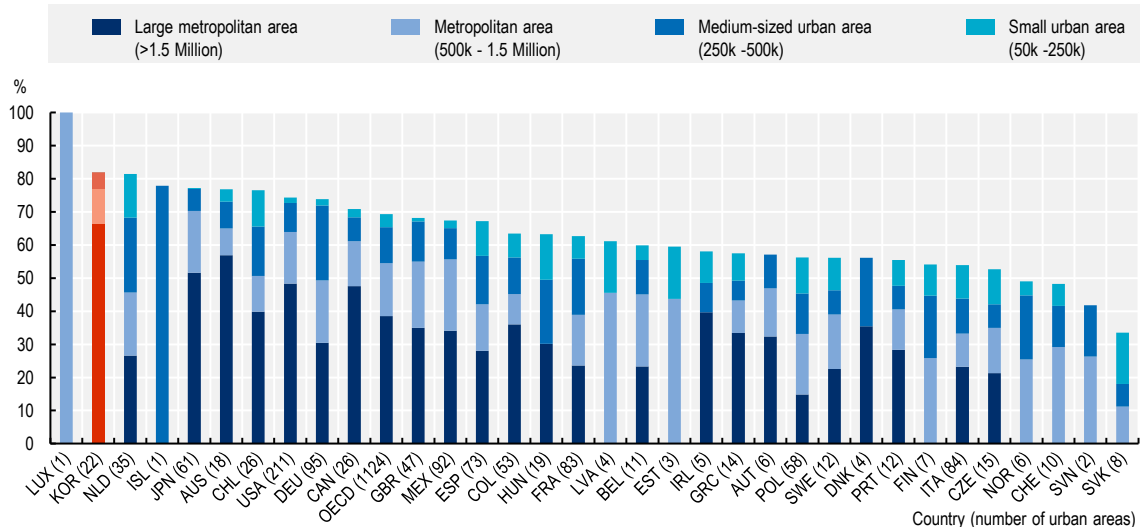
Note: 2017 values for Australia, Chile, Ireland, Japan and Mexico.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222510

In term of the OECD FUA definition, 83% of the national population lives in cities of more than 50 000 inhabitants and 76% were living in cities with more than 500 000 inhabitants, significantly higher than the OECD average share of 55%. When compared to OECD countries (Figure 2.3), only Luxembourg has a higher national share living in FUAs, making Korea one of the countries with the highest share of the national population living in FUAs.

Figure 2.3. Population share living in functional urban areas over total population, 2015

Population in FUAs over the total population

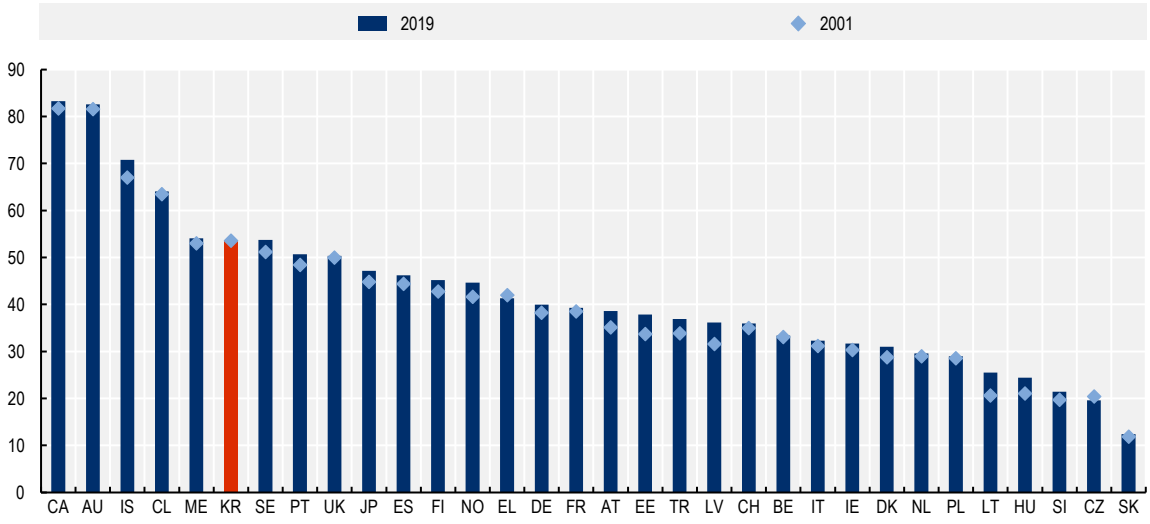


Note: Methodology available under OECD (2012[6]).
Source: (OECD, 2018[2]), *OECD Regions and Cities at a Glance*, https://dx.doi.org/10.1787/reg_cit_glance-2018-en.

StatLink https://doi.org/10.1787/888934222985

These figures show a high concentration in settlement patterns (Figure 2.4) in Korean regions when compared to OECD standards, both among TL3 regions and in FUAs.

Figure 2.4. Index of geographic concentration of population, TL3, 2001 and 2019



Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

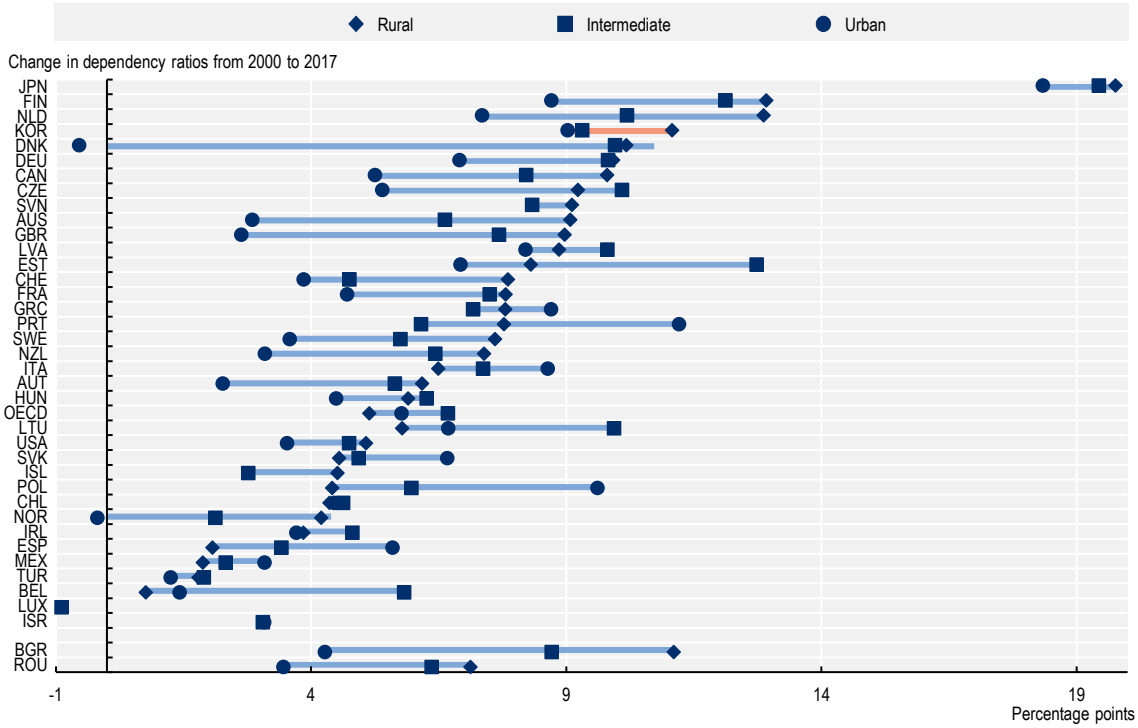
StatLink https://doi.org/10.1787/888934222529

Settlement growth and implications for concentration

The high levels of concertation in Korea have driven national policy responses over the past decades with measures put in place to promote more balanced national development and in particular to reduce the pressures that concentration has placed on the capital region of Seoul. This section measures the growth dynamics in Korea's settlement patterns over the past years and their implications for the country's high level of concentration.

In terms of population growth, according to the OECD TL3 regional typology, PU regions in Korea experienced the largest increase in their population share over the period 2001-17, increasing by 2.3 percentage points over this period (Figure 2.5). In contrast, the population share declined in IN and PR regions by 0.6 and 1.6 percentage points respectively. The population share in PR regions decreased in all except five OECD countries (the exceptions are: Belgium, Chile, Mexico, the Slovak Republic and the United States).

Figure 2.5. Change in the share of population by type of region (TL3), 2000-17



Source: (OECD, 2018[2]), *OECD Regions and Cities at a Glance*, https://dx.doi.org/10.1787/reg_cit_glance-2018-en.

StatLink https://doi.org/10.1787/888934223004

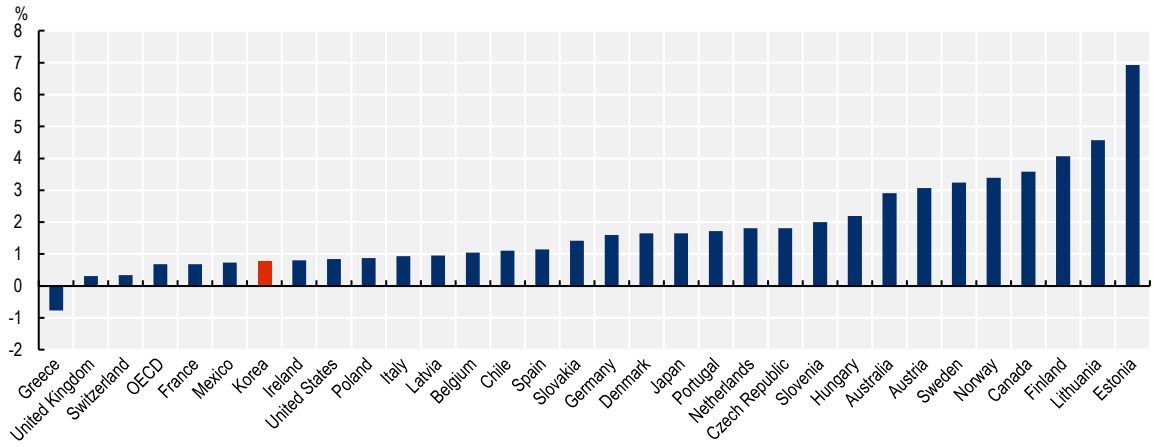
In terms of the OECD access to cities typology, only Greece increased its national share of the rural population over the period 2001-19. In the rest of the countries, the population share of MRs to total population increased. Korea also experienced an increase in the total population living in MRs (0.76 percentage points) but this increase was the sixth-lowest when compared to OECD countries (Figure 2.6).

Despite the overall decline in the population share in rural regions, the decline was mainly driven by Jeollanam-do, the only Korean TL3 region classified with access to small- and medium-sized cities, which shrank annually by an average 0.7%. In those rural regions classified as close to large cities, the population increased annually by close to a half of a percent (0.48%) annually. This increase was the 12th largest

when compared to the trends in OECD countries. These population dynamics across different types of regions in Korea are in line with OECD trends (Figure 2.7). Rural regions with access to small- and medium-sized cites are facing stronger demographic pressures than regions close the large cities. During 2008-18, 29% of OECD countries with regions with access to a small/medium-sized city (9 out of 31) experienced population decline. This percentage is smaller (20% or 5 out of 25) in regions with access to a large city.

Amongst the non-metropolitan (rural) regions classified in the access to cities definition, two of them, Chungcheongnam-do and Sejong, increased their population share from 2000-18 while Jeollanam-do saw its share decline (Figure 2.8). In absolute terms, Sejong increased its population by 219 161 inhabitants from 2012 to 2018, more than doubling its initial population. Chungcheongnam-do increased its population by 284 160 during 2001-18 representing a 13% increase. Jeollanam-do, in contrast, lost 12% of its 2001 population amounting to 216 500 inhabitants and Gangwon-do gained 7 750 inhabitants in absolute terms over the period, though saw its share of the national population decline slightly.

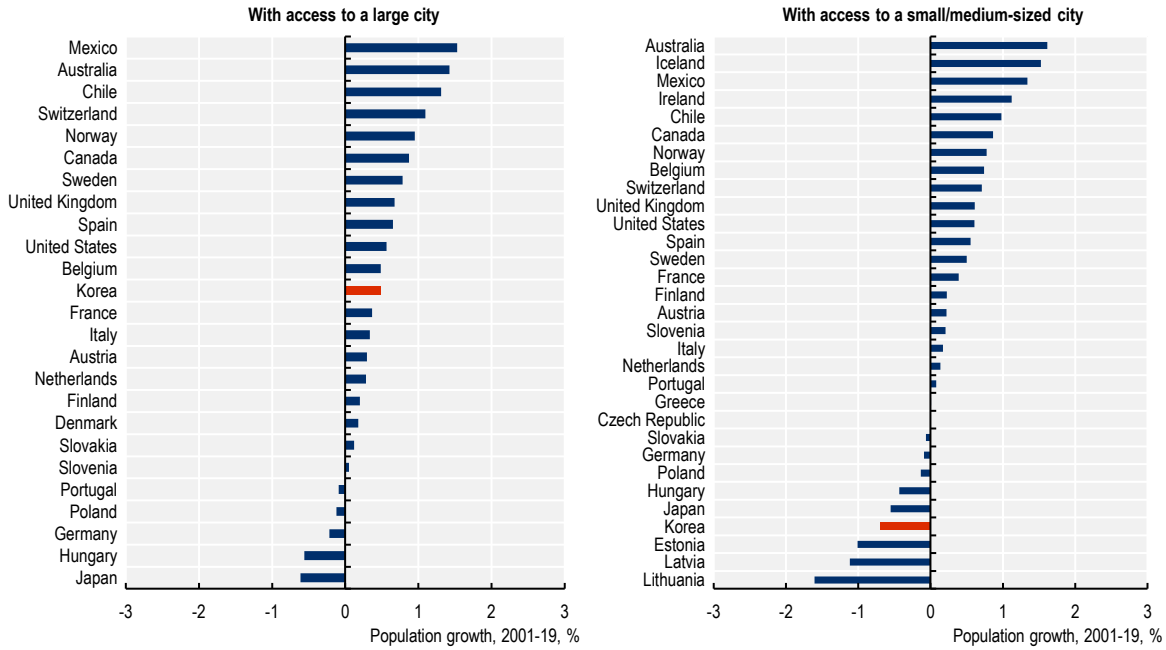
Figure 2.6. The share of the population in metropolitan regions increased in the last two decades, 2001-19



Note: Metropolitan regions include regions with a city of at least 250 000 inhabitants.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222890

Figure 2.7. Population growth in TL3 non-metropolitan regions, 2000-18



Source: (OECD, 2020[7]), *Rural Well-being: Geography of Opportunities*, https://doi.org/10.1787/d25cef80-en; *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

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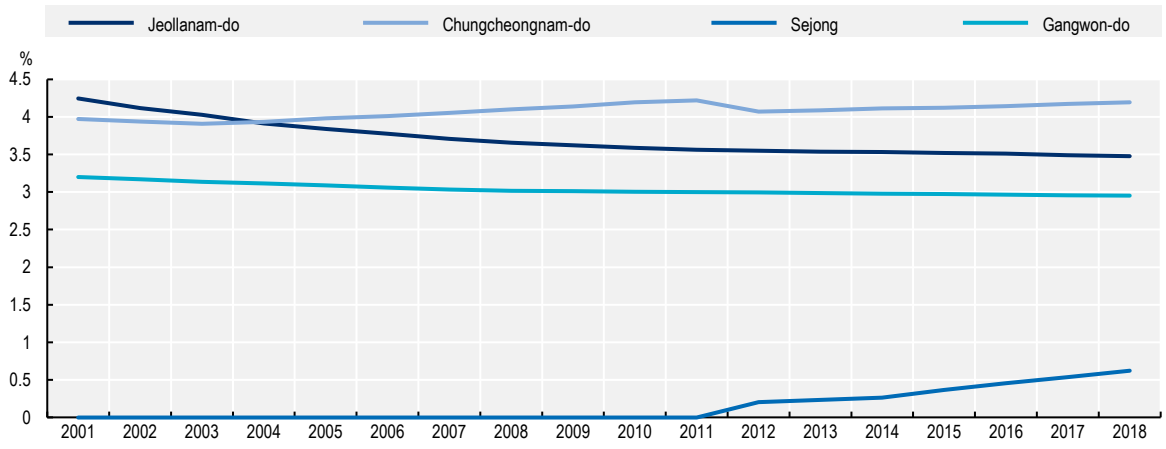
Figure 2.8. Growth in population share by four non-metropolitan (rural) TL3 regions in Korea, 2001-18



Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222548

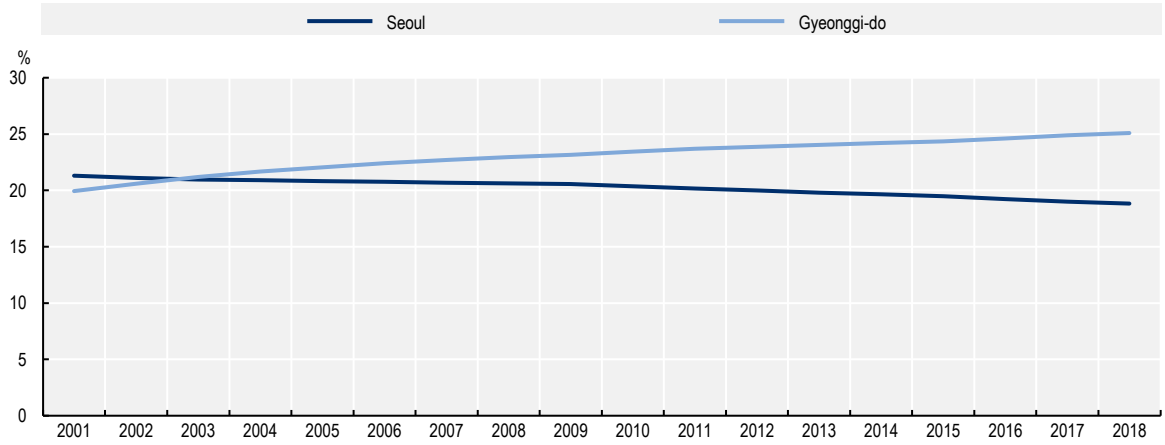
Amongst FUAs, those with more than 500 000 inhabitants but less than 1.5 million experienced the fastest population growth with an approximately 18% overall increase over 2000-18. Large metropolitan and

medium-sized urban areas grew by 9% and 7% overall. In turn, small urban area populations decreased by 11% in total.

Within FUAs, the commuting zones of large metropolitan areas grew by 48%, the highest growth over the period of 2000-15. Similarly, the commuting zones of medium-sized urban areas grew by 23%. In contrast, the core of the large metropolitan and medium-sized urban areas did not grow by as much, by 8% and 7% respectively, while the growth of core population in metropolitan areas was higher at 17%.

At the regional scale, the two TL3 regions from the capital TL2 region which concentrate the highest population shares, Gyeonggi-do and Seoul, experienced different population dynamics over 2001-18. Seoul in 2001 was home to 21.3% of the national population followed by Gyeonggi-do 20%. Over this time, the population share in Seoul decreased down to 18.8% in 2018, in contrast to Gyeonggi-do which experienced an increase to 25% (Figure 2.9).

Figure 2.9. Population shares in Seoul and Gyeonggi-do, 2001-18



Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

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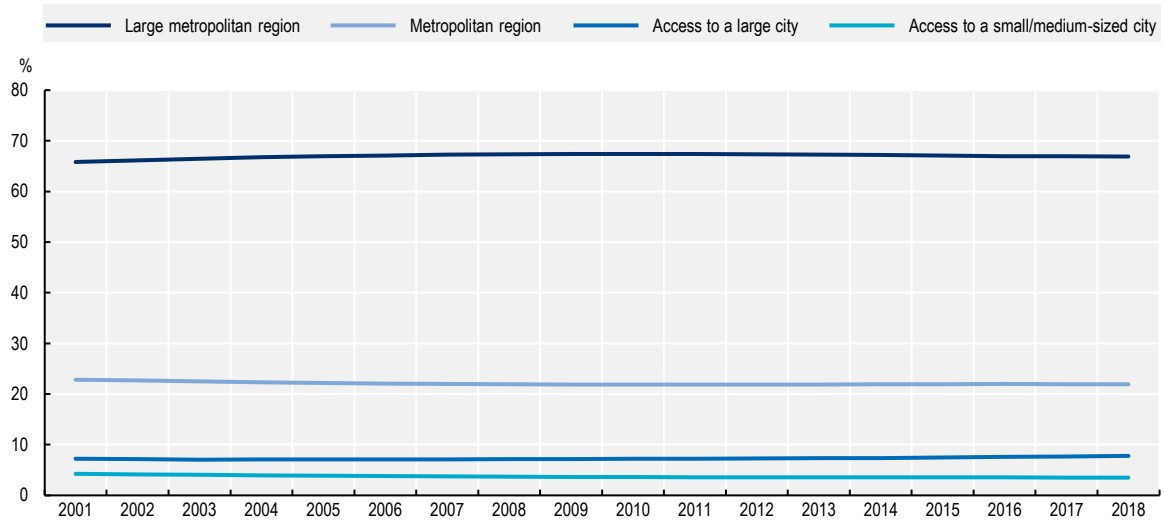
The population share amongst region types according to the access to cities definition also show different trends. The share of large MRs increased by 1 percentage point (from 65.7% to 66.8%), while the share of MRs decreased by 0.9 percentage points (from 22.7% to 21.9%). Amongst rural regions, those with access to large cities increased by 0.6 percentage points and regions close to small- and medium-sized regions decreased by 0.8 percentage points (Figure 2.10).

Figure 2.10. Population shares Korean TL3 regions based on OECD access to cities definition

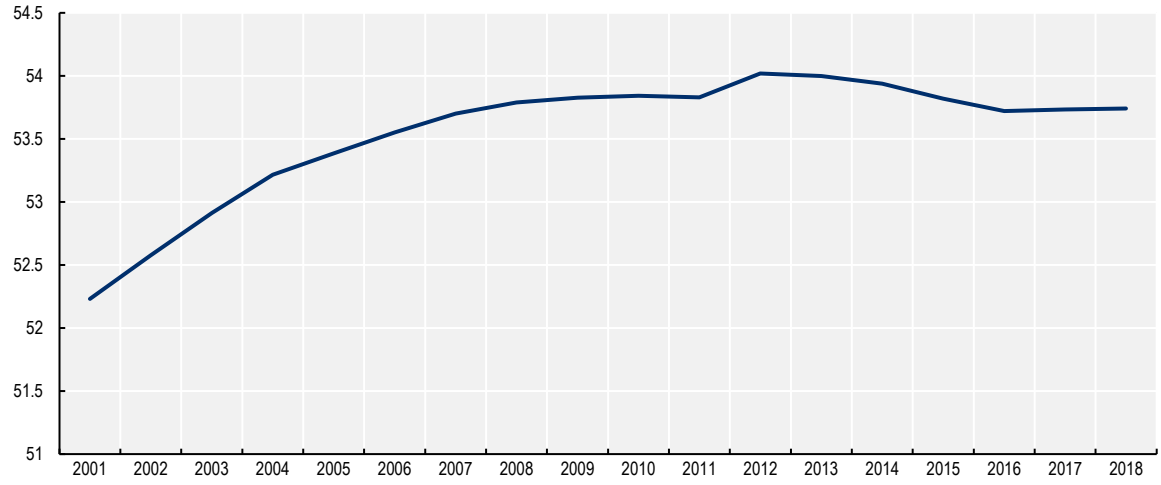


Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222586

According to the geographic concentration index, Korea's high level of demographic concentration (Figure 2.11) first increased from 2001 to 2011 and then this trend reverted and started to decline from 2011 to 2018.

Figure 2.11. Geographic concentration index among Korean TL3 regions, 2001-18



Note: The geographic concentration index depicts the spatial distribution of the population within Korea, comparing the resident population weight and the land area weight over all TL3 regions. The index ranges between 0 and 100: the higher its value, the larger the regional concentration.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

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The young population migrates from rural to urban regions

Data suggests that PU regions (OECD TL3 regional typology) are net recipients of migrants from other types of regions within Korea. Based on the access to cities typology, not all MRs are net recipients of migrants. In fact, the only type of region which saw a positive average of migration flows was that with access to a large city (Table 2.3). In 2017, regions with access to a large city recorded a positive average net migration rate, while other region types saw a negative average rate. The comparison of net migration rates of total population versus young people reveals that: i) large MRs attract young people; ii) migration into regions with access to large cities corresponds to an older profile, as net migration flows for the 15-29 age bracket in this type of region are actually negative; and iii) young people disproportionally leave regions with access to a small/medium-sized city compared to other age groups.

Table 2.3. Net migration rates, young and total population, by type of TL3 region (average), 2017

		Net migration rate (%)	Net migration rate (%), population 15-29 years of age
OECD TL3 regional typology	Predominantly urban	0.31	0.56
	Predominantly rural	-0.07	-1.24
OECD access to cities typology	Large metropolitan regions	-0.14	1.72
	Metropolitan regions	-0.04	-4.92
	Regions with access to a large city	1.42	0.95
	Regions with access to a small/medium-sized city	-0.17	-8.15

Note: Net (young) migration rate is defined as the median value of inflows minus outflows of (young) people over the total population. Inflows are defined as the group of new residents in the region coming from another region of the same country; outflows are defined as the group of persons who left the region to reside in another region of the same country.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

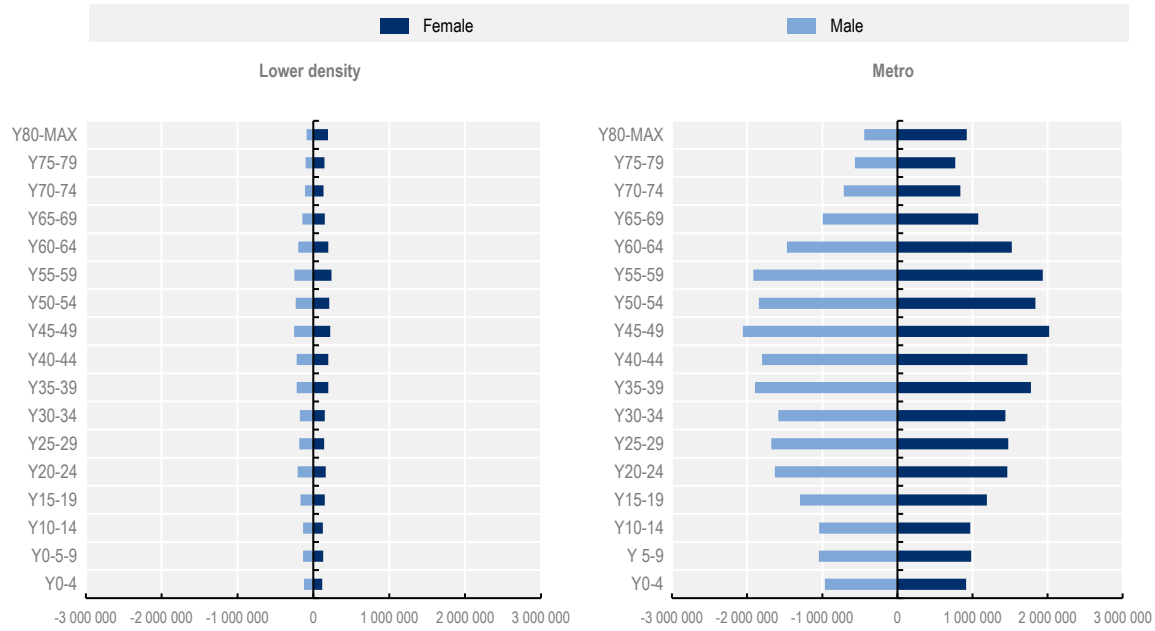
Korea's rural population is fast-ageing

The composition of the population differs between cities and rural regions. While the share of the younger population in urban and rural regions are at the same level, the share of the elderly population is larger in rural regions (low density) than in MRs (Figure 2.12). The share of the elderly population in rural regions stood at 18.3% which was 4.5 percentage points larger than the share in MRs. On the contrary, the proportion of the working-age population in rural regions is 68.6%, 4.7 percentage points smaller than the proportion of the working-age population of the total population in MRs.

Korea's population age structure follows the recent trends in OECD countries. Ageing is a stronger structural phenomenon in rural regions *vis-à-vis* MRs and therefore, rural and lower density regions face stronger ageing pressures than MRs (OECD, 2020[7]). Elderly dependency rates in rural regions stood at 27% in 2018. The ratio was slightly lower than the OECD average in TL3 rural regions, on average the difference was 2.7 percentage points (Figure 2.13). Korea is amongst the countries with the largest gap in elderly dependency ratios in 2018 between rural and metropolitan regions together with Australia, Canada, Finland, Japan, Sweden and the United Kingdom, all with a gap above 8 percentage points.

In 2018, regions with access to a small/medium-sized city had the highest average elderly dependency ratios (33%), followed by regions with access to an MR (24%). This differs from the trend typically seen in the OECD context, since in 2018, in 13 out of 18 OECD countries, the elderly dependency ratio was higher in regions with access to an MR than in regions with access to a small/medium-sized city (Figure 2.14).

Figure 2.12. Population pyramid by age, gender and place of residency, Korea, 2017

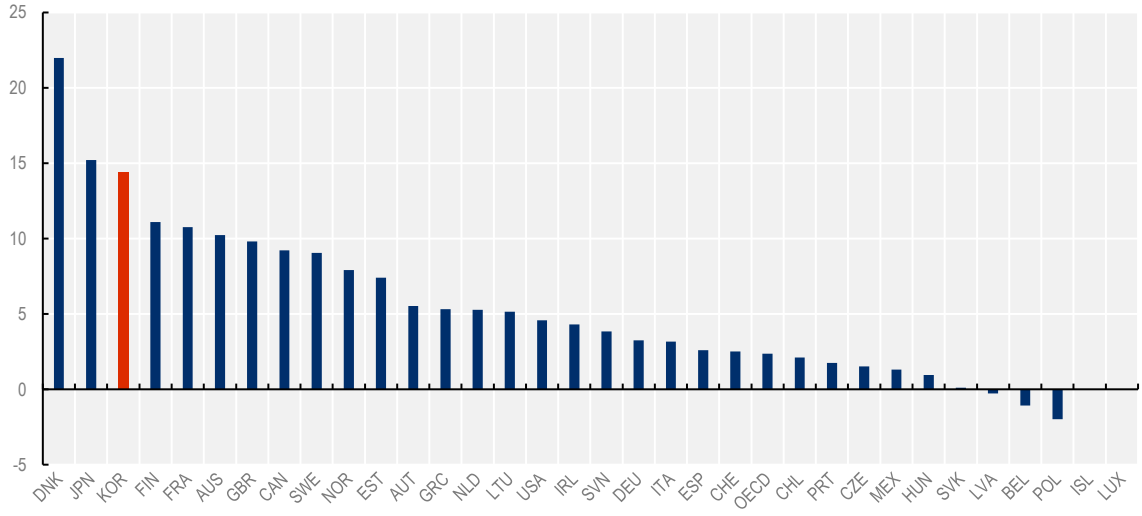


Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222776

Figure 2.13. Elderly dependency ratio gap between rural and metropolitan regions, 2018

Share of the population aged 65 years and older to the working-age population, 15-64 years old



Source: (OECD, 2018[2]), *OECD Regions and Cities at a Glance*, https://dx.doi.org/10.1787/reg_cit_glance-2018-en.

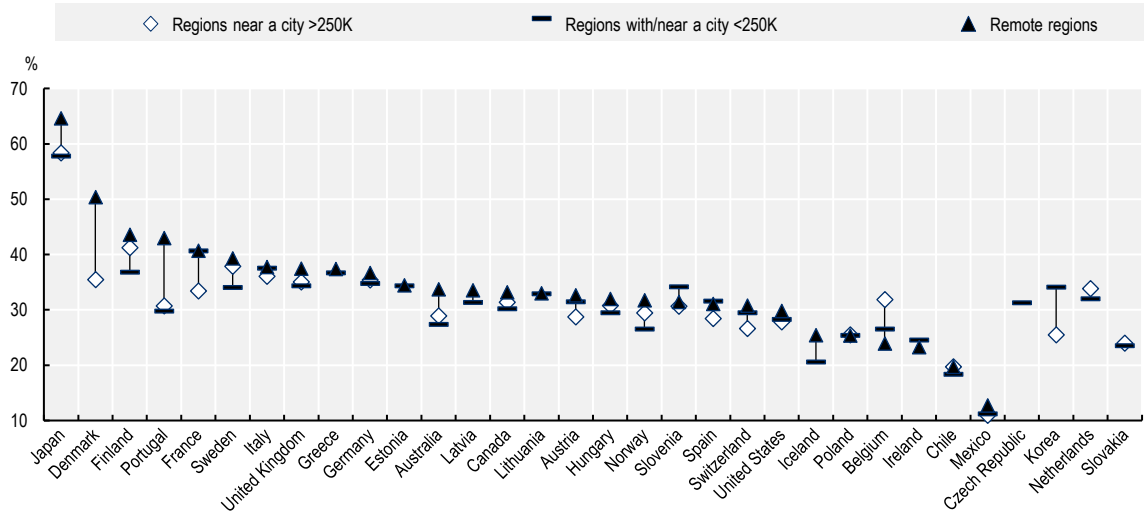
StatLink https://doi.org/10.1787/888934223023

Over the last 18 years, the population living in rural regions has become increasingly older. The growth rate of the elderly population, 65 years of age and older, has been the largest in rural regions when compared to MRs, recording an annual average growth rate of 4.2% during the period of 2000-18. Within

rural regions, the elderly population grew faster in the region with access to a small/medium-sized city compared to regions with access to an MR, where the per annual growth rate was actually negative.

Figure 2.14. Elderly dependency ratio by country and type of non-metropolitan region, 2018

Share of the population aged 65 years and older with respect to the working-age population, 15-64 years old

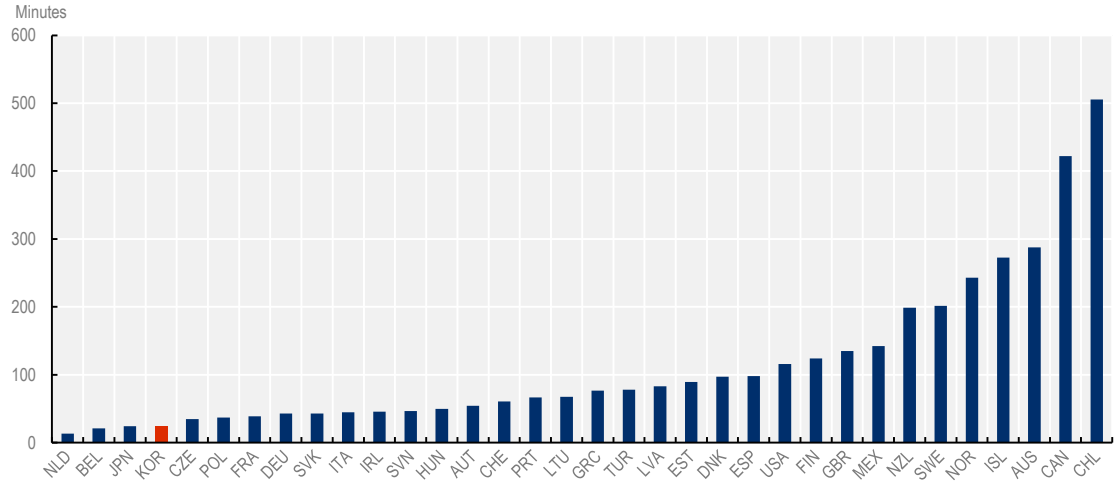


Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222928

In terms of access to cities, rural Korea has an advantage compared to other OECD TL3 rural regions. Compared to those, rural regions in Korea have the fourth shortest travelling time to the closest city (Figure 2.15). On average, the median travel time to the closest city is about 25 minutes. Within rural regions in Korea, the median travel time varies from 16 (Jeju-do) to 37 minutes (Gangwon-do).

Figure 2.15. Median travel time to the closest city



Note: "City" refers to an urban centre with at least 50 000 inhabitants. Travel time to the closest city is calculated for every 1 km^2 grid cell within TL3 boundaries as the shortest path through an impedance grid (using the Dijkstra algorithm) that takes into account the presence of transport infrastructure and geographical features in every grid cell. Median travel time refers to the median value across 1 km^2 grid cells.
Source: Elaboration based on Weiss et al. (2018[8]).

StatLink https://doi.org/10.1787/888934222624

In sum settlement patterns in Korea tend to concentrate in large cities when compared to OECD countries. The share of the national population living in rural regions in Korea ranges from 11.3% to 18% depending on the definition employed (e.g. OECD regional typology or OECD access to cities typology). Despite the low share, rural regions have strong linkages with cities, particularly with those above 250 000 inhabitants. This implies that rural policy responses will need to take advantage of strong interlinkages. Settlement patterns are concentrated in Korea when compared to OECD standards but the rate of concentration has declined in recent years and started to revert towards a more balanced development pattern. Population in Korea is growing faster in MRs, particularly in MRs against large MRs. In rural regions, population growth is higher in regions close to large cities and negative in rural close to small- and medium-sized cities. Elderly dependency ratios in rural Korea are slightly lower when compared to OECD rural regions but, when compared to urban, they are significantly higher. In fact, Korea shows the seventh-highest gap in dependency ratios between rural and urban amongst OECD countries. Elderly dependency ratios are increasing at a fast pace in rural regions in comparison to MRs, particularly in regions close to small- and medium-sized cities.

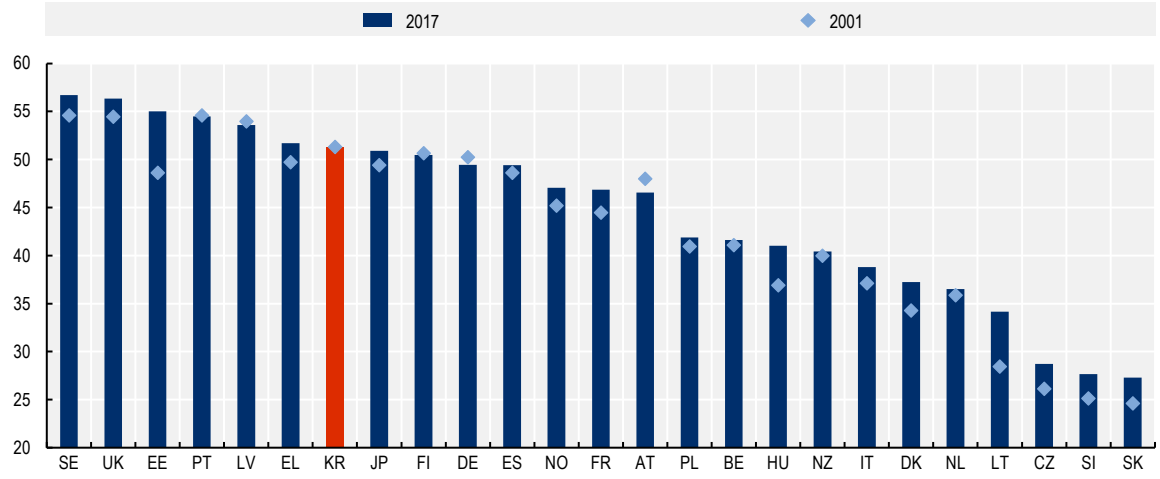
Rural areas of Korea are performing well economically

Korea's economic expansion is considered a success story of catching-up economies across OECD member countries. In 2003, Korea's GDP per capita was 28 percentage points below the OECD average. In just a decade, Korea has been able to reduce the gap by 8 full percentage points. The industrialisation of Korea's economy over the last 60 years which shifted its specialisation from agricultural to industry and now services has been largely responsible for the country convergence. The annual GDP per capita growth rate has been 2.6 times higher in Korea than in OECD member countries on average, growing annually at a rate of 3.07 in GDP per capita during 2003-16. This catching-up process, however, has not occurred in all Korean regions. In fact, regional disparities are very present in the geographical economic landscape of Korea today.

Economic development tends to progress unevenly among regions within OECD countries due to the benefits associated with economies of agglomeration. "Economies of agglomeration" is the term used to describe how firms like to locate close to other firms and to densely populated areas due to lower transportation costs, proximity to markets and a wider availability of labour supply. People also tend to be attracted to densely populated areas for the wider availability of job opportunities, goods and services. These mutually reinforcing forces yield important economic premium for both consumers and firms: economies of scale, better matching and functioning of labour markets, spill-over effects and more technological intensity. It is to no surprise that productivity, and therefore wages, tend to be higher in densely populated areas. These benefits, however, must be weighed against the costs of densely populated areas such as congestion, negative social effects of a possible oversupply of labour, higher land prices, rising inequality and environmental pressures. The net impact varies from one urban area to another.

Similar to settlement patterns, economic activities in Korea are also fairly concentrated. PU regions attract the largest share of economic activities in Korea with approximately 45% of the national GDP being produced in just 2 large MRs (the capital city Seoul and Gyeonggi, the region that surrounds the capital) in 2017. By looking at the international benchmark, Korea is among the top ten OECD countries with the highest index of geographic concentration of GDP among TL3 regions (Figure 2.16) though notably, Korea is the only OECD country where GDP is less concentrated than the population.

Figure 2.16. Geographic concentration index of GDP (TL3 regions), 2017



Note: The geographic concentration index depicts the spatial distribution of the population, comparing the resident population weight and the land area weight over all TL3 regions. The index ranges between 0 and 100: the higher its value, the larger the regional concentration.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

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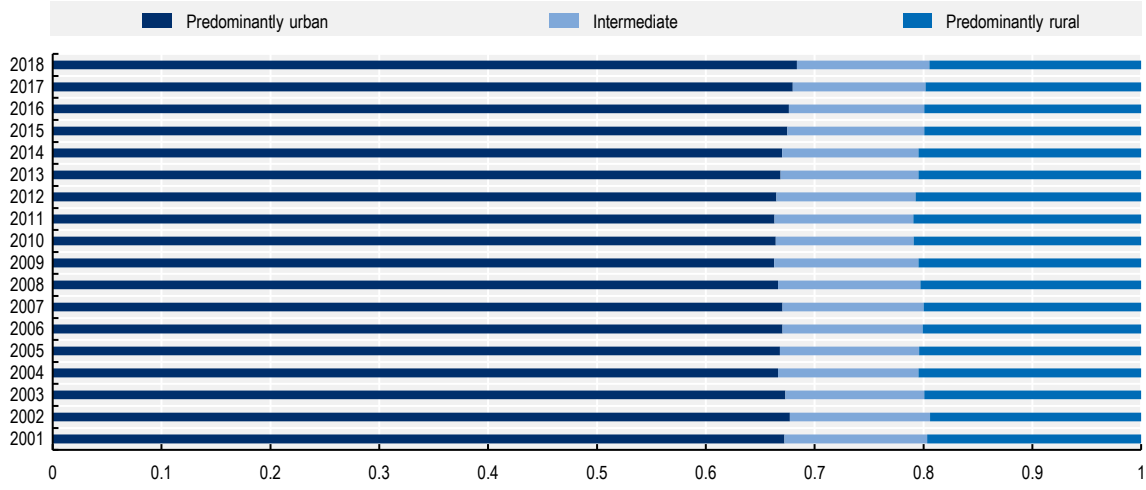
A closer look at the distribution of GDP by type of region reveals that the GDP share of PR regions stood at 19.5% of Korea's GDP in 2018 and this corresponded to about KRW 353 trillion. The contribution of the rural economy to the national GDP has been constant during the past 2 decades, including during the global financial crisis, standing at around 20% of the national GDP. The rural economy achieved its highest share of 20.9% in 2011. The GDP of Korea's rural regions grew overall by 95.3% during 17 years. Rural regions have been able to sustain their share of national GDP against PU and IN regions. Based on the distribution of GDP by type of regions, PU regions were hit hardest by the 2008 financial crisis.

Figure 2.17. GDP contribution by type of TL3 Korean region, 2018

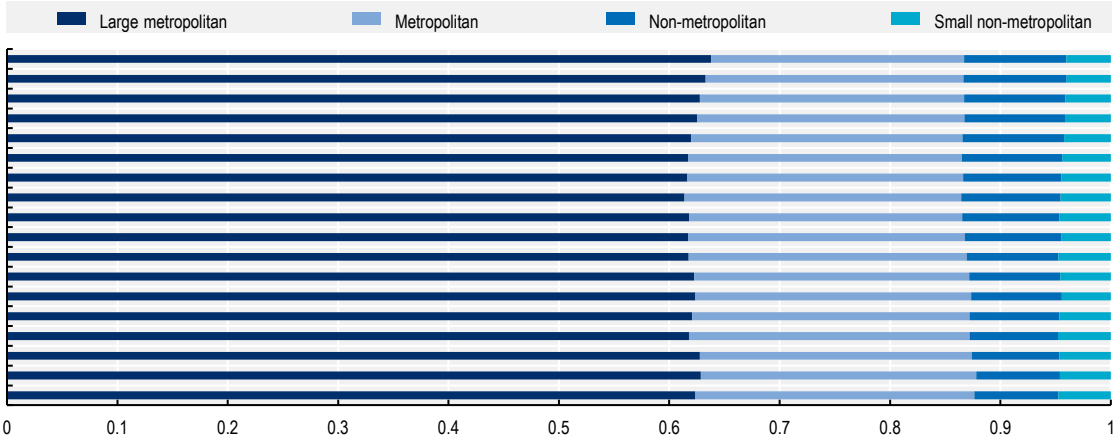


Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222947

According to the access to cities typology, rural (non-metropolitan) regions account for 13.3% of Korea's GDP in 2018, or KRW 241 trillion. The share peaked in 2011, amounting to 13.6%. Since this peak, the share of rural regions has stabilised to 13.2% of Korea's GDP. During the period 2001 to 2018, the GDP of rural regions grew overall by 108% which was 1.3 times more than the growth of GDP in Korea's metropolitan areas.

Figure 2.18. GDP contribution by type of TL3 Korean region using OECD access to cities typology, 2018



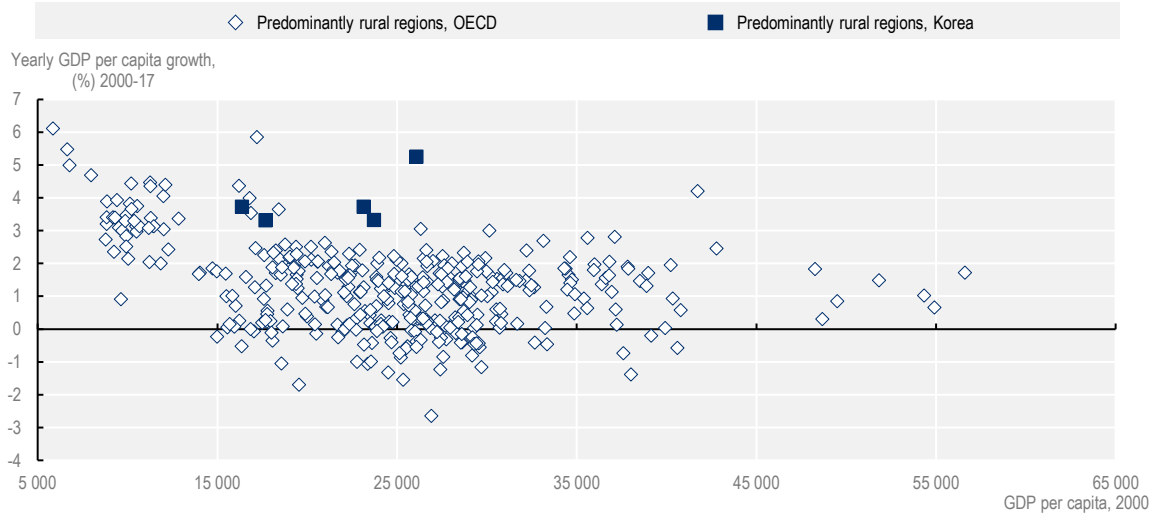
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222966

According to the OECD typology, the average level of GDP per capita in rural regions was USD 45 762 in 2018, which was USD 5 220 higher than the national average of USD 40 542 and USD 17 600 higher than the OECD PR region average of USD 28 162 (2017). Similarly, according to the access to cities OECD definition, GDP per capita in Korea's non-metropolitan (rural) regions in 2018 was USD 48 279. The high level of GDP per capita in rural regions is largely driven by the higher levels of GDP per capita in regions close the large cities against the lower levels in regions closer to small/medium-sized cities.

Korea's rural economies are performing well compared to OECD countries in terms of per capita GDP growth. Before the 2008 global financial crisis, the annual growth rate of GDP per capita in rural Korea was 1.5 times higher than the average of the PR OECD TL3 region. Once the crisis erupted in 2008, Korea's GDP per capita remained above the average of OECD rural economies. As a result, the PR economies of Korea have been able to achieve high levels of per annum growth in GDP per capita growth with high initial levels of GDP per capita (on average).

Figure 2.19. Performance of TL3 rural regions in Korea and other OECD TL3 rural regions, 2000-17

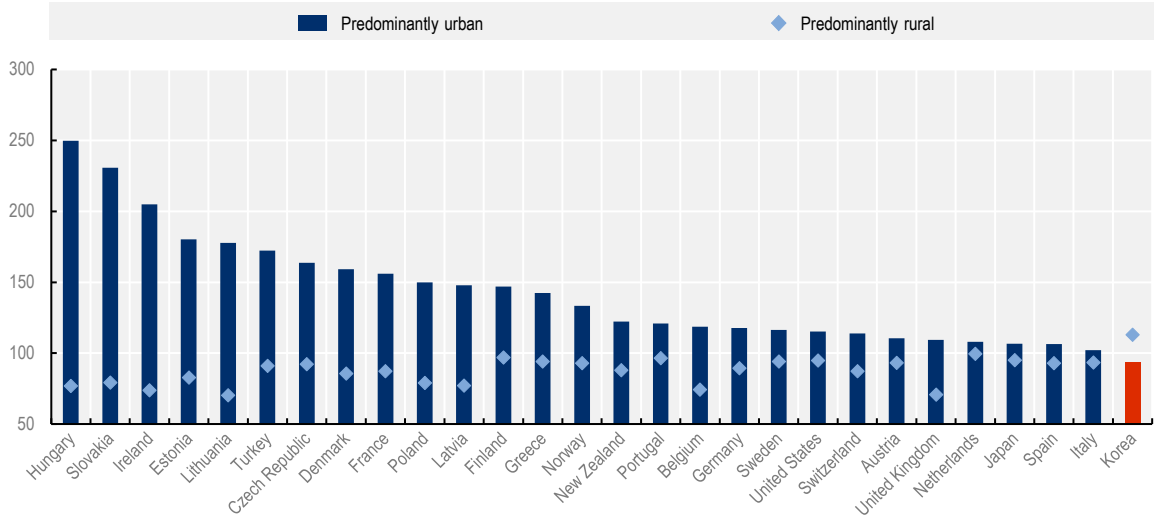


Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222795

When comparing the performance by type of region, Korea is the only OECD country where GDP per capita in rural regions is higher than the GDP per capita in urban regions (Figure 2.20). The GDP per capita ratio to the national average in Korea's PR regions was 113% in 2017, which was 19 percentage points higher than the GDP per capita ratio to the national average in PU regions in Korea. This can be largely due to the high concentration of settlement patterns in MRs and large cities in Korea.

Figure 2.20. GDP per capita gap between PU and rural regions, 2017



Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222814

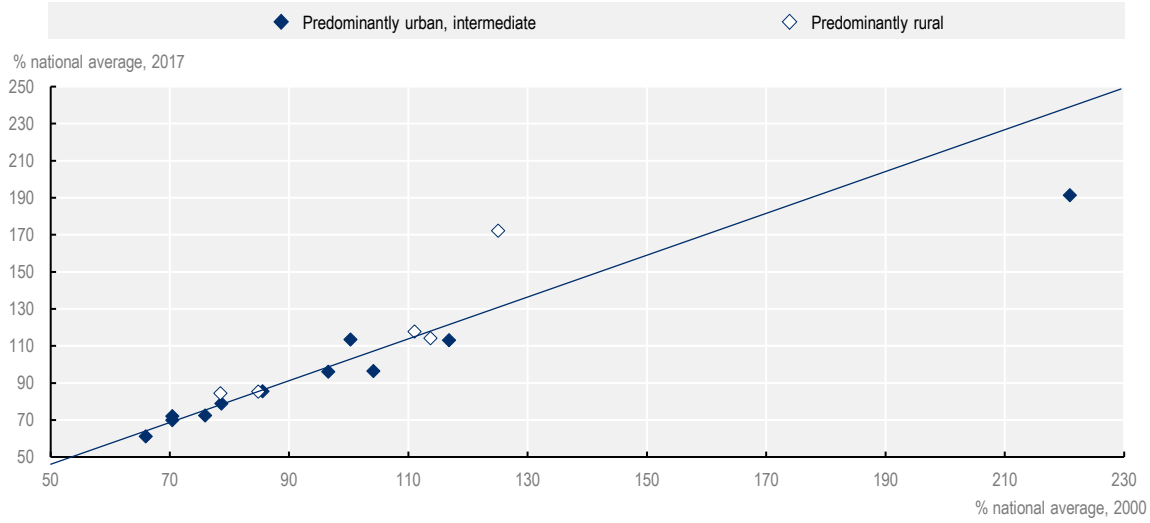
Within the national context, Korea's rural regions are also amongst the top performers. The majority of Korea's PR regions record higher GDP per capita growth than the national average during 2000-17 (Figure 2.21). The highest growth rate occurred in Chungcheongnam-do, where the GDP per capita grew by 5.2%. In addition to this, more than half of the rural areas had higher initial levels of GDP per capita in 2000 than the national average.

In terms of labour productivity, Korea's rural regions have lower levels of productivity compared to OECD rural regions but productivity in rural Korea has been converging. Korea's rural economies have recorded higher per annum growth rates than on average OECD rural regions. During the period 2008-17, labour productivity grew by 2% per annum in rural Korea surpassing the average OECD TL3 rate of 0.7% per annum. Korea's rural (non-metropolitan) regions also have on average higher productivity growth rates than other types of regions. The gains in productivity were greatest in regions with access to large cities (2.4%) while regions with access to a small/medium-sized city grew at a rate of 1.3%. Across OECD countries, rural regions in Austria, Belgium, Germany, the Netherlands and Switzerland show similar trends.

As is the case with GDP per capita, Korea is the only country with no gaps in labour productivity among rural and urban regions (Figure 2.22). Rural regions display higher levels of labour productivity against urban regions. In the rest of the countries, labour productivity tends to be higher in urban regions.

The lower levels of labour productivity also occur at the national scale. Previous OECD studies have attributed the relative lower productivity levels amongst other items resulting from the working culture. Long working hours have resulted in lower levels of well-being and female labour participation (OECD, 2019[9])).

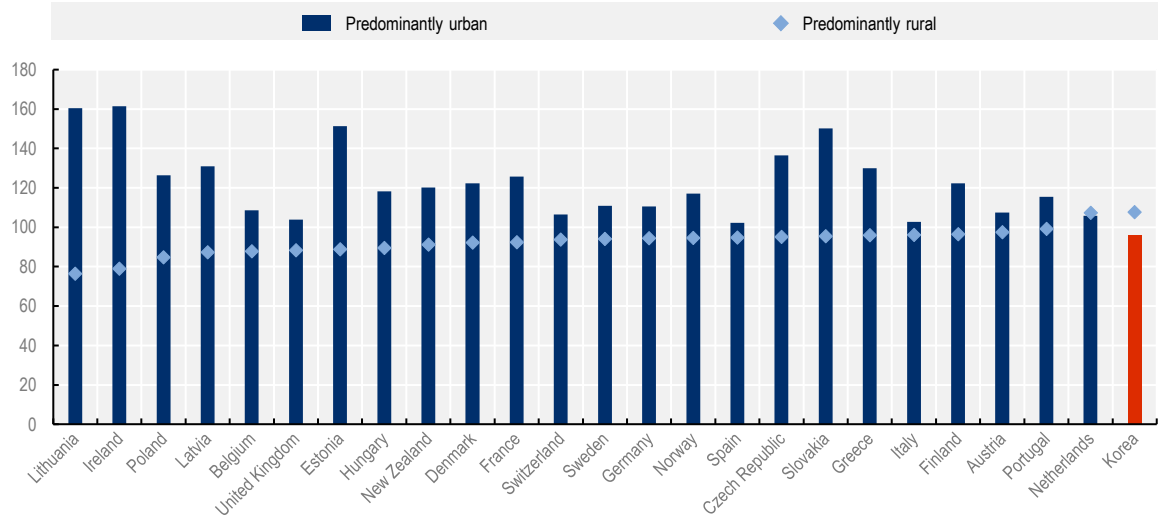
Figure 2.21. GDP per capita as a share of the national average by type of region, Korea, 2000 vs. 2017



Note: Regions above (below) the 45° line registered growth rates higher (lower) than the national average between 2000 and 2017.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222833

Figure 2.22. Labour productivity gab between urban and rural regions, 2016



Note: Labour productivity as a ratio of gross value added (GVA) over workers per place of work.
Source: *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

StatLink https://doi.org/10.1787/888934222852

The strong performance of Korea's rural regions may result from the effects of geography and their close proximity to cities. Since Korea is an extremely urbanised country, rural regions have strong interactions with cities. OECD research suggests surrounding regions can also "borrow" agglomeration from neighbouring cities. For a doubling of the population living – at a given distance – in urban areas within a 300 km radius, the productivity of the city in the centre increases by between 1% and 1.5% (OECD, 2014[10]). Given that residents and businesses of low-density regions have a strong interaction with cities, they can also borrow agglomeration benefits from the surrounding areas.

Rural regions specialised in tradeable sectors

The economy in rural regions, in general, is less diversified than in urban regions. In Korea, rural regions are highly specialised in tradeable sectors. The share of tradeable goods and services to the region's GVA represents 58% in 2017, 8 percentage points higher than the national average of 50%. Manufacturing alone contributed to over two-fifths of the rural regions' GVA and was also higher (42%) than the national average (32%).

Rural regions in Korea show differences in their economic structure. These can be divided into two categories: rural regions specialised in tradeable sectors and rural regions more specialised in non-tradeable sectors.

- The economy of three out of five rural regions (Chungcheongnam-do, Gyeonsangbuk-do and Jeollanam-do) is specialised in tradeable goods and services sectors since these sectors explain more than half of the GVA of the regions.
- The remaining two rural regions, Gangwon-do and Jeju-do, are more specialised in non-tradeable activities.

The tradeable sector is a key driver of competitiveness, given that it competes in global markets. The GVA of the tradeable sector in Korea represents 50% of the GVA in 2017 (Table 2.4) and the share was higher

(58%) in rural regions, especially manufacturing (42%). Urban regions tend to specialise more in non-tradeable activities. In Korea, they contributed to 55% of total GVA.

Table 2.4. Distribution of GVA by economic sectors, 2017

Sector	Rural regions (%)	Urban regions (%)	Korea (%)
Manufacturing (T)	**42**	**27**	**32**
Public admin., compulsory social security, education, human health (NT)	**18**	**15**	**16**
Distributive trade, repairs, transport, accommodation, food service activities (NT)	**9**	**18**	**15**
Construction (NT)	6	5	5
Agriculture, forestry and fishing (T)	6	0	2
Real estate activities (NT)	4	9	7
Financial and insurance activities (T)	3	8	7
Non-manufacturing industry, including energy (T)	3	1	2
GVA in other services (T)	3	3	3
Professional, scientific, technical activities, admininistration, support service activities (NT)	3	9	7
Information and communication (T)	1	6	4
Tradeable	58	45	50
Non-tradeable	42	55	50

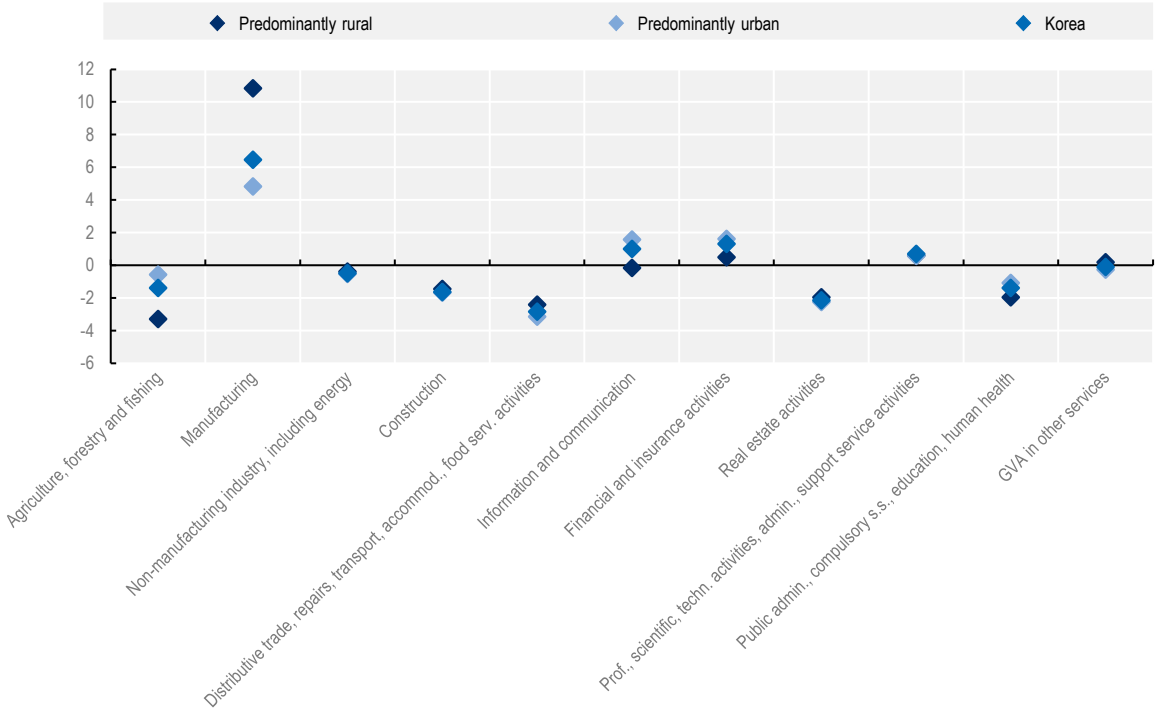
Source: OECD (n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

In terms of growth rates, the tradeable sector in Korea grew by 22% overall during 2000-17 in rural regions in contrast to the non-tradeable sector, which shrank by 14%. Manufacturing was the largest driver of GVA growth for rural regions.

Despite the significance of the tradeable sector for rural Korea, the non-tradeable sectors are also important drivers for the economy and jobs. In Korea, they account for 65% of all jobs and, in rural areas, 59% of all rural jobs in 2019. In Korea there are a number of interesting trends:

- About one-fourth of the total employment (24%) was in the distribution, trade, repairs, transport, accommodation and food service activities sector in PR regions in 2019.
- Since the crisis period (2007-09), the agriculture, forestry and fishing sectors is losing its relative weight. The share of total employment in agriculture, forestry and fishing sectors fell from 27% to 16% in 2008-19.
- The public administration sectors grew from 14% to 21% in 2008-19.
- Other sectors have not gone through as dramatic changes as the agriculture and public administration sectors in terms of employment.

Figure 2.23. Change in sector share of GVA, 2000-17



Note: Change in percentage points.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

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These trends show the structural transformation in rural Korea. Although the tradeable sector, particularly manufacturing, remains the largest contributor to the rural GVA (42%), it only employs 15% of the rural workforce. The relative weight of traditional rural sectors of agriculture, forestry and fishing are also losing their relative weight against non-tradeable sectors.

Table 2.5. Distribution of employment by economic sectors, 2019

Sector	Rural (%)	Intermediate (%)	Urban (%)	Korea (%)
Manufacturing (T)	15	20	16	16
Agriculture, forestry and fishing (T)	16	12	1	5
Construction (NT)	7	6	8	7
Distributive trade, repairs, transport, accommodation, food service activities (NT)	24	24	29	27
Financial and insurance activities (T)	2	2	3	3
Non-manufacturing industry, including energy (T)	1	1	1	1
Information and communication (T)	1	1	4	3
Other services (T)	6	6	7	7
Professional, scientific, technical activities, admininistration, support service activities (NT)	6	6	10	9
Public admininistration, compulsory social security, education, human health (NT)	21	20	19	19

Sector	Rural (%)	Intermediate (%)	Urban (%)	Korea (%)
Real estate activities (NT)	1	2	2	2
Tradeable	41	42	32	35
Non-tradeable	59	58	68	65

Note: NT=Non-tradeable sector; T=Tradeable sector.
Source: (OECD, n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

Well-being of rural dwellers

The well-being agenda has come to the forefront of OECD countries in recent years

For many years, GDP was the metric by which countries measured economic performance. However, GDP fails to measure important quality of life elements, including leisure time, health, social connections or environmental quality. At the same time, GDP does not account for inequality or how growth is affecting the resources available for future well-being. In light of growing inequalities and negative externalities stemming from increased production in certain sectors, policymakers can no longer look to GDP to provide an accurate assessment of progress. Since the financial crisis, policy leaders have acknowledged a need for a framework that recognises broader measures of social progress alongside more traditional "production-oriented" measurements (Stiglitz, Sen and Fitoussi, 2009[11]). Today, governments are paying greater attention to dimensions of well-being, such as housing, education, access to water and civic engagement (Cornia et al., 2017[12]). The concept of well-being recognises that economic progress works within these dimensions, encompassing a broader view of social progress beyond production and market value.

Studies reveal individuals who have made significant income gains often report their economic situation to be worse than much poorer rural individuals who have not achieved any income gains (Graham, 2018[13]). To avoid this paradox, any effort to understand welfare gains must consider non-income dimensions. The OECD began publishing comparative measures of well-being in 2011 in response to the growing recognition that income is not the only factor affecting how individuals experience economic growth. Individual countries have also established their own frameworks and indicators to reflect on well-being, such as those listed in the table below. New Zealand has taken this a step further by seeking ways to improve quality of life for citizens through its *Wellbeing Budget* (New Zealand Treasury, 2019[14]). The budget prioritises mental health, child well-being and Indigenous aspirations alongside more traditional economic growth goals.

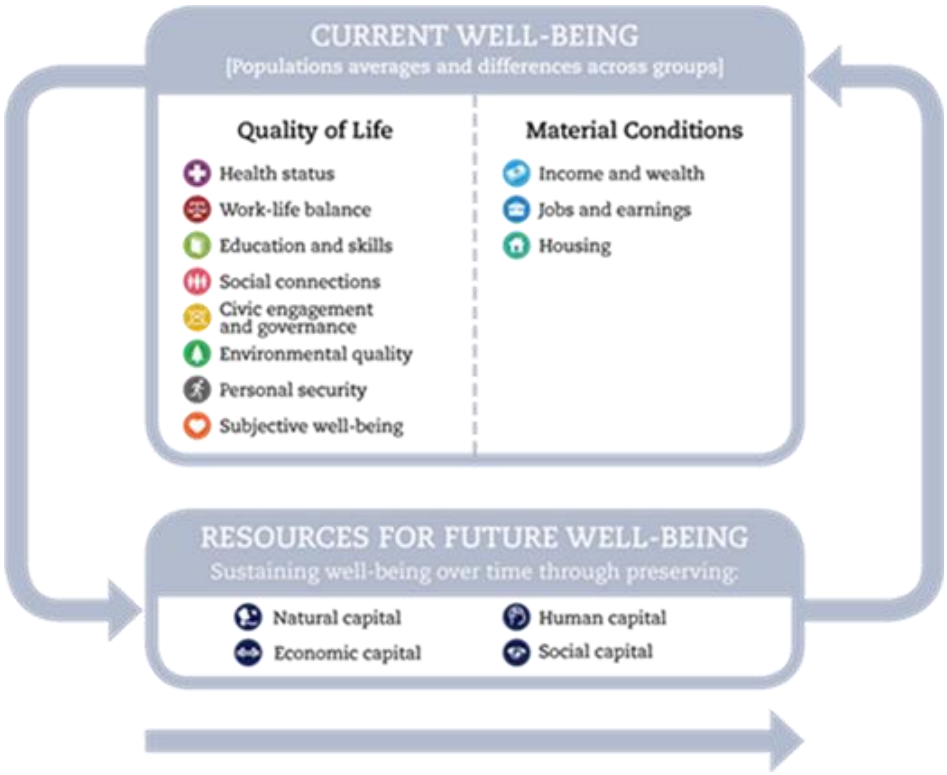
The OECD framework provides a lens through which to consider current and future well-being through measures of quality of life, material conditions and sustainability. The first two measures provide a comparison of current well-being between regions. *Quality of life* considers the role of health, education, environmental quality and air pollution among other factors. The framework uses primarily objective indicators, such as voter turnout to measure civic engagement, while also including an indicator of subjective well-being through life satisfaction surveys (OECD, 2011[15]). *Material conditions* include measures of income and wealth, jobs and earnings and housing. These measures rely on indicators such as disposable income, net wealth and long-term unemployment rate. Finally, *future well-being* represents the stock of natural, economic, human and social capital available to provide lasting well-being to future generations.

Table 2.6. Selected national well-being measurement initiatives and indicator sets

Country	Measurement initiative	Leading agency	Description
Austria	How's Austria	Statistics Austria	Since 2002, Statistics Austria reports on 30 indicators focused on 3 dimensions: material wealth, quality of life and environmental sustainability.
Israel	Well-being, Sustainability and National Resilience Indicators	Central Bureau of Statistics	Since 2015, the government publishes a set of indicators focused on the following domains: quality of employment, personal security, health, housing and infrastructure, education, higher education and skills, personal and social well-being, environment, civic engagement and governance, and material standard of living.
Slovenia	Indicators of Well-Being in Slovenia	Institute of Macroeconomic Analysis and Development	Since 2015, a consortium of four institutions updates indicators on a yearly basis. These indicators are presented in three categories: material, social and environmental well-being.
Wales	Well-being of Wales	Welsh Governments Chief Statistician	Since 2015, the Well-being of Future Generations (Wales) Act is aimed at incorporating social, economic, environmental and cultural well-being into policymaking. The act recognises 7 well-being goals and 46 indicators.

Source: Exton, C. and M. Shinwell (2018[16]), "Policy use of well-being metrics: Describing countries' experiences", https://doi.org/10.1787/d98eb8ed-en (accessed on 22 July 2019).

Figure 2.24. OECD framework for measuring well-being and progress



Source: OECD (2017[17]), *How's Life? 2017: Measuring Well-being*, http://dx.doi.org/10.1787/how_life-2017-en.

Measuring well-being at the regional level

In order to improve the use of well-being measures for policymaking at the regional and local levels, the OECD launched the publication *How's Life in Your Region* (OECD, 2014[18]) that developed a common framework for measuring people's well-being at the regional level. The framework has been designed to improve policy coherence and effectiveness by looking at nine dimensions that shape people's material conditions (income, jobs and housing) and their quality of life (health, education, environment, safety, access to services and civic engagement). These nine dimensions derive from both characteristics of individuals and those of each specific territory. They are best gauged through indicators of real outcomes rather than inputs or outputs.

The regional well-being framework captures a number of factors that are important to the competitiveness of places and helps to reinforce the importance of complementarities between different sectoral policies. The OECD framework for measuring regional and local well-being has the following seven distinctive features:

- It measures well-being where people experience it. It focuses both on individuals and on place-based characteristics, as the interaction between the two shapes people's overall well-being.
- It concentrates on well-being outcomes that provide direct information on people's lives rather than on inputs or outputs.
- It is multi-dimensional and includes both material and non-material dimensions.
- It assesses well-being outcomes not only through averages but also by how they are distributed across regions and groups of people.
- It is influenced by citizenship, governance and institutions.
- It takes account of complementarities and trade-offs among the different well-being dimensions.
- It looks at the dynamics of well-being over time, at its sustainability and the resilience of different regions.

To make the OECD Regional Well-Being Framework operational, indicators of well-being that are comparable across countries were developed for the OECD's 402 large regions and to a much lesser extent for the 275 metropolitan areas (FUAs) across the 9 dimensions of well-being.

These indicators, comparable across OECD countries, come from official sources in most cases and are available over different years. They are publicly available in the OECD Regional Well-Being Database. At present, regional measures are available for OECD countries in 11 well-being topics: income, jobs, housing, education, health, environment, safety, civic engagement and governance, access to services, community, and life satisfaction, as specified in Table 2.7.

Table 2.7. Well-being topics selected for visualisation

	Topics	Indicators
Material conditions	Income	Household disposable income per capita (in real USD PPP)
	Jobs	Employment rate (%) Unemployment rate (%)
	Housing	Number of rooms per person (ratio)
Quality of life	Health	Life expectancy at birth (years) Age adjusted mortality rate (per 1 000 people)
	Education	Share of labour force with at least secondary education (%)
	Environment	Estimated average exposure to air pollution in PM2.5 (μg/m^3), based on satellite imagery data
	Safety	Homicide rate (per 100 000 people)

	Topics	Indicators
	Civic engagement	Voter turnout (%)
	Accessibility of services	Share of households with broadband access (%)
Subjective well-being	Community	Percentage of people who have friends or relatives to rely on in case of need
	Life satisfaction	Average self-evaluation of life satisfaction on a scale from 0 to 10

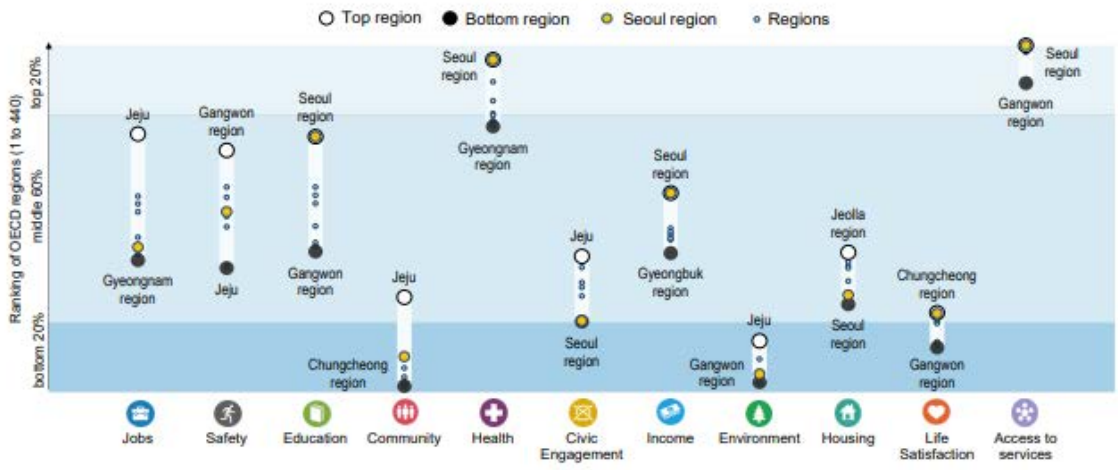
Source: *OECD Regional Well-being*, https://www.oecdregionalwellbeing.org (accessed on 3 December 2020).

Regional measures, comparable across countries, are not currently available on work-life balance. For each topic, one or two indicators have been selected. Improvements in the way the OECD measures the well-being topics in regions are still underway. For example, additional measures of access to services or indicators that measure other environmental performance are being developed particularly at lower-level geographies and for rural regions.

How's life in your regions in Korea?

Comparable subnational data are only available across large TL2 regions. For the case of Korea, there are 7 TL2 regions. Figure 2.25 compares Korean TL2 regions across the distribution of all 440 OECD TL2 regions amongst the bottom 20%, middle 60% and top 20%.

Figure 2.25. Distribution of Korean TL2 regions compared to all OECD TL2 regions, 2020



Note: Relative ranking of the regions with the best and worst outcomes in the 11 well-being dimensions, with respect to all 440 OECD regions. The eleven dimensions are ordered by decreasing regional disparities in the country. Each well-being dimension is measured by the indicators in Figure 2.26 below.
Source: (OECD, 2020[19])Regions and Cities at a Glance 2020 – Korea, https://www.oecd.org/cfe/Korea-Regions-and-Cities-2020.pdf.

The main trends amongst Korean TL2 regions are:

- The well-being domain with the largest disparities between Korean regions is related to job outcomes (employment and unemployment rate), with Gyeongnam region in the bottom 40% of OECD regions and Jeju close to the top 20%.
- All Korean regions rank in the top 20% of the OECD regions in access to broadband.
- In contrast, all Korean regions except Jeju rank in the bottom 20% in perceived social support network (community).

- The top performing Korean regions is above the average of the top OECD regions in 3 out of 13 well-being indicators, namely access to services, adjusted mortality rates and life expectancy.

Figure 2.26. Korean TL2 regions compared to national and median OECD TL2 regions, 2020

	Country Average	OECD Top 20% regions	Korean regions	
			Top 20%	Bottom 20%
Jobs				
Employment rate 15 to 64 years old (%), 2019	66.0	76.0	67.9	64.5
Unemployment rate 15 to 64 years old (%), 2019	4.3	3.3	3.4	4.6
Safety				
Homicide Rate (per 100 000 people), 2016-18	1.3	0.7	1.1	1.6
Education				
Population with at least upper secondary education, 25-64 year-olds (%), 2019	84.3	90.3	88.6	76.6
Community				
Perceived social network support (%), 2014-18	77.3	94.1	80.9	71.9
Health				
Life Expectancy at birth (years), 2018	82.7	82.6	83.4	81.9
Age adjusted mortality rate (per 1 000 people), 2018	6.2	6.6	5.9	6.7
Civic engagement				
Voters in last national election (%), 2019 or latest year	77.2	84.2	64.1	58.3
Income				
Disposable income per capita (in USD PPP), 2018	19 893	26 617	21 009	18 520
Environment				
Level of air pollution in PM 2.5 (µg/m³), 2019	31.1	7.0	25.3	28.0
Housing				
Rooms per person, 2018	1.3	2.3	1.6	1.4
Life Satisfaction				
Life satisfaction (scale from 0 to 10), 2014-18	5.8	7.3	5.9	5.7
Access to services				
Households with broadband access (%), 2019	99.4	91.3	99.7	98.9

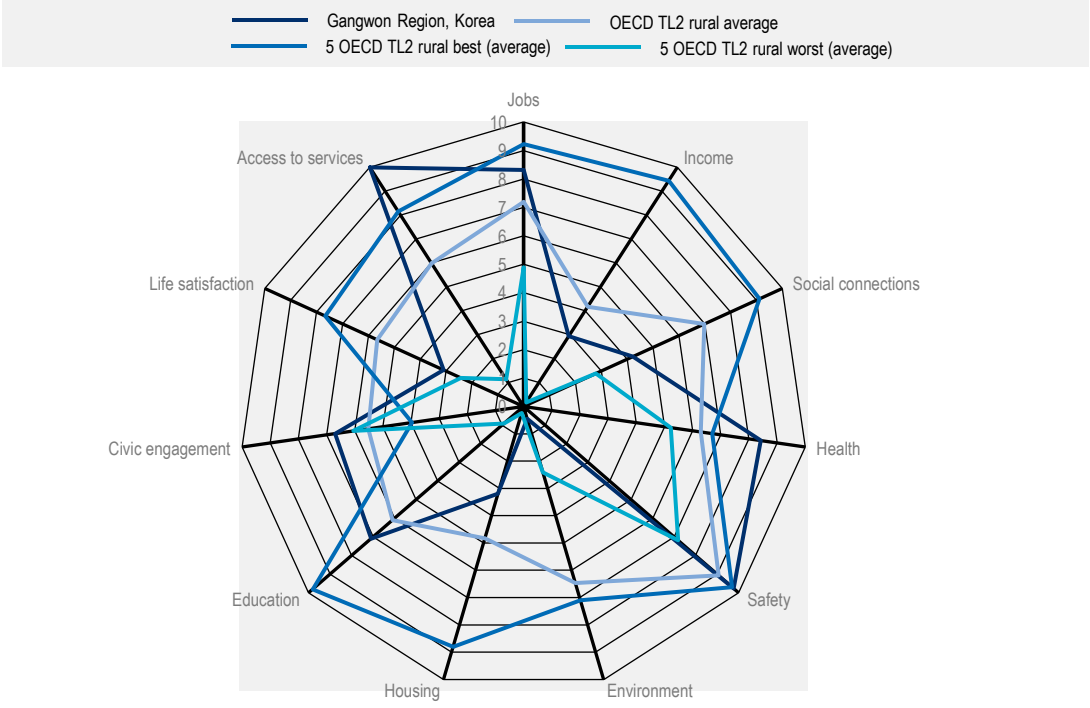
Notes: OECD regions refer to the first administrative tier of subnational government (large regions, TL2); Korea is composed of seven large regions.
Source: OECD (n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en; (OECD, 2020[19]), Regions and Cities at a Glance 2020 – Korea, https://www.oecd.org/cfe/Korea-Regions-and-Cities-2020.pdf

Since data for regional well-being are not available for TL3 regions, which would provide a tool to benchmark well-being in rural Korean regions against national and international standards, the analysis focuses on regional well-being of those TL2 regions with a high degree of rurality. The degree of rurality captures the percentage of the population living in rural communities. Rural communities are defined as municipalities with less than 150 inhabitants per km^2. The rural TL2 regions sample consist of 64 TL2 regions. The degree of rurality ranges from 67.9% to 100%. Korea has only 1 TL2 region (Gangwon-do) with a relatively high degree of rurality (87.5%).

Relative to other TL2 regions with a high degree of rurality, Gangwon-do's performance across the different regional well-being dimensions is mixed:

- The region's comparative advantages are in the jobs, health, education, civic engagement, safety and access to services dimensions.
  - Gangwon-do is a top performer in safety and access to services compared to other selected OECD TL2 regions (Figure 2.27).
  - Approximately 97.2% of the region's households had a broadband connection.
  - Moreover, the region had about 4.5 percentage points lower unemployment rate than the average of selected OECD TL2 regions.
- In contrast, the region recorded lower levels of well-being in the environment, housing, income and life satisfaction than with comparable TL2 regions.

Figure 2.27. The OECD Regional Well-being in selected TL2 regions with a high degree of rurality, 2014



Note: Each well-being dimension is measured using one to two indicators from the OECD Regional Well-being database. Normalised indicators are averaged with equal weights. Indicators are normalised by rescaling (linearly) from 0 (worst) to 10 (best).
Source: OECD (n.d.[4]), *OECD Regional Statistics (database)*, https://doi.org/10.1787/region-data-en.

The good performance in the jobs dimension can be linked to higher rates of education. The importance of human capital and skills as drivers of regional growth is challenged by the increasing outmigration of the young skilled population to urban areas. In 2014, the educational attainment rate of the region was 73%, approximately 10 percentage points smaller than the national average. However, the educational attainment rate of the region is about 7 percentage points higher than the average rural TL2 region's rate.

Income was one of the dimensions where the region had lower levels than the average of the selected TL2 regions with a high degree of rurality (around USD 14 150 compared to an average of USD 19 300). Another area of comparative weakness is environmental quality: the level of air pollution was approximately 21.7 in µg/m³ in 2014, positioning Gangwon-do in the bottom rankings in terms of environmental quality performance across OECD TL2 regions.

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3 Evolution of rural policies in Korea and current policy measures

Chapter 3 examines Korean's rural policies, its multilevel governance framework and current efforts towards decentralisation. It first describes the key actors for regional and rural policies, followed by the historical evolution of rural policies and an assessment of current rural policy approaches in Korea. The chapter then describes the main features of Korea's multilevel governance framework and current approaches to decentralisation. The chapter then focuses on challenges and opportunities for implementing rural policies in the context of decentralisation.

Key institutional actors for regional and rural development

Many Korean ministries are involved in regional development policies. In terms of the balanced development agenda, the Presidential Committee on Balanced National Development, launched in 2003 (named the Presidential Committee on Regional Development from April 2010 to March 2018), provides direction and oversight regarding key policies to implement balanced national development. The committee is composed of government (12 ministries) and civilian members and other special committees report to it, such as those for metropolitan area management, regional innovation and transferring public institutions to local areas, among others. The committee is responsible for Five-Year Regional Development Plans and the Special Account for Regional Development, as well as project management and evaluation. It also plays a key role in co-ordinating sectoral policies by different ministries.

The Ministry of Land, Infrastructure and Transport (MOLIT) is the leading ministry to draft the Comprehensive National Territorial Plan (CNTP). As a long-term overarching regional development plan, the CNTP is a vehicle to encourage inter-ministerial co-ordination and to align subordinate regional plans. Since the enactment of the National Land Planning and Utilisation Act in 2003, replacing the Urban Planning Act and the National Land Use Management Act, the Korean spatial policy has expanded its scope to include non-urban areas along with urban areas, thus allowing rural policies to have a territorial perspective. According to this comprehensive perspective employed in the CNTP, the ministry is leading the nation's balanced development across regions. A primary policy under the regional development initiative is the development of the new administrative capital, Sejong, along with a series of Innovation Cities across the country, through the relocation of central government ministries and public institutions that were concentrated in the capital region. These initiatives go beyond the development of new communities: rather they are intended to improve the quality of life of local residents and support the development of the surrounding areas outside the new cities themselves, for example by enhancing residential environments, hiring local talent and procuring locally sourced goods among other things. MOLIT also assists subnational governments in systematically strengthening their capacity to manage the growing number of policy jurisdictions that are under their leadership (as a result of ongoing devolution). With each subnational government required to establish and implement its own ten-year development plan, MOLIT provides support where necessary in the forms of budget allocations, tax breaks and deregulatory measures. For those areas facing particular challenges in terms of income, population or financial capacity, "growth promotion areas" are designated and these areas then receive special support.

The Ministry of Agriculture, Food and Rural Affairs (MAFRA) is also a key ministry in rural development in Korea. The Framework Act on Agriculture, Rural Community and Food Industry mandates MAFRA to formulate the Agriculture and Rural Community and Food Industry Development Plan every five years. The plan provides the policy directions which covers not only the agricultural sector but also the broad policy measures on rural development. The most recent policy plan for 2018-22 sets four main policy targets: strengthening the income safety net; innovation for sustainable agriculture; enhancing food safety in the supply chain; and improving rural welfare. Strengthening competitiveness and growth of agriculture by enhancing agricultural productivity has been a core goal of agricultural policies in Korea. The most recent five-year policy plan diversifies the objective of agricultural policies to address more varieties of societal demands towards agriculture and rural areas. The new policy plan shifted the orientation of agricultural policies further to ensure income stability and quality of life of farmers as well as the balanced development between agricultural production and environmental conservation. It also foresees a strengthening of bottom-up participation in policy (OECD, 2018[1]).

A second inter-ministerial committee is the Prime Minister's Committee on the Quality of Life of Farmers and Fishermen and the Promotion of Rural Development. This committee is responsible for establishing the basic plan for improving the quality of life of farmers and fishermen and developing rural areas every five years (the fourth basic plan is being implemented for the period of 2020-24). The plan, including comprehensive policy measures, is designed to guarantee basic services essential to daily life to residents

in rural areas all across the country. It is developed through consultations with relevant ministries and rural stakeholders, and finalised through the review and deliberation of the committee. Under this basic plan, the committee establishes the annual implementation plan, monitors and evaluates its implementation, and then reports the outcomes to the National Assembly each year. The committee, chaired by the Prime Minister, is composed of 14 ministries and 6 administrative agencies of the central government, and MAFRA is the lead ministry. The committee also co-ordinates sectoral policies by different ministries.

In addition to MOLIT and MAFRA, which play leading roles in the abovementioned inter-ministerial committees, there are additional ministries that relate to and implement rural development policies as shown in Table 3.1.

Table 3.1. National ministries related to rural development

Ministries	Related departments	Policies/Activities
Presidential Committee on Balanced National Development	Main Committee Expert Committee Special Committee Regional Development Planning Team	• Establish regional development policy • Co-ordinate regional policies • Five-Year Plan for Regional Development • Operation of a special account for regional development • Evaluation and consulting on regional development projects
Prime Minister's Committee on Quality of Life	14 ministries 6 administrative agencies	• Establish an annual implementation plan for the 5-year plan Improving Quality of Life of Farmers and Fishermen and Developing Rural Area • Report outcomes of policy implementation to the National Assembly annually
Ministry of Strategy and Finance	Policy Co-ordination Bureau	• Knowledge-based economy and new growth engine development • Regulatory free zones, industrial policies, improvement of corporate regulations, etc.
Ministry of Government Administration and Home Affairs	Local administrative office (regional development policy) Local financial and economic office (Regional Economic Support Agency)	• Regional development plan • Local roads, border area, special area • Study on the development of the population reduction area, Comprehensive Book Development Plan, etc. • Support for regional economic policy • Revitalise traditional markets and alley businesses • Support for local economic events
Ministry of Land, Infrastructure and Transport	Territorial and Urban Development Office (Regional Policy Division)/ Innovation City Development Office	• Regional development plan, growth promotion area, border area, comprehensive island development plan, etc. • Industrial estate • Regional Development Investment Agreement, etc. • Innovation Cities
Ministry of Trade, Industry and Energy	Industrial Policy Office (regional economic policy) Free Economic Zone Planning Board	• Regional economic stimulus plan, Five-Year Plan for Regional Development • Corporate Local Investment Fund management • Support for local hubs and promote local industries (local specialisation industry; traditional industry; regional insurance industry, etc.) • Industrial complex management; structural refinement, etc. • Development and activation of the landscape area • Improve the conditions of foreigners in free economic zones • Activation of the free trade zone, etc.
Ministry of Agriculture, Food and Rural Affairs	Rural Policy Bureau	• Development of rural areas and improvement of living conditions • Development of General Agricultural Fishing Village • Local Happy Living Zones co-operation programmes, etc.

Ministries	Related departments	Policies/Activities
Ministry of Culture, Sports and Tourism	Tourism Policy Office (Tourism Policy Officer)	• Basic tourism development plan and regional planning • Tourist destination development • Development of tourism and leisure type Enterprise Cities

Source: Adapted from Korea Institute of Industrial Technology (2016).

Historical evolution of rural policies in Korea

The early days of Korea's development journey

Korea is one of the countries that achieved the fastest growth in the latter half of the 20th century. The country's export-driven industrialisation delivered a drastic increase in the income per capita and of the overall living conditions of the Korean people. However, this period also gave rise to a significant expansion of the imbalances between regions within the country, with growing socio-economic concern for those left behind, demanding a policy response. Thus, the Korean post-war regional policy is highlighted by the "development era" that began in the 1960s, followed in the 1980s by a growing focus on achieving more balanced national development.

While in the early stages of the development era national policy had been primarily focused on industrialisation, policies for economic development in rural regions were also implemented in the form of a modernisation movement. In Korea, as in many other countries, rural development policy and agricultural policy were regarded as synonymous (although "agricultural area" is not synonymous with "rural area") and so, in the early stages of the county's development, rural development policies had been carried out for agricultural villages and their focus was on raising agricultural productivity and the income of farming households, alongside efforts to improve living standards in rural areas.

Through the 1950s and 1960s, most of Korea's rural residents lived in poverty, below the absolute poverty line and agricultural productivity during this period was low. Two policies, the land reform undertaken in the 1950s and the New Village Movement (Saemaul Undong) in the 1970s have shaped Korea's rural areas (OECD, 2001[2]; 2010[3]).

- **Land reform** in the 1950s. Following the Korean War, a radical land-to-the-tiller agrarian reform took place. With populations dislocated by the war, landlords were without local, personal or political clout to counter the reform; and with rampant inflation, the government was eventually required to pay only a fraction of the land compensation awarded at the time of confiscation. The impact of the reform, which is one of the few peaceful agrarian reforms of its type to have been accomplished in the post-colonial world, was twofold. First, it gave at least subsistence incomes to the vast majority of the Korean population. Income inequalities were instantly levelled and what would later become Korea's heralded process of industrialisation with equity gained an important rural foundation. Second, in the context of low levels of urbanisation and the "as yet" small urban working and middle classes, the elimination of a landed rural elite gave enormous autonomy to the Korean government to construct what has come to be known as the "developmental state", namely, a strong-arm government capable of heavily intervening in the economy and society.
- **Saemaul Undong**. In the 1970s, the government launched a massive green revolution programme and a village modernisation programme: Saemaul Undong (New Village Movement). The intention of the green revolution was for the country to achieve self-sufficiency in grain production, which was a response to three issues: national food security, providing cheap food for rapidly increasing urban populations and limiting foreign exchange losses. Substantial increases in land productivity were achieved through strict enforcement of the adoption of high-yield crop varieties, subsidised fertiliser and pesticide programmes, and collection and distribution systems run by the government.

In order to rebuild agriculture, the Saemaul Undong was first initiated from 1971 to 1973, under the strong leadership of the central government. In the beginning, 6 000 rural villages participated, increasing to 34 665 villages in 1973. During the second stage, from 1974 to 1976, the activity was extended considerably across the nation, with participation from schools and social organisations. In 1975, an non-governmental organisation (NGO), the Saemaul Undong Council, was set up to carry out campaigns aimed at achieving wider participation. The council also placed emphasis on four measures, including projects to generate income, public work projects, education and Saemaul Undong in urban areas. Since 1977, as the third stage, projects to improve living standards and the income structure were carried out to complete the activity of Saemaul Undong (OECD, 2001[2]).

Evolution of the Comprehensive National Territorial Plans

Throughout the development era in the last century, these agricultural policies contributed to the development of rural areas and the remarkable increase in agricultural production and income in absolute terms. Despite these advances, the period also witnessed a growing disparity between urban and rural. In relative terms, rural areas in Korea and rural policies had been marginalised while the government devoted much of its attention to industrialisation, which was accompanied by rapid urbanisation. As the development gap between urban and rural areas widened and the rural population rapidly decreased, many communities lost vitality and the settlement environment deteriorated in the 1980s.

Korea's evolving national development goals and policies are embodied in the Comprehensive National Territorial Plans (CNTP). The CNTP, formerly formulated every 10 years before being extended to a 20-year term since the fourth CNTP in 2000, presents the long-term vision and orientation of the government on territorial development.

The goals of the first CNTP (1972-1981) were the development of large-scale industrial bases, the intensification of transportation and the provision of water resources and energy in order to facilitate economic growth. The key strategy at this time was to foster the "growth pole", which geographically corresponded to the so-called Gyungbu corridor linking Seoul to Busan and Ulsan. The government used public resources and external borrowing to finance the work, focusing first on manufacturing and services in Seoul. It then went on to create the heavy industry base along the southeast coast by building such industrial cities as Ulsan, the construction of which began in 1969, and a number of other industrial estates in that region. During the 1960s and 1970s, to improve efficiency, the government's investment was concentrated on the high priority areas of Incheon, Seoul and Ulsan, so as to facilitate access to human resources, subsidiary material, product sales and infrastructure (Lee, 2015[4]).

The first CNTP placed little emphasis on regional balance or living conditions. During this period, population concentration in the capital region had already brought about acute problems in Seoul, leading to urban policies such as the designation of a greenbelt and the construction of a subway.

In contrast to the first CNTP, which focused exclusively on industrial development, the national goal for the period of the second CNTP (1982-1991) placed an explicit emphasis on balanced regional development, population decentralisation and the improvement of living standards (OECD, 2001[2]).

In the 1980s, various measures were adopted in line with the two policy directions: restraining the concentration in the capital region and expanding growth to regions nationwide. For the former, the Capital Region Readjustment Planning Act was introduced in 1982 to control the influx of people and industry into the Seoul metropolitan area by limiting the construction of new factories, universities and other large-scale projects, and by relocating public offices to other regions. In order to promote economic development in regions outside the capital, the government designated regional economic blocks and developed industrial complexes in small- and medium-sized cities and rural areas. In the 1980s and 1990s increased government budgets were invested in rural regions across the country to develop basic infrastructure such

as roads, communication facilities and water supplies/treatment and to improve educational, medical and welfare systems (OECD, 2001[2]; 2018[1]; Lee, 2015[4])

Despite the spatial development policy of the 1980s trying to balance regional development, concentration in the capital region continued into the 1990s. In response, the third CNTP (1992-2001) set four targets:

- regionally decentralised development
- efficient land use
- improvement of quality of life
- enhancing amenity and unification of North and South Korea.

The intention was to balance regional development by strengthening industrial centres along the west coast and the regional and provincial cities. In order to ensure support for less industrialised areas, the Law on Regional Balanced Development and Promotion of Local Small- and Medium-sized Firms was enacted, establishing eight area-wide development plans. The third CNTP was particularly concerned with the development of lagging regions and with the quality of life within them. The same law also introduced the Development Promotion Districts (DPD) (Kim and Lim, 2016[5]).

In the 1990s, national investment in agriculture and rural areas expanded greatly as the crisis in the farming sector increased following the conclusion of the Uruguay Round of negotiations at the World Trade Organisation. The implementation level of rural development was changed from the *gun* (county) to the *myeon* (community) level, and settlement development projects were carried out at the *myeon* level. As such, hardware infrastructure projects such as road and village maintenance increased significantly. For some *myeons* in remoter areas, where the settlement conditions were acutely poor, the Minister of Home Affairs carried out “remoter area development projects” in a similar approach.

In the last decade of the 20th century, Korea experienced drastic changes taking place in the global economy and internal socio-economic shifts. The Asian Financial Crisis in the late 1990s had a devastating impact on the national economy and while the country recovered quickly, the economy had entered into a new era of more moderate growth. Being a historically export-oriented economy dependent on medium-technology manufacturing, including electronics, shipping, automobile, petroleum and chemicals, Korea has been pursuing a shift in its growth model to become more innovative and focused on high-value-added products in response to the acceleration of globalisation after the Asian Financial Crisis (OECD, 2014[6]). This required territorial development policies that support regions to be more open and competitive.

At the same time, changes in the socio-economic conditions being experienced by Koreans have emerged and become more widely recognised in policy (MOLIT, 2012[7]). National population growth has been slowing down for decades and was expected to start to decrease in 2028, however the most recent data suggests that the peak-population moment may already have passed with the most recent statistics showing the Korean population declining since November 2019. Korea’s population is also ageing rapidly, at a rate higher than any other OECD country. Continued economic concentration in the Seoul-Busan corridor and the persistent regional disparity between metropolitan regions and non-metropolitan areas has emphasised the need for regional policy. The consolidation of the democratic system and decentralisation have also increased demand for well-being in lagging areas (OECD, 2012[8]).

In response to the dynamic shift in the socio-economic environment, the fourth CNTP formulated in 2000 (revised in 2009), was characterised by three distinctive differences from the former three CNTPs:

- Preservation of the territorial environment is given top priority; the plan calls for development in harmony with the environment leading to sustainable development.
- The plan was formulated through co-operation with the local governments and the civil society from the initial stage. The Research Commission for the CNTP was formed in 1998 and developed the

plan. The Territorial Forum for the 21st Century, organised by a private sector initiative, made recommendations and comments throughout the preparatory stage.

- The term of the plan is set for 20 years instead of the 10 years of each of the former 3 plans.

The fourth plan stated that the national goal was the "Realisation of Integrated Territory in the 21st Century", to be achieved through the integration of regions, integration of development with protection of the environment, integration of the two Koreas, and integration with Northeast Asia (MOLIT, 2012[7]). These four targets are given succinctly as "a balanced territory, green territory, open territory, and unified territory". Balanced territory stresses regional integration and balanced development through the efforts of each region to enhance its own local identity. Green territory clearly places emphasis on the integration of territorial development and environmental preservation, aiming at sustainable national development with an improved quality of life. Open territory means being open to the global community in order to facilitate integration with the rest of Northeast Asia and in order for Korea to take the role as a centre of Northeast Asia and as a leading country in the world economy. Unified territory implies the promotion of a peaceful unification and the establishment of a co-operative relationship between the South and the North. The plan proposed a 3-layer structure for stimulating regional development: 7 (5+2) mega-regional economic zones with priority industrial specialisations, complemented by supraeconomic regions (belts), and 161 basic residential zones. Many of the instruments to implement this plan were therefore industry-related (e.g. free economic zones, technoparks, research and development [R&D] Innovation Cities).

Continuing the direction of the fourth CNTP, the Roh Administration (2003-08) intensified efforts to address regional development by introducing balanced development as a national priority, establishing the legal foundations for the national policy on regional development and making the first governance improvements towards more decentralised policy approaches. The balanced growth approach was aimed at reducing disparities between regions and at favouring decentralisation from the capital region (OECD, 2012[8]).

The Roh Administration sought to decentralise government functions that had been highly concentrated in the capital region and relocate them to underdeveloped areas across the territory. This initiative involved carrying out several large-scale projects to build new cities. First, the Multifunctional Administrative City, otherwise known as Sejong City, is being constructed with the goal of becoming a self-supporting city of 500 000 inhabitants by 2030. Sejong is located approximately 130 km southeast of Seoul along the Chungcheongnam-do and Chungcheongbuk-do border, with its territory drawn from both these provinces. Today the city is home to many newly migrated central government ministries and institutions and its population already tops 300 000. This administrative capital is also expected to attract private business and diverse industries such as healthcare, welfare, culture and international co-operation, and advanced technology. Alongside the development of Sejong, in order to promote the balanced location of administrative functions, 10 Innovation Cities are also being developed nationwide, relocating 154 public agencies from the capital region to the provinces and metropolitan cities. Innovation Cities are being constructed not only to accommodate government organisations (as well as housing for their staff) but also private actors including enterprises and universities, in the hope of creating innovative clusters. In addition, pilot projects for Enterprise Cities were designated in August 2005 and 6 projects have been under implementation. While the pace of progress and scale of these projects was reduced due to the global financial crisis and real estate market recession, this policy aims to boost regional economies through promoting private investment in underdeveloped areas. Although the goals of the Roh Administration were to narrow the gap between regions by relocating public organisations from the capital region and developing growth centres in less developed areas, there have been criticisms that its mathematical allocation of functions increased the tension between regions (Kim and Lim, 2016[5]).

Along with the above flagship projects, the Roh Administration also established the legal foundation for regional policy to drive balanced national development. The Special Act on Balanced National Development in 2003 set out the legal framework for regional development. The act introduced three major improvements. First, it established a Presidential Committee on Balanced National Development, providing

policy advice and horizontal and vertical co-ordination. Second, it aims to strengthen the role of regional actors in regional development policy. Third, it promoted fiscal decentralisation through the increase in the amount of transfers from the special account to local governments (OECD, 2012[8]). This development strategy aimed to disperse socio-economic functions and infrastructure, which had been concentrated in the Seoul metropolitan region, into other provincial regions and supported various local development projects.

Moreover, the Korean government established the Comprehensive Measures for Agriculture and Rural Areas and enacted the Special Act on Improvement of Quality of Life of Farmers and Fishermen and Promotion of Development in Rural Areas in 2004. The objective was to overcome the worsening conditions in rural areas due to the expanded opening of the domestic agricultural market and the declining prices of agricultural products by improving the poor public services, such as welfare and education, and promoting integrated regional development. Therefore, the Korean government carried out the "policy to improve the quality of life" in rural areas linking various sectoral policies by government departments for welfare, health, education, regional development, etc.

Under the Lee administration (2008-12), regional development continued to be promoted but shifted its focus from "balance" to "development", emphasising the competitiveness of regions rather than the equality among them. The former five-year Balanced National Development Plan was renamed the Regional Development Plan and was aimed at securing global competitiveness and improving the living standards of regional economies. This plan was comprised of sectoral plans which were developed on the basis of the four major ministerial development strategies (increasing growth potential, creating a pleasant living environment, promoting openness and co-operation, and achieving regionally driven mutual development) and economic regional plans developed by the Economic Region Development Committee. Under the plan, 5+2 supra economic regions had been designated to enhance regional competitiveness through promoting regional strategic industries and to encourage horizontal co-operation beyond administrative borders. Despite some fruitful results, some scholars have argued that its regional policy focused too much on industries and lacked the immediate creation of local jobs and public participation.

Under the Park administration (2013-17), the emphasis shifted towards enhancing quality of life, with the vision of "Happiness to the people, hope for the regions". While the policies of the previous administration were largely maintained, the shift in policy emphasis reflected the changing environment in response to citizens' demands for regional policy, the empowerment of local governments and efforts to tackle fierce global competition. The existing territorial restructuring strategies were limited by their development costs, social consensus and their central government-led approach. New strategies were called for that would foster collaboration between regional and local governments, develop linkages beyond jurisdictions and be more inclusive of local communities. Thus, the central government's assistance to regions became better co-ordinated with "policy packages" directed at the target region (Kim and Lim, 2016[5]).

The newly begun fifth CNTP (targeting 2020-40, formulated in December 2019) proposes a vision "Our land, shared future: Towards balanced, smart and innovative cities and regions for all". The new plan puts the priority on people living on the national land, shifting the focus from the land itself. Along with the three major objectives to make the territory balanced, smart and innovative, the plan presents six implementation strategies:

- Facilitate regional development in a way that enhances local identity, based on solidarity and co-operation.
- Innovate regional industries and promote culture and tourism.
- Build safe and liveable places for all generations.
- Create quality and ecofriendly spaces.
- Ensure efficient infrastructure operation and smart territory.
- Bring peace to the national territory and connect the continent with the ocean.

For regional development, focal points include achieving compressed development through spatial rearrangement, strengthening competitiveness through inter-regional linkages, nurturing hubs for balanced development, like innovation cities, and seeking shared prosperity between the Seoul capital region and the rest of the nation. Key changes from the fourth to fifth CNTP are outlined in Table 3.2.

Table 3.2. Comparison of the fourth and fifth CNTP

	Revised fourth CNTP (2011-20)	Fifth CNTP (2020-40)
Vision	• Global green land for a new leap forward	• Our Land, Shared Future
Objectives	• Unified territory with competitiveness • Green territory with sustainability • Attractive territory with decency • Open territory toward the world	• Balanced territory that is liveable anywhere across the country • Smart territory that is safe and sustainable • Innovative territory that is healthy and active
Spatial goal	• Build hub cities based on 7 (5+2) megaregional economic zones with an open axis of national land development	• Build a flexible and smart territory through solidarity and collaboration
Six development strategies	• Strengthen local specialisation and megaregional co-operation to enhance the overall competitiveness of national land • Build ecofriendly and safe territory • Provide comfortable and culture-oriented cities and residential environments • Establish an integrated network of green transport and territorial information • Secure foundation for Ocean Korea open toward the world for new growth • Build a transborder territorial management basis	• Facilitate regional development in a way that enhances local identity and based on solidarity and co-operation • Innovate regional industries and promote culture and tourism • Build safe and liveable places for all generations • Create quality and ecofriendly space • Ensure efficient infrastructure operation and smart territory • Bring peace to national territory connecting the continent and the ocean
Direction of regional development	• Seek local specialisation and global competitiveness by building megaregional economic zones • Nurture strategic growth hubs based on local traits, centred around metropolitan cities and cities nearby rapid-transit railway (KTX) stations	• Seek compressed development through special rearrangement and strengthen competitiveness through inter-regional linkages and co-operation on various aspects (hardware and software) • Nurture hubs for balanced development, like innovation cities, and seek shared prosperity between the Seoul capital region and the rest of the nation
Implementation	• Set up an efficient regional development system to prevent the overlapping of regional development projects • Diversify financing methods	• Monitoring and evaluation • Integrating the management of territory with the protection of the environment

Source: Information provided by MOLIT.

Current rural development policy approaches in Korea

The development in rural regions is driven in large measure by two inter-ministerial oversight committees, the Presidential Committee for Balanced National Development and the Prime Minister's Committee for Quality of Life. Together these two committees oversee myriad initiatives in support of economic development and to support the well-being of rural people, with the committee on Balanced National Development driving much of the economic agenda in these regions while the quality of life committee concentrates on service delivery and well-being in fishing and farming communities.

Rural policies for economic development

Economic development activities in rural regions fall within the mandate of several ministries, most specifically MAFRA in rural areas and MOLIT more broadly at the regional level, with oversight and co-ordination provided by the Presidential Committee on Balanced National Development (PCBND). The success of the country's development strategy in the latter half of the 20th century in building an advanced industrial economy has increased concentration in cities and particularly in and around Seoul, while rural communities have seen their populations age and fall. Consequently, the government has grown increasingly concerned about the inclusion of rural communities in the overall balanced development agenda. In an effort to revitalise rural places and reduce perceived disparities, rural development policy focuses on two dimensions: economic development of rural regions and the well-being of rural communities. This section introduces the main policy instruments to support local growth opportunities and boost competitiveness in rural regions.

In order to curb the excess concentration of people in the capital region, the policy measures to relocate public and private functions to less developed regions to build growth hubs have been traditionally adopted. First built in Ulsan in 1960s, industrial complexes, totalling 1 074 across the country, have significantly contributed to Korea's industrialisation and economic growth to date. The investment in building industrial complexes was followed by heavy investment in infrastructure, particularly in transport such as expressway networks and rapid-transit railway (KTX). While the central government support had been focused on large-scale complexes usually located in cities since the 1980s, agricultural and industrial complexes have also received government support as ways of revitalising small- and medium-sized cities and regions. Target industries have shifted as well over time, from export-oriented industries in 1960s-70s to R&D and innovation activities and investments were made to transform industrial complexes into knowledge-based centres (OECD, 2012[8]).

Along with the policies to expand industrial growth engines to less developed region, under the direction provided by the CNTP, the government is developing three types of new city across the country to relocate administrative functions and economic activities from Seoul to the provinces. Many government ministries and public organisations have been collectively relocated to the Multifunctional Administrative City of Sejong and other public organisations, including research institutions, have transferred to ten newly constructed Innovation Cities to play leading roles in forming regional innovation systems. Enterprise cities aim to revitalise regional economies through encouraging private investment, providing incentives on land use and tax (Lee, 2015[4]).

During the same time in the 2000s, regional innovation had increasingly called for attention and policies to foster innovation and competitiveness in regions. Technoparks, Technology and Innovation Centres (TICs) and Regional Research Centres (RRCs) were the major policy tools for strengthening regional innovation systems in Korea. In addition to supporting strategic industries, a specific programme for lagging areas was implemented. The Revitalisation Business programme targeted agriculture-dependent areas and supported processing and distribution linkages to support the development of areas specialised in agricultural activities. The programme offered entrepreneurship training, support for collaboration between agents of the innovation system and rural-urban interaction to mitigate rural-urban migration (OECD, 2012[8]).

An example of a bottom-up approach in regional development policy can be found in Demand-Driven, Customised Assistance (DDCA) introduced in 2015. In contrast to its predecessing subsidy-based policy for underdeveloped areas, which had focused on large-scale infrastructure investment, the DDCA integrates hardware such as infrastructure and software such as cultural content, aiming at both enhancing quality of life and promoting economic growth. Each regional government formulates project proposals, based on the consultation with the local people, experts and interest groups so that the plan is tailored to satisfy the local demands, and MOLIT is in charge of selecting plans eligible for government supports.

Disparities between urban and rural areas are a major policy concern for sustainable development in rural areas, where agriculture remains an important economic base. Structural changes in the agricultural sector and diversification of income sources to off-farm employment have been the main pathways to addressing low-income issues in rural areas. However, despite government efforts to develop rural infrastructure and provide incentives to attract non-farm business activity to rural areas, young and skilled workers still tend to leave such areas.

Future demographic change and a slowdown of economic growth will have a significant influence on Korean agriculture from both supply and demand sides. Currently, 59% of farmers are over 65 years old but the average age of farmers is expected to increase further. The domestic food market is unlikely to expand due to the declining and ageing population. Per capita consumption of rice nearly halved in just 25 years and is likely to decline further.

Given the challenges that the rural areas face, the agricultural policy requires focus on two directions: i) raising the productivity and competitiveness of agriculture; and ii) promoting off-farm economic opportunities (OECD, 2018[1]).

MAFRA is promoting the Smart Agriculture Project to integrate information and communication technology (ICT) within agriculture and rural areas. This project established more than 45 cases of model development and field demonstration. The area of greenhouse vegetable production using ICT expanded from 40 077 to 52 526 ha between 1995 and 2015. The project also introduced an automatic feeding system for pig farms. To promote effective integration of ICT with the agri-food industry, the Korean government is developing farming systems where artificial intelligence (AI)-based systems automatically control farm operation; it is also enhancing the use of drone technology and geographic information systems (GIS).

Despite declining domestic demand, Korea's relatively small food manufacturing industry is growing rapidly. Its share in the overall manufacturing sector is much smaller than in other OECD countries and, dominated by small-scale firms, its labour productivity lags that of its competitors. Promoting the industry will be a particularly important policy area if the opportunities to produce value-added food products are to be exploited. The industry also has the potential to create employment in rural areas.

As a part of an income diversification strategy, the so-called "6th industrialisation policy" has been implemented to promote the production of high-value-added agricultural products through the expansion of farm operations to processing, marketing and tourism. Since 2014, the government has installed 6th industrialisation support centres in 10 regions to investigate the development of 6th industrialisation activities and undertake business support projects. The government also established the 1st Basic Plan for the Development of the 6th Industrialisation (2016-20) and introduced the certification system of 6th industrialisation for business operators with a potential to lead the process and to foster outstanding enterprises. In 2016, 1 130 business operators receive the certificate. The basic plan has a target to maintain the sales growth rate of certified business operators at 5% by 2020, to increase the number of 6th industrialisation start-ups from 1 600 in 2016 to 3 000 in 2020, and to increase the number of rural tourism visitors from 6 to 8 million during the same period.

Diversification of rural economic opportunities may further extend to the industries that do not directly relate to agriculture. The Act on Promoting the Development of Income Sources for Agricultural and Fishing Villages in 1983 has promoted the construction of industrial complexes, which provide jobs in both manufacturing industries and agricultural product processing.

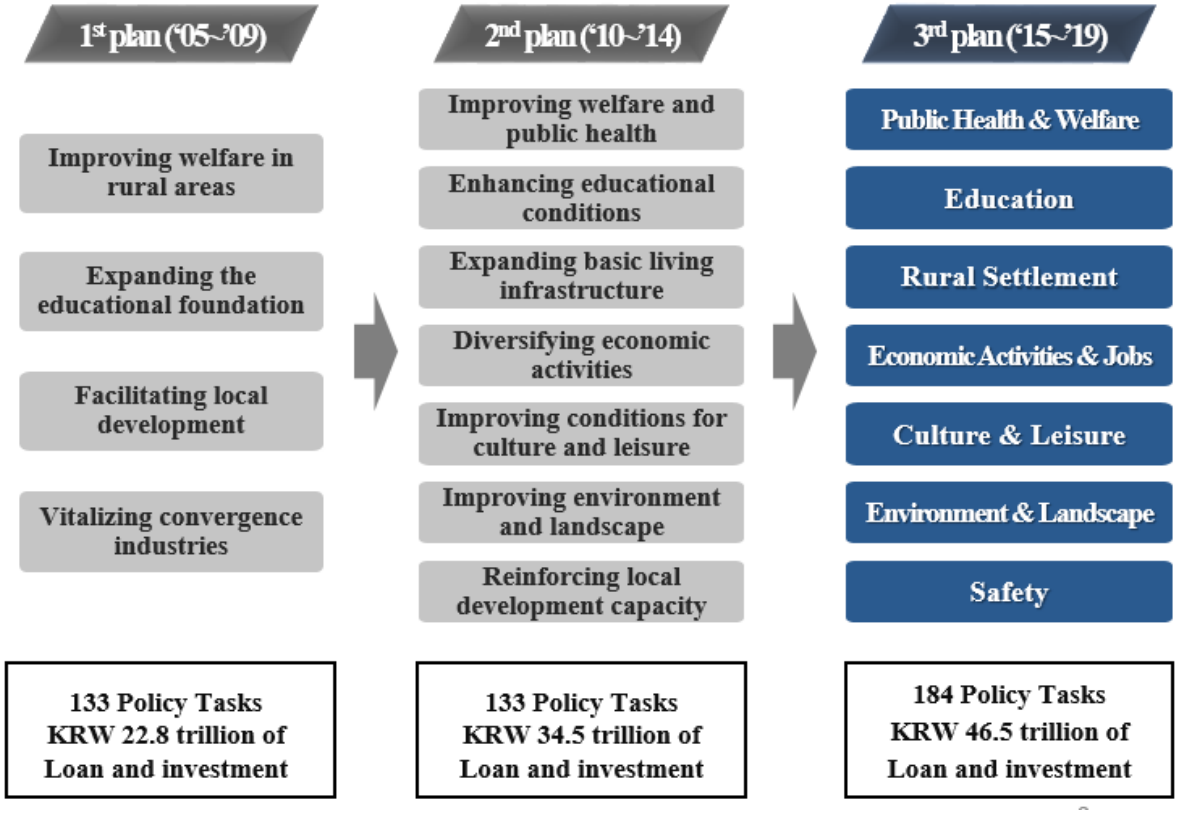
In order to allow the policies aiming at raising agricultural productivity and diversifying rural industries to achieve rural sustainable development, better alignment with broader policy areas including education/skills policy is essential. The development of the educational environment is an important element to enhance the quality of life in rural areas. However, if they fail to provide decent job opportunities, rural regions would not be able to attract and retain the young generation and skilled workers, who would then leave for urban areas.

In response to the educational environment gap between rural and urban areas, the Ministry of Education is implementing two major projects to improve quality of life for farmers and fishers. The project supports selected middle schools in rural areas to form education hubs and attracts students from urban areas. The financial support allowed the selected middle schools to improve educational facilities and deliver various educational programmes (such as the School Creative Career Education Program, sports clubs, orchestra, foreign language programmes). The second project involves ICT facility construction and the distribution of educational content at primary, middle and high schools. Agricultural high schools and the Korea National College of Agriculture and Fisheries have been playing key roles in providing vocational education in the sector. The government has increased fiscal supports to these education organisations to allow them to deliver the practical competency-oriented curriculum (OECD, 2018[1]).

Rural policies for enhancing well-being in Korea

Complementing the economic development efforts spearheaded by the PCBND, the Prime Minister's Committee on Quality of Life brings specific focus to the well-being of rural dwellers in farming and fishing communities. This committee oversees the execution of the Basic Plan for Improving the Quality of Lives of Farmers and Fishermen, a five-year plan to improve the quality of life in rural areas. The policies have been evolving over the last past 15 years (Figure 3.1) as the government continued to identify and expand measures to improve the quality of life in rural villages, the budget increased from KRW 22.8 trillion for 133 programmes in the first planning period to KRW 51.9 trillion for 185 programmes in the third. The scope of the policy has been expanding from basic services to cover more various sectors such as culture and leisure, environment and landscape, and safety of rural residents (Table 3.3).

Figure 3.1. Korea's 5-year Basic Plan for Improving the Quality of Life of Farmers and Fisherman



Source: (OECD, 2020[9]), OECD Questionnaire to Korean Government.

In 2010, the government introduced rural services standards. According to a survey conducted by the Korea Center for Disease Control and Prevention in 2010, the prevalence of the 10 diseases in urban areas was 65%, while the prevalence rate of residents in the non-urban areas was 74% of the total population. As this notable disparity in well-being of the residents between urban and rural areas would be derived from the lack of good access to medical services, securing access to basic public services across the territory should be the priority in enhancing the quality of life in rural regions.

Korean rural policy has increasingly extended its focus from development to well-being of the rural communities. In 2010, the Special Act on Improving the Quality of Life in Rural Areas and Rural Development Promotion was amended to establish the National Standards for Rural Area Services to guarantee a high quality of life for rural residents and narrow the gap between cities and rural areas. The standards cover a wide range of basic public services and set the targets to be achieved by 2019, selected by the central government, while the local government may add items according to the local conditions and needs.

The government has suggested 17 items in 7 sectors, including health/welfare, education, living conditions, economic activities/jobs, culture/leisure, environment/landscape, and safety.

The government has been upgrading the policy implementation system to strengthen the linkages and co-ordination between ministries, ensuring the participation of research institutes and academics, and providing support for field activities by local communities and organisations.

Table 3.3. The 3rd Basic Plan to Improve Quality of Life, 2015-19

Vision	Building happy and vibrant rural communities	
Goals	Health and welfare	Enhance health and welfare services and make the service more accessible in rural communities
	Education	Expand educational infrastructure and improve the quality of education in rural areas
	Settlement area	Build community-driven, liveable and convenient settlement areas
	Economic activities and jobs	Create value-added and jobs by combining agricultural and fishing resources
	Culture and leisure	Create conditions for various cultural and leisure activities
	Environment and landscape	Preserve a clean environment and beautiful landscape without damaging rurality
	Safety	Build community roads that are safe from natural disasters, crimes and accidents
Driving force	Central	Conduct coherent and integrated policies among government departments
	Regional and local	Improve the effectiveness of regional quality of life policies
	On site	Enhance participation and capacity in local communities

While offering guidelines rather than legal requirements, the standards have been doing well in engaging local communities with the service provision agenda, through its monitoring and incentive mechanism. The Korea Rural Economic Research Institute is in charge of inspecting and evaluating the implementation, in co-operation with local governments and provincial research institutes which review regional selected indicators. The 2016 assessment of policy achievement shows overall improvement from the previous year but most areas still fell short of the standards, except for emergency services and the broadband network coverage. Financial incentives were given to the regions doing well and policy support to the regions struggling to achieve the goals.

In addition to securing basic services to be provided in each locality through the service standards, the use of networks among rural villages is emerging as an effective and efficient policy to build sustainable living environment in rural communities. The rural hubs revitalisation project has been promoted since 2015 by MAFRA, reorganising predecessor projects focusing on infrastructure and property development. In response to the increase in depopulated villages, the new project aims to improve residents' livelihoods by

linking with towns which can function as rural hubs and providing neighbouring villages with various services including educational, medical, cultural, welfare and business. Public supports are focused on improving basic living infrastructure in general village districts and, in contrast, larger investment is made in leading districts so that they can function as a region's business and service hub. Until 2016, 33 leading districts have completed basic planning and they are in the implementation stage.

Table 3.4. Monitoring implementation of national standards for rural service delivery

Sector	Policy Target by 2019	Target (2019)	2015 (%)	2016 (%)	Changes ('15→ '16)
Health and welfare					
Medical service	City and county ratio to receive medical care for important subjects (such as internal medicine, oriental medicine, orthopaedics, obstetrics and gynaecology) should be 80% or more.	80	76.8	73.9	↘
Emergency service	In case of an emergency, the rate of ambulances arriving within 30 minutes and receiving first aid service should be 97% or more. In the case of the island area, a system of patient transport using helicopters and ships should be established.	97	98.4	98.6	↗
Elderly service	The rate that elderly people can receive welfare services at home more than once a week should be 80% or more.	80	71.8	70.1	↘
Young children	The rate for the use of day care facilities for infants and toddlers within *eup* and *myeon* districts should be 80% or more.	80	69.7	69.2	↘
Education					
Elementary/middle school	Foster rural schools for local conditions and provide appropriate transportation to students who need transportation assistance.	100	71.1	71.8	↗
Lifelong education	The rate for receiving lifelong education programmes in service centre facilities within *eup* and *myeon* districts should be 40% or more.	40	21.8	19.7	↘
Settlement conditions					
Housing	The percentage of households living in homes that meet minimum housing standards should be 95% or more.	95	88.3	88.3	-
Water supply	The water supply ratio in *myeon* districts should be 82% or more.	82	67.8	69.3	↗
Heating system	The city gas supply rate in e*up* districts should be 65% or more. The government should promote a reduction in heating costs in regions where it is difficult to supply city gas.	70	53.1	57.0	↗
Public transport	Use transport more than three times a day within the village. Quasi-transportation programmes should be introduced to regions where it is difficult to operate a transportation system. In the case of island areas, more than one round-trip passenger ship should be operated per day.	100	90.4	90.4	-
Broadband	The broadband convergence network construction rate should be 90% or more.	90	85.8	92.8	↗
Economic activity/job					
Start-up and employment consulting/education	A professional consulting and education service about start-ups and employment should be available within cities and counties.	100	67.3	67.4	↗
Culture/leisure					
Cultural facilities and programmes	The possibility of seeing a culture programme more than once a month and professional performance programme more than once a quarter in cultural facilities such as Culture and Arts Centres within cities and counties.	100	91.3	92.0	↗

Sector	Policy Target by 2019	Target (2019)	2015 (%)	2016 (%)	Changes ('15→ '16)
Environment/landscape					
Sewerage	The diffusion rate of sewerage should be 85% or more.	85	80.8	81.0	↗
Safety					
Crime prevention equipment	Closed-circuit television (CCTV) installation rate should be 85% or more to prevent prevention of crime.	60	35.8	43.2	↗
Police patrol	Patrols in villages vulnerable to crime should be conducted more than once a day for each village.	100	-	-	-
Fire call	The rate that a fire truck arrives at the scene within 5 minutes after receiving a report should be at least 55%.	55	41.1	41.1	-

Note: In Korea, *dong* districts are termed urban areas while *eup* and *myeon* districts are classified as rural areas. 2016 indicates the year of publication using the most recent data available.
Source: MAFRA (2017[10]), "Inspection and evaluation result of quality of life implementation plan for farmers and fishermen in 2016 and announcement of an implementation plan for 2017", Press release.

A regional co-operative approach to enhance quality of life has been increasingly mainstreamed in the Korean regional policy and adopted at a larger spatial scale. Under the former Park administration, a new spatial concept, Happy Living Zones, was introduced in 2013 as a basis for regional development policy. It aims to enhance peoples' happiness and quality of life by encouraging co-operation among local governments beyond jurisdiction.

Three types of zones were formed according to the shared characteristics and conditions of local municipalities, such as geography, local industries and historical background. These include:

- Rural zones – with a population of approximately 100 000 inhabitants.
- Rural-urban zones – with small- and medium-sized cities of approximately 100 000 to 500 000 inhabitants.
- Metropolitan zones – with a population of more than 500 000 inhabitants.

The zonal development plan is designed and implemented by the association of local governments in the zone. It covers various inter-local co-operation projects such as economic revitalisation, education, culture, welfare and basic infrastructure, which then are fed into the provincial and national five-year regional development plans. To support the formation of the zones and implementation, the central government had provided a broad range of support schemes such as co-ordinating local governments with funding through a special account for regional development, consulting and technical assistance, and deregulation. Despite its success, the Happy Living Zones policy has been criticised for its excessive focus on local welfare and service provision and absence of regional growth strategies.

Main features of Korea's multilevel governance framework

While large-scale initiatives such as the development of Sejong and Innovation Cities are driving balanced national development by physically relocating the offices and staff of ministries and institutions from Seoul to locations throughout the country, these initiatives constitute only one part of the government's broader decentralisation agenda. A second form of decentralisation is currently underway, one whose long-term impact on Korean society may be even more profound – the devolution of the central government's authority to the regional and local governments. This large-scale devolution that involves an expansive array of policy domains, will have a significant impact on regional and rural development going forward. In introducing this new era of multilevel governance (MLG) in Korea, it is important to first understand Korea's existing MLG framework, the relationship between levels of government and the competencies and responsibilities that exist at each level.

South Korea is a unitary republic led by a president elected by a national popular vote for a single five-year term. The president is both head of state and head of government. The prime minister is appointed by the president with the consent of the National Assembly and is responsible for assisting the president and directing the executive ministries. The country has a unicameral parliament, the National Assembly (Kuk Hoe), elected for a four-year term. Most of the assembly's seats are filled by election from geographical constituencies, with the remainder are distributed proportionally among the various parties.

Local autonomy has been established in Korea's constitution since it was first written in 1948, although the level of autonomy has been increased since 1995. Local magistrates and assemblies are elected in every province, metropolitan or special city, county and autonomous district. City or county governments appoint officials at lower levels (e.g. *eup* – towns and *dong* – neighbourhoods) (OECD-UCLG, 2019[11]).

All subnational governments have the same structure made up of an executive body (governor for a province, mayor for a metropolitan city, municipal city, county and autonomous district government) and a local council as a legislative body. Governors and mayors are elected by direct popular vote for a four-year term. As far as council members are concerned, 17%-18% are elected by popular vote and the remaining seats are occupied by proportional representatives.

Korea has a two-tier local government system – regional and municipal – though these are not hierarchical (municipal governments are not subordinate to regional governments). A diverse and complex structure exists within each level (OECD-UCLG, 2019[11]).

- **Regional level** – There are eight provinces (*do)*, one special self-governing province (the island of *Jeju*), six metropolitan cities (*gwangyeoksi*), one special city (Seoul Metropolitan City) and, since 2012, Sejong Special Self-Governing City. Sejong is a key project of the balanced national development policy, founded as a new administrative capital, it will serve as the new home for most of the administrative functions of the central government, bringing major new development and hundreds of thousands of people out of Seoul to a site in central Korea. Metropolitan cities combine the functions of regional and local government.
- **Municipalities** – The lower level of local government includes cities (*si*), counties (*gun* – mostly rural areas) and autonomous districts *(gu)*, which reflects the "municipal annexation" process that took place in 1995. The municipal level is further divided into 3 500 sub-municipal localities: 224 *eup* (towns, or other urban division of counties), 1 189 *myeon* (rural divisions of counties), and 2 087 *dong* (neighbourhoods within cities and districts) in accordance with the 2018 Statistical Yearbook published by the Ministry of the Interior and Safety regarding Administrative Districts of Local Governments. There are very large differences in the sizes of area and population of subnational governments even among similar types of local governments. While the average size of municipalities is the highest among OECD countries, the size of sub-municipal entities ranges from 10 000 to 50 000 inhabitants.

The local government sector also comprises 17 educational local authorities (ELA) at the regional level and 188 lower levels of ELA, which are independent elected entities according to the Local Education Autonomy Act. Local governments may establish intergovernmental corporate authorities but this form of co-operation is rarely used.

Local government associations that represent the interests of local governments to the central government include the National Association of Governors, the National Association of Mayors, the Association of Metropolitan and Provincial Council Chairs.

Subnational government responsibilities

The functions of subnational governments (SNGs) in Korea are not clearly defined by law. According to Article 117 of the constitution, local governments have to focus on "matters pertaining to the well-being of local residents, manage properties and may establish their own rules and regulations regarding local

autonomy as delegated by national laws and decrees". The Local Autonomy Act (Article 9) distinguishes SNG functions between those delegated by the central government and those which are local by nature. It identifies six categories of SNG functions:

- Category I: 11 functions related to the territorial jurisdiction, the organisational and managerial aspects of local governments.
- Category II: 10 functions aimed at improving the general welfare of local residents.
- Category III: 14 functions to foster growth in the agricultural, trade and industrial sectors.
- Category IV: 15 functions related to regional development and environmental protection (construction and management of environmental facilities).
- Category V: 5 functions to promote education (however, this falls under the responsibility of independent educational offices), sports activities, culture and art.
- Category VI: 2 functions concerning civil defence and safety (firefighting).

Nevertheless, a conditional clause to Article 9 stipulates that the "central government may exercise its own power and control over any function if other laws define them as the functions of the central government". Both SNG levels have the same functions but at different scales but regions are also responsible for vertical co-ordination between the national government and lower level of government. Independent national agencies manage many other areas, including fire protection and education. As a result, there is a large degree of overlap in the division of responsibilities across levels of government.

Overall, local governments have limited policymaking authority and are usually limited to the implementation of national policies; the act stipulates that the central government can use its own power and control over any function. Recently, local authorities have been pressing for more authority at the local level. Within the framework of the 2017-18 decentralisation programme, new functions could be transferred from the central government to subnational authorities. For example, in November 2018, the Presidential Committee on Autonomy and Decentralisation announced that around one-third of the country's police force is set to be transferred from the central government to regional governments over the next four years. Table 3.5 broadly outlines the main areas of responsibility that are within the mandate of the regional and local governments in Korea. The details of decentralisation will be discussed below.

Table 3.5. Main responsibility sectors and sub-sectors of subnational governments

	Regional level	Municipal level
General public services	Management of public properties and facilities	Management of public properties and facilities
Public order and safety	Policing	Firefighting and rescue services
Economic affairs and transport	Economic affairs; public transport	Economic affairs; public transport
Environmental protection	Environmental protection	Environmental protection, including refuse collection and recycling
Housing and community amenities	Housing	Land use; planning and development control; local housing plans
Health	Healthcare	
Recreation, culture and religion	Culture	Leisure services; sport; libraries
Education	Education	Education
Social protection	Social welfare	Welfare services and social care

Source: SNG-WOFI (2019[12]), *Asia-Pacific – Korea*, http://www.sng-wofi.org/country-profiles/KOREA.pdf; (OECD, 2020[9]), "Questionnaire", Unpublished, OECD, Paris.

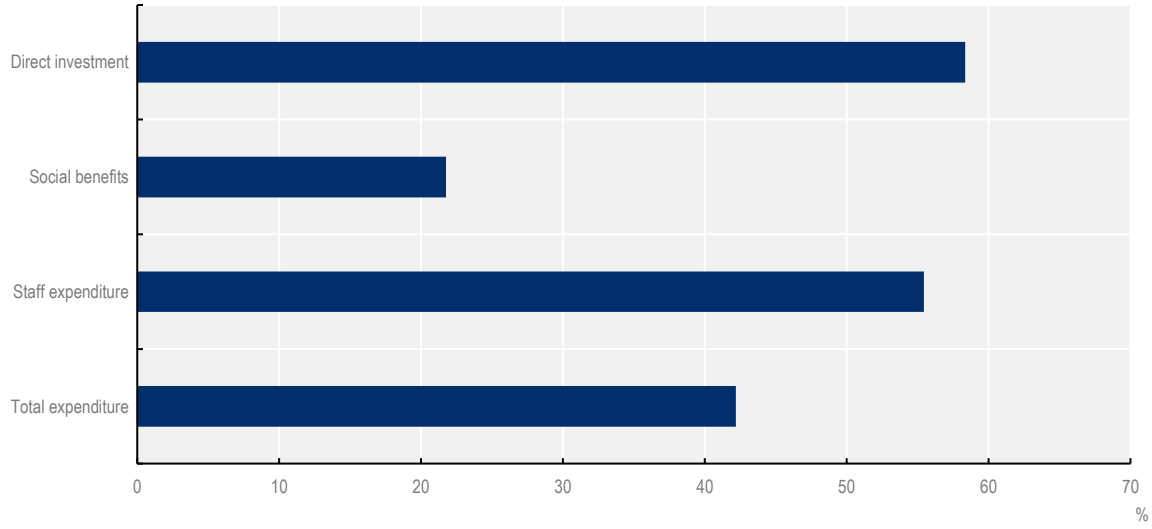
Subnational government financing

Despite fiscal reforms that accompanied the transfer of powers and spending responsibilities to local governments, the lack of fiscal independence at the local level significantly undermines the efficacy of political and administrative decentralisation in Korea.

On the expenditures side:

- SNG spending has increased by 4.1 percentage points from 1995 to 2016 but has decreased as a share of total public spending (-1.7 percentage point), resulting in a mixed picture of transfers of spending responsibilities.
- In 2016, SNG expenditure accounted for 13.8% of gross domestic product (GDP), below the OECD average (16.2%), but for 42.2% of public expenditure, above the OECD average (40.4%).
- SNGs account for more than half of public staff spending (vs. 62.9% in OECD on average but 15 points above the OECD unitary country average) which results partly from the payment of teacher salaries (educational offices).
- The high level of expenditure also reflects the importance of social benefits that are disbursed by SNGs. Subnational social spending represents a significant share of total public social spending, higher than in the OECD on average (16.7%), especially compared to the average of OECD unitary countries (21.8% vs. 10.5% in 2016).
- Korea is among the few OECD countries to use subnational expenditure limits; however, the country has become more inclined to rely on limits since fiscal consolidation started in 2010. This trend has slowed growth in current expenditure.

Figure 3.2. Subnational government expenditure by economic classification



Source: SNG-WOFI (2019[12]), *Asia-Pacific – Korea*, http://www.sng-wofi.org/country-profiles/KOREA.pdf.

StatLink https://doi.org/10.1787/888934223042

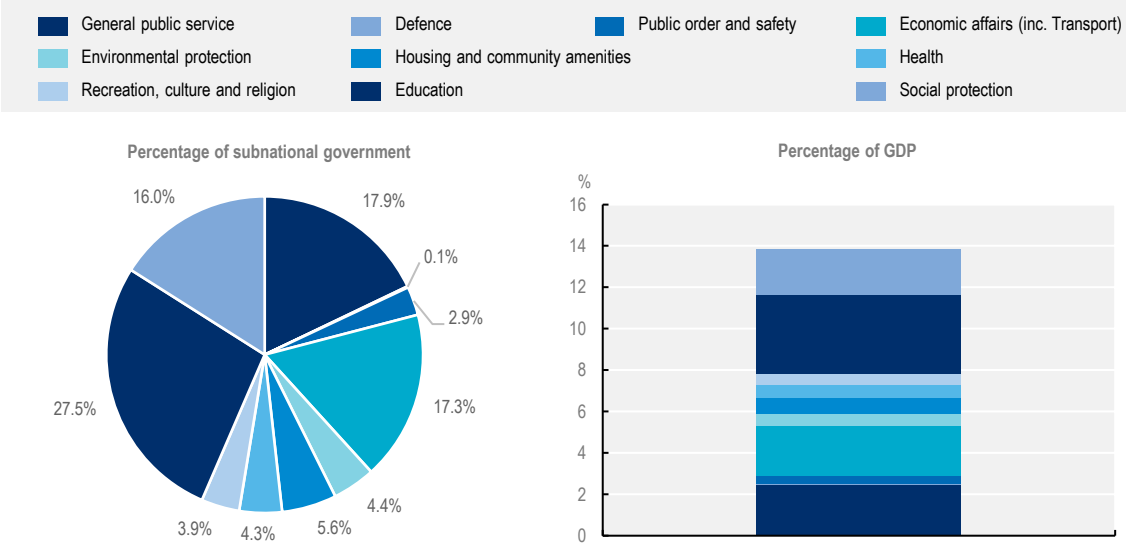
In terms of direct investment, Korea had the highest share of general government spending in 2016 devoted to investment among all OECD countries (16% vs. 8% in the OECD). However, the 2017-21 Fiscal Management Plan shifted spending priorities from economic development activities to social welfare in order to better adapt to the country's ageing population. As a result, infrastructure investment is expected to decline from 5.5% of total spending to 3.2%, while R&D outlays are expected to decline from 4.9% to

4.0% over the period 2017-21. SNG investment has also been particularly high as a share of GDP (3% vs. 1.7% in the OECD), while the share of SNG activities in overall public investment was slightly higher than the OECD average (58% vs. 57% in 2016), reflecting an active role of subnational governments in public investment. The 2013 Special Act on Urban Regeneration provided a framework that encompassed national guidance, a strategic plan and an urban regeneration plan. These plans have called for more collaboration between local and national governments. The incoming administration in 2017 strengthened the act through a 5-year Urban Regeneration New Deal that will designate 100 projects to be supported by an investment of KRW 1 trillion.

Subnational government expenditure by functional classification

Education, delivered via the ELAs, is the largest category of SNG spending, representing 27.5% of total SNG expenditure, followed by general public services (17.9%) economic affairs and transport (17.3%) and social protection (16%). SNGs are particularly active, as a percentage of total public spending, in the areas of housing and community amenities, culture and recreation and environmental protection.

Figure 3.3. Subnational government expenditure in Korea by functional classification



Source: SNG-WOFI (2019[12]), *Asia-Pacific – Korea*, http://www.sng-wofi.org/country-profiles/KOREA.pdf.

StatLink https://doi.org/10.1787/888934223061

However, the share of SNG spending in total public spending has been – on balance – decreasing significantly in all categories since 2013 (a decrease of 17 percentage points in the housing and community amenities categories, 22 percentage points in environmental protection and 26 percentage points in education).

As noted, the 2017-21 Fiscal Management Plan marks a shift in spending priorities from economic activities to social welfare. Social welfare spending has accounted for an increasing share of local expenditure, especially since 2006 when several social welfare services were transferred to subnational governments (pensions for the elderly and for disabled people in 2010, child care allowance, family and healthcare services, national basic living security). Social and health expenditure is on the rise because of Korea's ageing population.

In terms of subnational government revenue, the 1988 Local Finance Act, which determines SNG financing, has been amended several times in 2005, 2009 and 2011, in order to increase fiscal decentralisation and reform the tax and grants systems. In 2016, SNGs still depended heavily on central government transfers whose share in total SNG revenue is well above the OECD average. In 2017, the Ministry of the Interior and Safety (MOIS) announced, as part of the 2017-18 decentralisation programme, that it would increase the ratio of local tax vs. national taxes to 40%-60% in the long term. Expanding the share of local taxes could however raise new challenges in terms of tax disparities. The current structure of the Korean local tax system favours urban areas. Expanding local taxes would exacerbate this situation, further increasing the revenue capacity of the urban areas, at the expense of rural areas, yet it is rural areas that face the greatest challenges in terms of population decline and ageing. This would likely necessitate a review of the country's equalisation mechanisms.

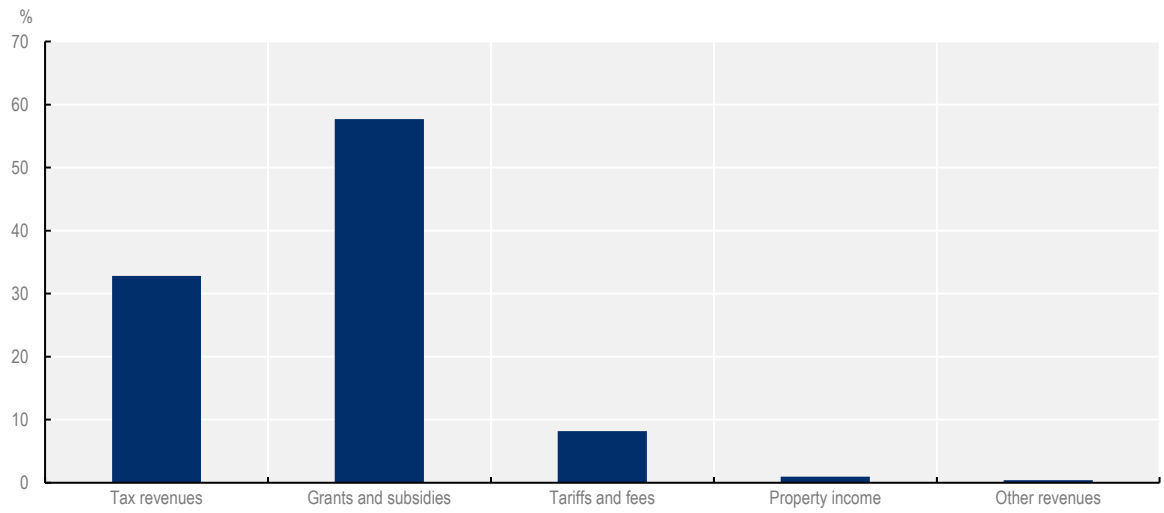
The tax system was reformed in 2011, in order to simplify the tax mix. The number of taxes allocated to SNGs declined from 16 to 11. Indeed, nine of these taxes are ordinary taxes and two are earmarked. Most tax rates are determined by the central government. Provincial taxes comprise ordinary taxes (acquisition tax, registration and license, leisure, and local consumption taxes) and earmarked taxes (community resource and facility and local education taxes). City and county taxes comprise ordinary taxes including inhabitant, property, automobile, local income and tobacco consumption taxes. Metropolitan cities can levy both provincial and municipal own taxes. On 19 December 2017, Korea enacted the 2018 tax reform bill on redistribution and sustainable growth that will amend the acquisition tax exemption clauses and reform environmental tax, among others. In terms of grants and subsidies, transfers from the central government to local authorities mostly include transfers from revenue sharing between levels of government, categorical grants and fiscal equalisation payments.

Revenue sharing is divided between Regular Revenue Sharing (RRS) and Revenue Sharing for Decentralisation (RSD). The RRS consists of 18.3% of national tax revenue. 96% of receipts are non-earmarked to SNGs according to an equalising formula based on an assessment of standard fiscal needs and revenues. The remaining 4% is earmarked.

The RSD system, financed through a decentralisation tax, was introduced in 2006 in order to finance the decentralisation of administrative functions. Categorical grants are very diverse and are aimed at helping local governments to:

- Provide services that would otherwise be too financial onerous.
- Finance delegated tasks and policy projects.
- Provide financial assistance and compensation, among others.

Figure 3.4. Subnational government revenue by category



Source: SNG-WOFI (2019[12]), *Asia-Pacific – Korea*, http://www.sng-wofi.org/country-profiles/KOREA.pdf.

StatLink https://doi.org/10.1787/888934223080

The current Local Finance Equalisation Scheme comprises the transfer of resources between the central and local governments (local subsidy, local education subsidy and subsidy from the national treasury) but also transfers between metropolitan cities and low-level local governments to alleviate internal fiscal disparities. Metropolitan cities give away a certain percentage of the ordinary taxes they collect to low-level local governments based on formulas and special spending needs. Apart from metropolitan cities, provinces also award unconditional grants to lower levels of local government, which are distributed based on population, tax amount collected in a jurisdiction and the fiscal capacity of local governments.

Finally, other revenues include mainly user charges and fees (8% of revenue). Revenue from property (sales of assets, leasing, dividends, etc.) accounts for less than 1% of SNG revenue.

Subnational fiscal rules and debt

According to the Local Autonomy Act, SNGs must maintain a balanced budget. Performance-based budgeting was also introduced for local governments in 2016. A Local Fiscal Crisis Alert System was introduced in 2012 to prevent local governments from being in fiscal insolvency or moratorium, which monitors seven local fiscal statuses which may be connected directly to the fiscal crisis.

In terms of debt, SNGs are free to borrow to fund investment projects (“Golden Rule”). SNGs mostly borrow from the central government’s public loan funds, and recently from “regional development funds”, operated by the upper level of local governments. Since 2006, they have been able to issue bonds without prior approval from the central government if their debt levels are less than the maximum debt ratios set by the authorities (Local Bound Ceiling System). If not, the approval of the Minister of Government Administration and Home Affairs is required. SNG debt in Korea is low, well below the OECD average for unitary countries (8.2% of GDP and 12.0% of public debt). In 2016, half of the outstanding debt was made up of “other accounts payable”, i.e. commercial debt and arrears, while the other half consisted of financial debt. The share of local bonds in SNG debt has been increasing markedly in recent years, climbing to 29% of SNG debt in 2016 (compared to 9% in 2013). Domestic bonds include public bonds, also known as flotation bonds, compulsory bonds and compensation bonds.

Current approaches to decentralisation in Korea

In Korea, decentralisation has two distinct meanings. First of all, there is the decentralisation already discussed that has involved the physical relocation of the central government's offices and staff out of Seoul, through projects like Sejong and the Innovation Cities. Activities in this area are intended to help deconcentrate the population in the Seoul area as well as to help deconcentrate Korea's economic prosperity, thereby ensuring that the country's development occurs in a distributed, balanced way throughout the territory. The government's activities in this area are overseen by the PCBND. The second form of decentralisation is what is sometimes referred to as devolution in other countries, whereby the authorities, responsibilities and fiscal capacity of the central government are transferred to subnational governments, increasing the scope of autonomy of the country's regions. Activities in this area are intended to empower the regions to pursue their own development paths and to govern themselves in a way befitting local values and priorities. By empowering the regions in this way, the expectation is that the activities in this area are overseen by the Presidential Committee on Autonomy and Decentralisation. It is this second form of decentralisation that is discussed in this section.

The decentralisation process in Korea is relatively recent, having started in 1987 with the Declaration for Democratisation. It gained momentum in 1988 with the Local Autonomy Act and the Local Finance Act. Subnational elections for executives and legislative were introduced in 1991 and 1995, when substantial fiscal resources started being transferred to subnational governments. In 1999, a large reform of the public sector was launched including a comprehensive decentralisation programme, under the Act on the Promotion of Devolution of Centralised Administrative Powers to Local Governments. In 2004, the Special Act on Decentralisation, enacted under the impulsion of the Presidential Committee on Government Innovation and Decentralisation, clarified principles and methods for decentralisation, transferred new functions to local governments and abolished special administrative agencies. It was followed by a fiscal reform in 2005 which established the Special Account Balanced National Development.

During the following years, decentralisation was pushed further via the reinforced legal framework. The Special Act on Decentralisation, enacted in 2004, was changed into the Special Act on the Promotion of Decentralisation in 2008, and the Special Act on Decentralisation and Restructuring of Local Administrative Systems was enacted in 2013. For an overview of different laws and committees, see Table 3.6.

In 2017, the administration of Moon Jae-in included decentralisation as one of the Top 100 national tasks: "to promote well-balanced development across every region" (Goal IV), "to promote autonomy and decentralisation to realise grassroots democracy" (Strategy 1) and "to strengthen fiscal decentralisation for financial autonomy" (Task 75). The Moon administration's rationale for this renewed stronger emphasis on decentralisation relates to the understanding that current challenges like demographic change and the introduction of industry 4.0 could be better addressed at the subnational level. The "100 national tasks" programme includes measures to transfer functions of the central government to local governments and to increase the budgets allocated to local governments. In March 2018, as the revised bill of the Special Act on Decentralisation and Restructuring of Local Administrative Systems was promulgated, the Presidential Committee on Autonomy and Decentralisation was set up.

Table 3.6. Decentralisation over time – Governing law and committees by administration

Administration	Governing laws	Implementing committees
Pr. Kim Dae-jung	Act on the Promotion of Devolution of Centralised Administrative Powers to Local Governments (1999)	Presidential Committee for Promotion of Local Empowerment
Pr. Roh Moo-hyun	Special Act on Decentralisation (2004)	Presidential Committee on Government Innovation and Decentralisation
		Presidential Committee for Promotion of Local Empowerment

Pr. Lee Myung-bak	Special Act on the Promotion of Decentralisation (2008)	Presidential Committee on Decentralisation
	Special Act on the Restructuring of Local Administrative Systems (2010)	Presidential Committee for Restructuring of Local Administrative Systems
Pr. Park Geun-hye	Special Act on Decentralisation and Restructuring of Local Administrative Systems (2013)	Presidential Committee on Local Autonomy Development
Pr. Moon Jae-in	Special Act on Local Autonomy and Decentralisation, and Restructuring of Local Administrative Systems (2018)	Presidential Committee on Autonomy and Decentralisation

Source: OECD (2020[9]), "Questionnaire", Unpublished, OECD, Paris.

The Presidential Committee on Autonomy and Decentralisation co-ordinates the current decentralisation process in Korea. The committee is comprised of 27 members. They include official members (the Minister of Public Administration and Security, the Minister of Strategy and Finance and the Minister for the Cabinet Office) as well as other ministries relevant to the agenda. In addition, the committee has 24 civilian members. Among these, six are recommended by the president, ten by the chairman of the National Assembly, and two each by four major local associations, including the Association of Provincial Governors and Metropolitan City Mayors and the Association of Metropolitan and Provincial Council Chairs. All members are formally appointed by the president. In addition to the representatives from the major local associations and political leaders, cities countries and districts can establish consultative councils for their jurisdiction to exchange information, to make policy recommendations and to collect opinions regarding the tasks of autonomous decentralisation, as prescribed by municipal ordinances. However, voices from the local governments, residents or other stakeholders are only consulted by the committee if it deems necessary to do so.

In September 2018, the Committee on Autonomy and Decentralisation developed a comprehensive plan for autonomous decentralisation. The plan includes 6 strategies and 33 tasks. The 6 strategies are as follows; for a description of the 33 tasks, please consult Annex 3.A:

- Realisation of residents' sovereignty.
- Substantial transfer of central authority to local governments.
- Powerful promotion of fiscal decentralisation.
- Stronger co-operation among central-regional-municipal governments.
- Expansion of autonomy and responsibility of municipalities.
- Restructuring of local administrative systems and improvement of local electoral systems.

The revised Special Act on Local Autonomy and Decentralisation, and Restructuring of Local Administrative Systems includes a series of fundamental changes for local-level governance. It includes devolution of centralised administrative powers to local governments (effective from 1 January 2021). This unprecedented move will see local authorities take over the delivery of 400 tasks spanning 46 laws (Table 3.7), tasks originally handled by 16 of the central government's ministries. Some tasks will be transferred to the regional levels and some to the local level. No differentiation is made between different types of region or to reflect the current capacity of each regional and local government, nor will there be a phased approach, as all 400 tasks will be transferred simultaneously on 1 January 2021. However, administrative and capacity building support is being given to help the SNGs prepare. The goal of the reform is to enable local governments to autonomously establish and enforce policies tailored to their regional needs.

Table 3.7. Breakdown of administrative transfers

	Total	National to *Si*/*Do*	National to *Si*/*Do*/ *Si*/*Gun*/*Gu*	National to *Si*/*Gun*/*Gu*	*Si*/*Do* to *Si*/*Do*/ Large cities	*Si*/*Do* to *Si*/*Gun*/*Gu*
No. of administrative affairs	400	242	57	50	27	24
Share (%)	100	60.5	14.2	12.5	6.8	6

Source: OECD (2020[9]), "Questionnaire", Unpublished, OECD, Paris.

In addition to the allocation of new tasks, the Special Act on Decentralisation also includes a restructuring of administrative systems. This includes consolidation of local governments, particularly *Gu* that have a very small population or area. The consolidation process is evaluated according to geographical conditions, neighbourhood zones, economic zones and the characteristics of each region including their historical and cultural homogeneity, a process overseen by the Minister of Interior. While the minister might recommend consolidation, the process requires local approval and can evoke a local referendum. The consolidation is then implemented by a joint committee led by the heads of the local governments to be consolidated.

The act shall also ensure a more participatory environment for the general public in policymaking, for example through the establishment of regional councils as a platform for proposing policy ideas and collecting opinions on region-specific matters concerning decentralisation. Further, it also guarantees residents' right to direct participation through measures like referenda, residents recall votes, residents' lawsuits and residents' requests for the enactment and abolition of a municipal ordinance. It also stipulates provisions for the establishment of local self-governing entities for the purposes of achieving regional development in line with the constitutional promise that "the country's sovereignty shall reside in the people".

In a move to facilitate participatory budgeting, the law establishes the basis for an expansion of residents' autonomous organisations and broadens the allowed scope of participation from "being limited to budget compilation" to "budgeting processes including compilation", thereby providing residents with an increased opportunity to participate in major municipal projects.

The constitutional amendment bill, proposed by President Moon Jae-in in March 2018, proposed adding the "Republic of Korea promotes decentralisation" into Article 1 of the constitution, further cementing the autonomy of local governments though this proposal failed to achieve quorum. Nevertheless, addressing the regional imbalance between Seoul and surrounding regions is at the core of the government's decentralisation programme.

In addition to the transfer of administrative powers, the central government has also sought to transfer additional fiscal authority to local governments. In October 2019, it announced the implementation plan for fiscal devolution, setting the proportion of national and local budgets at 7:3, from 8:2 currently. To achieve this, the government plans to transform part of the national value added tax (VAT) into a local consumption tax. Consequently, local consumption taxes will rise from 11% to 21% while VAT will be cut in a revenue-neutral way. This change is expected to replenish subnational government finances, by a total of KRW 8.5 trillion, with no additional tax burden on the public. Mindful that some areas are richer than others, the devolution plan includes tools for equalisation to spread the funding more evenly across regional governments than they would otherwise collect. Local consumption taxes collected will be distributed with different regional weights, specifically the Seoul Metropolitan Area, metropolitan cities and provinces by 1:2:3 respectively. Moreover, 35% of the taxes collected in the Seoul metropolitan area will be transferred to Local Mutual Development Funds over the first 10 years to support development among in other parts of the country.

Implementing rural policies in a context of increased decentralisation

With the decentralisation of authority now underway, there are five key areas where progress will be necessary to ensure a smooth and equitable transfer and to ready the subnational governments to make the most of their new autonomy. These include measures to support vertical co-ordination, horizontal co-ordination, capacity building, public engagement and subnational government finances. Successful decentralisation requires a holistic approach that aligns all stakeholders in support of the agenda. With these in place, Korea's regional and local governments will be best prepared to leverage autonomy in support of the prosperity and well-being of their people.

Advancing from top-down policymaking

As a unitary country with a legacy of having a highly centralised approach to public policy, Korea's recent undertaking to decentralise hundreds of state functions to subnational governments marks a profound change for the country that will have a lasting impact on how it governs itself. It may give rise to unforeseen regional divergences and serve to strengthen regional identities across the country. That said, the legacy of centralised policy management may not be easy to set aside, as it is likely still embedded in the institutional memory of public institutions. Institutional changes do not happen overnight and cumulative learning processes explain the path dependency in policymaking and the persistence of central government control despite reforms towards decentralisation.

Traditionally both the central and local governments have had responsibilities and roles in policy planning and implementation, with an arrangement that has left little room for autonomy at the local level, particularly in strategic planning. The central government establishes top-level sectoral plans, such as the CNTP, the Development Plan for Agriculture, Rural Areas and Food Industries, and then local governments elaborate regional sectoral plans that reflect the conditions of each region, along with considering the direction of the national plan. Thus, the role of the local governments has been mostly to implement policies and deliver programmes that were designed and developed at the centre. While they do have some capacity and history of preparing their own development goals and proposals, their dependency on central government funding has meant that national priorities usually take precedence.

Improving vertical co-ordination

Rural development projects are in some cases designed and implemented by the subnational governments while the central government's line ministries have the authority to evaluate the submitted proposals and to co-ordinate. The Presidential Committee for Balanced National Development reviews non-urban policy projects and conducts an annual survey on cases deemed excellent to help improve the policy outcomes. This policy evaluation system leads to budget reductions for ineffective projects and additional financial incentives for outstanding projects.

To help accelerate the implementation of balanced national development projects, the central government decided in January 2019 that subnational government proposals would be exempted from preliminary feasibility checks in the following four areas:

- Promoting regional strategic industries through R&D investment.
- Constructing infrastructure (e.g. roads, rail bridges) supporting regional industries.
- Building metropolitan networks on transport and logistics.
- Projects intended to improve quality of life for residents.

These changes should accelerate the assessment process conducted by the central government so that approvals come sooner. Regions are taking advantage of these changes to push forward with a variety of projects: for example, in Jeollanam-do, the province is planning to extend an expressway to connect islands and build a new export complex for the fishing industry.

Overcoming budgetary constraints

Local governments in Korea have little financial autonomy at the moment, as the central government provides most of their funding via transfers. These transfers, grants and subsidies from the central government constitute approximately 57.7% of their total resources, with own-source revenue from locally applied taxes at just 32.8% in 2016. This compares with the OECD average of 37.2% from transfers and 44.6% from locally applied taxation. While increased fiscal autonomy is a goal of the national government and further fiscal decentralisation is currently underway, the additional revenue that local governments receive may not be sufficient to cover the additional tasks being simultaneously handed over to them and it is not yet clear whether, once the tasks are absorbed and the new fiscal authority given, they will find themselves any less dependent on the central government than they were previously. In addition, the central government recognises that the economic disparities that exist within the country necessitate that, alongside fiscal decentralisation, it will be necessary to have substantial equalisation measures, at least in the near term and, therefore, ongoing central government intervention to support this.

Fiscal imbalances have been covered by tax-sharing agreements (local shared tax) and intergovernmental transfers from the central government (a block grant to promote capital investment called national earmarked categorical grants). In 2005, fiscal reform was enacted establishing the Special Account for Balanced National Development which transformed many specific-purpose grants into integrated national grants for regional development that were otherwise scattered in the central government's accounts. The Special Account for Balanced National Development was then reorganised and renamed the Interregional and Regional Development Special Account in 2010 to expand fiscal spending for local municipalities. Two hundred projects were integrated into 24 comprehensive projects and a block grant was adopted to give local municipalities the authority to autonomously design the projects (OECD, 2010[3]). Further changes to the account in 2015 saw a further expansion to 37 projects, along with another name change, to the Regional Development Special Account. Most recently, the account was expanded again under the current administration to 43 projects and its name was reverted to the Special Account for Balanced National Development in 2019.

Applying a functional region approach

Territorial relationships change over time and are shaped by socio-economic and cultural changes. Economic development, the mass diffusion of cars, technological progress and improvements in communication and transport have had an impact on the organisation of people, goods, ideas and economic activities across space – whether for residential and employment choices or the consumption of goods and services. The space where individuals carry out their activities, where they live their lives day to day, has expanded and no longer matches the traditional administrative structures that govern territories.

A first step in implementing rural policy is identifying the right scale of intervention by adapting policies and governance to functional geographies. Rural economies are different from urban economies across various dimensions including the physical distance from markets, the costs in terms of connectivity to transport people and goods and the prominence of specific natural endowments for the local economy. The implementation of rural policies thus needs to match the scale of rural economies (e.g. local labour markets, food chains, environmental services and amenities), based on current and future needs of the areas, with effective governance mechanisms at the relevant scale to realise rural policy objectives.

The Korean government and subnational governments within Korea have recognised this and have taken steps in recent years to increasingly apply a functional region approach in their regional development policy. Examples of this include the mega-regional economic zones and supra-economic regions articulated in the 4th CNTP. At the subnational level, the province of Jeollanam-do has developed a consultative body with the metropolitan city of Gwangju recognising their shared interests and the boundary-crossing needs of their people. Their consultative body is working together on 16 different priorities including the development of a new circular expressway, a joint tourism initiative and the

development of new farmers' markets to strengthen the economic bonds between the urban population and the surrounding agricultural rural areas. They are also exploring the expansion of their partnership to include neighbouring Jeonbuk Province to create an even larger economic region that they hope may eventually rival Seoul.

On a smaller scale, the Happy Living Zone concept has been developed in response to the need for sustainable and efficient public service delivery in rural areas. Given the long-term demographic trend of population ageing and outmigration in rural Korea, initiatives like these will become increasingly essential, as it will no longer be feasible to provide comprehensive public services in all municipalities and fiscal challenges are expected to increase (OECD, 2018[13]). In this regard, policy initiatives that further mobilise regional linkages to enhance the quality of residents' life, deliver services more efficiently and co-operate to pursue economic opportunities should be prioritised.

Working with civil society and other non-governmental stakeholders

Traditionally Korea's non-urban development policy has been a top-down approach led by the central government; however, in recent years, social and economic organisations such as village enterprises, co-operatives, self-help companies and rural community companies have actively been playing larger roles in policymaking and implementation. Public-private co-operation (private assistance) is expanding so that the flexibility and innovation of these intermediate support organisations can be utilised in non-urban policies.

A good example of the partnership between public and private actors would be the social enterprises in Chungcheongnam-do. Social enterprises operate in various social welfare areas such as healthcare for the elderly in remote communities and mental healthcare for children and the youth. The activities of these social enterprises cover a wide range of services, for example, a social enterprise for the elderly's healthcare offers medical services through medical co-operatives in areas of higher proportion of the elder residents. Not only providing medical services for the elderly, the enterprise functions as a vehicle for collaboration between various local actors including local government, volunteer organisation and private companies. Partly funded by the provincial support fund and subsidies from municipalities, the social enterprises are operating with their own incomes from membership fees and medical service provision.

In another example, Jeollanam-do has implemented two new processes in an effort to avoid blind spots in its policy development process. First, their public service now gives active consideration to the spatial environment in their project development including aspects like crime prevention and how the built environment can relieve stress. In all public infrastructure and policy delivery, consideration is now given to potential differential impacts on persons with disabilities, children and multi-cultural families. Second, the province has introduced a participatory budgeting system that encourages the participation of the public. The system permits residents to participate in budget formulation and provides enhanced transparency and efficiency.

Also, in Jeollanam-do, a network of Community Social Security Council provides an opportunity for resident participation in identifying local well-being needs and permits the public to propose solutions. In addition, the Jeollanam-do Welfare Foundation works to develop, implement and evaluate a variety of policy measures for resident well-being and connects stakeholders with private resources to support these efforts.

Although many rural development projects have encouraged resident participation, they have sometimes failed to train independent private partners since the project implementation was mainly led by the public sector or few partners. Since decentralisation will accelerate in the near future, supporting various local actors and partner organisations to develop the necessary capacity to fully and usefully participate in policy development and delivery at the local level will become an increasingly important factor in the success of rural policy delivery in Korea.

Annex 3.A. Korea's decentralisation plan

Annex Table 3.A.1. The Comprehensive Plan for Autonomous Decentralisation

Six strategies	33 tasks
1. Realisation of residents' sovereignty	1-1. To guarantee the right of residents to participation
	1-2. To promote participation by residents based on deliberation
	1-3. To enhance the representation and activities of the Resident Autonomy Council
	1-4. To allow residents' request for the enactment and amendment of municipal ordinances
	1-5. To ease requirements for making civil recall or demand of audit
	1-6. To expand the eligibility for resident voting
	1-7. To expand the resident participatory budgeting system
2. Substantial transfer of central authority to local governments	2-1. To redistribute administrative affairs between central and municipal governments
	2-2. To make a function-oriented transfer of central administrative authority to local governments in a comprehensive manner
	2-3. To make it mandatory for central ministries to consult with the Ministry of the Interior and Safety for enactment or amendment of a law that they are responsible for over any possibility of breaching the right of local autonomy
	2-4. To reorganise special local administrative agencies, currently put under the jurisdiction of central ministries, so that some of their administrative affairs can be reallocated to be performed by local governments
	2-5. To expand special provisions regarding administrative affairs of large cities (large cities herein mean those with a population of more than 500 000 or 1 million inhabitants that are neither a Special Metropolitan City nor a Metropolitan City)
	2-6. To introduce an autonomous police system at the metropolitan level
	2-7. To strengthen autonomy in education and secure connectivity and co-operation between autonomy in education and other areas
3. Powerful promotion of fiscal decentralisation	3-1. To improve the structure of national and local taxes
	3-2. To strengthen the basis of securing more local tax revenues
	3-3. To introduce a hometown donation system that allows taxpayers who live in urban areas to contribute to rural areas in return for a tax credit
	3-4. To restructure subsidy programmes
	3-5. To improve equity of local subsidies
	3-6. To expand and reorganise Local Mutual Development Funds, aimed at assisting mutual development among local governments and efficiently managing and utilising the surplus capital of funds (e.g. financial resources for the funds, areas to be used and other details are described in the Framework Act on the Management of Local Government Funds)

Six strategies	33 tasks
4. Stronger co-operation among central-regional-municipal governments	4-1. To establish and operate a co-operative body between central and local governments
	4-2. To boost co-operation among municipalities
	4-3. To realise models for autonomous decentralisation with Jeju and Sejong
5. Expansion of autonomy and responsibility of municipalities	5-1. To give local councils autonomy over the personnel management of their public officials and disclose legislative activities
	5-2. To strengthen organisational autonomy and responsibilities
	5-3. To secure autonomy and transparency in local personnel management systems
	5-4. To enhance the expertise of local public officials
	5-5. To improve autonomy in managing local finance
	5-6. To expand access to local finance information
	5-7. To establish a self-evaluation system
6. Restructuring of local administrative systems and improvement of local electoral systems	6-1. To restructure local administrative systems
	6-2. To improve local electoral systems

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4 Considerations for upcoming decentralisation and devolution

Chapter 4 describes lessons from OECD countries on decentralisation relevant to the current Korean context. It starts by describing 10 OECD guidelines to implement decentralisation. It then focuses on several key dimensions drawing from examples in OECD countries on vertical co-operation, horizontal co-operation, capacity building, public engagement and, finally, on financing across levels of government.

The OECD approach to decentralisation

Over the past decades, many OECD counties have started to increasingly decentralise. Between 1995 and 2016, decentralisation processes have resulted in an increase of subnational spending, as a share of gross domestic product (GDP), as well as the share of total public spending in two-thirds of OECD countries. Despite this trend, it is important to note that decentralisation in and by itself is neither positive nor negative. Rather, its outcomes, in terms of democracy, efficiency, accountability, local and regional development, largely depend on how the decentralisation is designed and executed (OECD, 2019[1]).

Getting decentralisation right is particularly important in the context of ongoing megatrends, including globalisation, climate and demographic change, and rapid technological advancements. These bear new challenges and opportunities at the subnational level and can exacerbate existing divides between places, as some may benefit from these trends while others may feel increasingly left behind. Dysfunctional decentralisation systems carry the danger of aggravating challenges regions already experience. It is thus critical to find ways to make multi-level governance systems work for regional development and the well-being of people (OECD, 2019[1]).

Decentralisation is more than simply increasing the power and autonomy of local governments. Rather, it requires a profound reconfiguration of relationships and roles between the levels of government. For instance, central governments need to move from a service delivery role to one that sets the right framework conditions in terms of strategy, co-operation, alignment of policy objectives and monitoring performance. Further, as a complete separation of policy responsibilities and outcomes among levels of government is impossible, decentralisation relationships are characterised by mutual dependence and necessitate new forms or increased co-operation across and among different levels of government.

The OECD has documented the benefits and challenges decentralisation can have for countries. Among the greatest benefits are that programmes can be better matched to local needs, for instance with regards to the quality and efficiency of service delivery. In addition, positive correlations exist between GDP per capita growth and decentralisation, and links between revenue decentralisation and smaller regional disparities have been observed. Thus, decentralisation may help lagging regions to catch up. In Korea's case, well-designed decentralisation may meaningfully contribute to the government's longstanding desire for more balanced national development.

Similarly, the OECD has also shed light on the most common pitfalls with regards to decentralisation processes. Key challenges revolve around a lack of sufficient administrative, technical and strategic capacities at the subnational level, missing resources and fiscal support to local governments to carry out the newly assigned tasks, and the loss of certain economies of scale and fragmentation of public policies (OECD, 2019[1]). To be able to help countries to make the most of decentralisation, the OECD has identified ten guidelines for implementing depenalisation. These help to anticipate and minimise risks and harness opportunities. The guidelines are presented below in Box 4.1.

Box 4.1. Ten OECD guidelines to implement decentralisation

Guideline 1: Clarify the responsibilities assigned to different government levels

- The way responsibilities are shared should be explicit, mutually understood and clear for all actors. Equally important is clarity in the different functions that are assigned within policy areas.

Guideline 2: Ensure that all responsibilities are sufficiently funded

- Access to finance should be consistent with functional responsibilities.

Guideline 3: Strengthen subnational fiscal autonomy to enhance accountability

- Subnational governments should have a certain degree of autonomy in the design and delivery of their public service responsibilities. Subnational governments need to develop own-source revenues.

Guideline 4: Support subnational capacity building

- Central government should assess capacity challenges in the different regions on a regular basis. Policies to strengthen capacities should be adapted to the various needs of territories.

Guideline 5: Build adequate co-ordination mechanisms across levels of government

- There is a need to establish governance mechanisms to manage joint responsibilities. Creating a culture of co-operation and regular communication is essential for effective multi-level governance. It is also important to avoid multiplying co-ordination mechanisms.

Guideline 6: Support cross-jurisdictional co-operation

- Horizontal co-ordination can be carried out using specific matching grants and by promoting inter-municipal and inter-regional co-operation. Rural-urban partnerships are one form.

Guideline 7: Strengthen innovative and experimental governance, and promote citizens' engagement

- Citizens should be empowered through access to information. Ensure that elected local councils have the ownership and control of citizen participation and engagement initiatives.

Guideline 8: Allow and make the most of asymmetric decentralisation arrangements

- Asymmetric decentralisation should be supported by effective vertical and horizontal co-ordination mechanisms and an effective equalisation system. It should also be based on dialogue, transparency and agreements between all main stakeholders.

Guideline 9: Consistently improve transparency, enhance data collection and strengthen performance monitoring

- National governments should develop performance-monitoring systems for decentralisation and regional development. Monitoring of subnational performance should be based upon a minimum set of standardised indicators.

Guideline 10: Strengthen national regional development policies and equalisation systems and reduce territorial disparities

- The equalisation programme must not be looked at in isolation from the broader fiscal system, especially conditional transfers. Equalisation arrangements need to be carefully designed to promote the development efforts of subnational governments.

Source: OECD (2019[1]), "Making decentralisation work: A handbook for policy-makers", https://dx.doi.org/10.1787/dd49116c-en.

There is increased recognition that regional and rural policies should be adapted to the needs and circumstances (social, economic, cultural, geographic, environmental, etc.) of different regions and rural places. This tailoring requires rural policymaking to extend across a wide range of policy areas, which makes a complete separation of policy responsibilities and outcomes impossible. Successful implementation of rural policy consequently requires new ways of working and organising including mechanisms that effectively engage different levels of governments, people and businesses in order to increase well-being across all types of rural regions. In the process of decentralisation in Korea, the

interdependencies of rural policy, as well as the particular challenges experienced by rural areas, need to be considered throughout the decentralisation process.

Five key areas will be addressed in the following section:

- *Vertical co-ordination:* As rural and regional development policy is cross-cutting by nature, it involves a variety of governmental and non-governmental actors. Ensuring that objectives and priorities are aligned, particularly in areas that support rural and regional development but where responsibilities and/or interests intersect (e.g. economic development, transport, health and education) requires vertical co-ordination mechanisms that foster partnership-based relationships among levels of government and proper assignment of functions to avoid duplication of services or unnecessary administrative costs.
- *Capacity building:* Adequate human and technical capacity is a prerequisite for successful decentralisation. Yet, benefits of decentralisation may accrue only to the already more developed and prosperous regions because of unequal distribution and availability of capacities. Especially rural regions can be disadvantaged in efforts to build capacity due to smaller labour markets, limited attractiveness and career opportunities. Decentralisation processes need to avoid regional disparities increasing and hampering regional development.
- *Horizontal co-ordination:* A lack of horizontal policy co-ordination can easily lead to missed opportunities on investment and policy complementarities at the subnational level. For instance, inefficient service provision may result from too small a scale. Rural and regional development requires aligning different sectoral and political interests through horizontal co-operation.
- *Public engagement:* Crafting effective policies requires decision-makers to listen and respond to the needs of their constituencies. However, with the deepening of globalisation, some rural regions feel that their voices are increasingly overlooked in policymaking. Decentralisation processes offer important opportunities for governments to widen citizen participation in policymaking and represent an important strategy for improving trust in public institutions and policies.
- *Subnational fiscal autonomy and effective public investment:* For decentralisation to be effective, subnational governments must have a degree of autonomy in the design and delivery of their programmes and services, something they cannot have if they are reliant on the central government's fiscal capacity to pay for their activities.

Vertical co-ordination and delegation of tasks

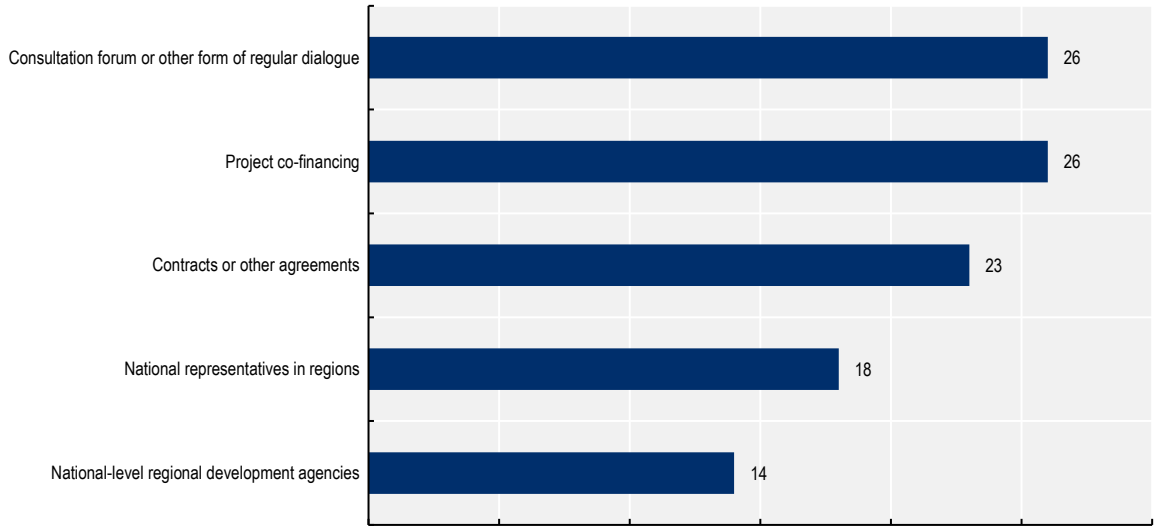
In order to manage the relational outcome of decentralisation policies, executing tasks, overcoming obstacles and/or accomplishing objectives requires co-ordination among government actors and a clear definition of roles of various levels of government. The fact that rural development extends across a wide range of policy areas and involves a variety of actors further heightens the importance of co-ordination and clarity of roles. For instance, when tailoring programmes to specific local needs, these services are often best provided locally but higher-order legislative frameworks and financing may be required for equitable provision. This section looks at ways to structure vertical co-ordination between levels of government and the delegation of a task to enable a clear division of powers.

In a context of shared jurisdiction, i.e. when a function is the joint responsibility of several levels of government, a transparent division of power is crucial for governments to deliver mandates and ensure accountability. If this is not the case, duplication of services increases administrative costs. Clarity in the division of power, however, does not mean that shared responsibilities should be avoided; rather, it means that the way responsibilities are shared should be explicit, mutually understood and clear for all actors, including citizens. To do this best, an intergovernmental consensus for clarity in responsibilities (including sub-functions and major tasks) that is tailored to local circumstances and mutually acceptable and

agreeable to all orders of government should be striven for. In practice, the question is about how to manage shared functions and responsibilities (OECD, 2019[1]).

Tools for vertical co-ordination (Figure 4.1) include dialogue platforms, fiscal councils, standing commissions and intergovernmental consultation boards, and contractual arrangements for example. The OECD Regional Outlook Survey 2015 showed that consultation fora, project co-financing and contracts are the most common forms of vertical co-ordination (Charbit and Romano, 2017[2]).

Figure 4.1. Vertical co-ordination instruments in OECD countries



Note: The total number of respondents is 30.
Source: (OECD, 2015[3]), OECD Regional Outlook Survey 2015.

Consultation fora and other forms of regular dialogue

Consultation fora and other forms of dialogue can be of ad hoc and permanent nature depending on their objective. While ad hoc measures can help to address and resolve problems that are of temporary nature, for instance in moments of crisis, more permanent bodies such as standing commissions and intergovernmental consultation boards can create a culture of regular co-operation and communication. This is often needed for long-term reform success. Italy, for instance, has three separate conferences – state-regions, state and local governments, and state-regions-local governments – serve as the intergovernmental fora. Similarly, Denmark, Finland, Norway and Sweden have regular meetings of central and local governments (through their associations of local governments) to discuss policy and implementation issues (see Box 4.2. for a description of the Swedish system). Further in 2015, Portugal established the Council for Territorial Dialogue chaired by the prime minister and with the representation of central and local governments, in order to facilitate continuing dialogue on important policy and programme issues (OECD, 2019[1]).

In Korea, the Central and Local Governments Policy Council is a form of permanent forum for dialogue. This council, chaired by the Minister of the Interior and Safety and attended by the heads of central ministries and local governments (e.g. mayors and governors), is convened once a month on a regular basis and ad hoc meetings are held if necessary. At the council, local administrative matters, major policies requiring consultations and suggestions between central and local governments are discussed.

Box 4.2. Forum on Regional Competitiveness in Sweden

The Forum on Regional Competitiveness, created in 2007, has since been strengthened and plays an active role in fostering dialogue across levels of government. Formerly used as a co-ordination mechanism, it has been replaced with the Forum for Sustainable Regional Growth and Attractiveness. This forum is used to promote co-ordination between levels of government and type of government actor (political and civil service), bringing together representatives from ministries and regional bodies. State agencies also participate, depending on the topic for discussion at each meeting. Associated with the forum are networks and working groups that bring together 16 state agencies. The forum meets in plenary sessions four times per year. It is part of the implementation of the National Strategy 2015-20.

The forum has gained in authority and legitimacy and is now considered as an important tool for multi-level governance in Sweden. Although the forum cannot take binding or formal decisions, it is seen as a credible institution to support national and regional level policy development through dialogue and co-operation. The forum focuses on themes related to the National Strategy 2015-20's priorities, for example: regional innovation systems; supporting skills and labour market integration; public services; infrastructure; and transport.

Contracts as a tool for vertical co-ordination and regional development

In-depth research at the regional level carried out by the OECD in 2012 showed that contracts can be complementary tools to both formal (i.e. conditionality) and informal arrangements (i.e. platforms for policy exchange or working groups). Contracts across levels of government represent a practical and flexible option for co-ordination across levels of government, which allow the establishing roles and responsibilities without changing the constitution. Both parties can negotiate and organise the duties, according to needs, territorial circumstances and local specificities. Sometimes, contractual arrangements across levels of government may be the only option for the central government to co-ordinate actions with subnational authorities since adopting other multi-level governance devices would require significant institutional changes, which would take time and may lead to unforeseen/undesirable results (Charbit and Romano, 2017[2]).

Box 4.3. Background on contracts – Understanding the use of contracts for regional development

Contracts define mutual obligations of parties, which have to agree on: an assignment of rights of decision among the parties (*authority*); a distribution of contributions, including funding, human capital, assets, etc. (*mutual duties*); and mechanisms that guarantee the correct implementation of each party engagement and solve disputes (*enforcement*) (OECD, 2007[4]).

The engagement of parties through a contract is performed through several steps:

- The consultation initiates the dialogue between central and subnational governments, both contributing to shared policy objectives5. The consultation phase aims at establishing priorities and actions, by assessing regional development needs, as well as possible impacts on different categories of stakeholders. Several actors can be involved in the consultation, including private and non-profit sectors and civil society. Although rarely performed, the evaluation of previous contractual experiences can help design the next generation of contracts.

- The negotiation/signature leads to the formal agreement between central and subnational governments. The contract is negotiated between independent authorities, with elected legitimacy to intervene in public functions. They can be represented by "gatekeepers", governmental actors engaged in the negotiation and implementation phase, such as inter-ministerial bodies, specific ministry or deconcentrated bodies (for the central government) and leaders of regional, provincial and local authorities (for the subnational government).
- The implementation phase involves a number of "operational actors", such as local, provincial or other subnational institutions, as well as firms, associations, private actors and non-profit organisations. The dialogue between the two parties can be facilitated by an "intermediary agent", such as: the *Prefect* in France, designated by the central government to represent central ministries in regions; and the National Planning Department (DNP) in Colombia, an administrative body, which, among others tasks, sets priorities, co-ordinates central governments and departments and monitors the implementation of contracts.
- Enforcement and evaluation are two important components of the contracts. Enforcement mechanisms aim to solve possible conflicts and ensure that each party fulfils the commitments. The enforcement can be internal (performed by the parties) or external (e.g. a judge, a group of peers, international agencies, citizens and other stakeholders). The evaluation aims to assess impacts to ultimately learn from success and failures. It is crucial for informing, prioritising and negotiating terms of contracts in the following period. Enforcers and evaluators should guarantee a neutral and independent process (Kaufmann and Kraay, 2008[5]).

Charbit and Romano's (2017[2]) differentiate between three types of contracts:

- *Empowerment contacts* are designed to assist with capacity building among subnational authorities, thereby making it feasible to provide them with greater autonomy in dealing with regional development policies.
- *Delegation contracts* are designed to delegate the implementation of tasks to the subnational government and are therefore a tool in support of vertical co-ordination. Delegation contracts are typically deployed in cases where regional and local actors are deemed to be better positioned to implement national policies at the local level and can improve efficiency in public spending.
- *Policy-sharing contracts* are designed to foster co-operation between central and subnational governments in order to fulfil competencies that are either overlapping or not fully addressed. As such they are also a tool that can support vertical co-ordination. In both cases, a contractual mechanism may favour information sharing and mutual understanding, while reducing transactional costs and generating trust for future endeavours.

In unitary states, contracts, usually in the form of long-term agreements, are often used to empower subnational governments or delegate tasks within the framework of decentralisation policies. In federal states, contracts often agreed for short periods of time, are complementary to existing legal frameworks, setting co-operation on specific tasks (OECD, 2007[4]). Contracts can adapt to complex situations and to the socio-economic and environmental characteristics of regions (e.g. leading and lagging regions, urban and rural areas, regions endowed with abundant or scarce natural resources).

Contracts for regional development can include equity targets through two approaches:

- Eligibility conditions: Such as in the case of European Union (EU) cohesion funds, which are allocated according to whether a region's per capita GDP is below/above 75% of the European average.

- Co-funding rate: This can be differentiated according to the wealth of each partner region. In France, the funding share of the central government varies from 39% (Ile-de-France) to more than 63%.

Source: Charbit, C. and O. Romano (2017[2]), "Governing together: An international review of contracts across levels of government for regional development", https://doi.org/10.1787/ff7c8ac4-en (accessed on 16 July 2020); OECD (2007[4]), *Linking Regions and Central Governments: Contracts for Regional Development*, http://dx.doi.org/10.1787/9789264008755-en; Kaufmann, D. and A. Kraay (Kaufmann and Kraay, 2008[5]), *Governance Indicators: Where Are We, Where Should We Be Going?*, Published by Oxford University Press on behalf of the International Bank for Reconstruction and Development, World BankWorld Bank.

Contracting in Korea – Initial steps in leveraging contracts to support decentralisation

The Korean government has been developing a contract system, where local governments can establish comprehensive multi-year regional development plans and obtain multi-year financial support from the central government based on the central-regional agreement. These are called Regional Development Investment Agreements. The rationale behind the agreements is to enhance the local governments' autonomy and capacity on their own regional development agenda and to break the policy silos among central ministries which dominate regional policies through sectoral approaches.

Following the amendment of the Special Act on Balanced National Development in 2018 to allow preferential fiscal supports to the contract-based local projects from the special account, 11 local governments were selected as pilots. Contracts between the selected project proponents and the central government were finalised in 2019, following a selection process that included feasibility assessments, desk review and presentations given to selected ministries and the Presidential Committee on Balanced National Development. Selection criteria for the projects included synergies with existing projects, a partnership among relevant entities, civic participation, proper performance management, etc. Overall, ten ministries are part of the agreements, either as lead or as supporting ministries.

Principally, submitting entities are intended to be local governments at the municipal level; however, metropolitan governments or those with a similar administrative structure can apply as well. The 11 selected pilot projects are distributed across different regional types based on the OECD typology as follows:

- Two are in *large metropolitan* regions.
- Five of the projects are in *metropolitan* TL3 regions with a city with more than 250 000 inhabitants.
- Three are in *non-metropolitan regions with access to a metropolitan region*.
- One region has *access to a small/medium-sized city*.

The majority of projects seek to expand already existing industries such as the maritime industry, tourism, food production and consumption, biotechnology and medicine or technical services, while the remaining projects focus on improving liveability by strengthening regional medical facilities or job matching facilities and recreational services to become more attractive. An overview of the projects can be found in Table 4.1.

In order to meet the goal of improving policy efficiency and regional autonomy, the new agreement system is equipped with powerful tools. Financially, a total of KRW 100 billion has been allocated to cover the cost of projects in the agreements over a period of 3 years. This works out to approximately KRW 9 billion for each of the pilot projects, with 50% cost-sharing from the local government budgets. For projects whose lives may extend beyond the pilot period (for example those projects that will develop a new piece of infrastructure or other fixed assets), local governments will be primarily responsible for their ongoing maintenance and running costs, though central ministries may provide support if necessary. Each regional agreement requires the establishment of an implementation team responsible for the detailed planning, operational management and performance monitoring and assessment. Since local capacity may be

limited in some areas, consulting support by regional policy experts is available. These consulting teams consist of three to five experts from the Korea Research Institute for Human Settlements and a Regional Innovation Committee as well as one recommended by a line ministry. To monitor progress, MOLIT will provide quarterly reviews on the performance indicators set by each region, with the results then reflected in the following year's implementation plan. Initial results from the pilot projects show that they have had a positive impact on local planning and implementation capabilities.

Table 4.1. Eleven pilot projects of the Regional Development Investment Agreement

Name	Title/Objective	Ministries (lead and supporting)	Budget (KRW)	TL3 typology
Busan	Build a business ecosystem for innovative growth of Busan's new maritime industry	Ministry of Trade, Industry and Energy, Ministry of Science and Information and Communication Technology (ICT), Ministry of Oceans and Fisheries, Ministry of Small- and Medium-sized Enterprises (SMEs) and Start-ups	18.2 billion	Regions with a city >1M
Gwangsan-gu (Gwangju)	Improve quality of life by developing air purification technology and developing new industry focusing on the reduction of fine dust	Ministry of Trade, Industry and Energy, Ministry of Science and ICT, Ministry of the Environment, Ministry of SMEs and Start-ups	18.2 billion	Regions with a city >1M
Seoguipo-si (Jeju)	Establish an integrated medical safety net for regional communities	Ministry of Health and Welfare and Ministry of Agriculture, Food and Rural Affairs	18.2 billion	Regions with a city >250K
Gunsan-si (Jeollabuk-do)	"Only One Go Gunsan" Tourism Belt Project to stimulate the tourism industry, e.g. through improved infrastructure	Ministry of Oceans and Fisheries, Ministry of the Interior and Safety, Ministry of Land, Infrastructure and Transport	18.2 billion	Regions with a city >250K
Cheongju-si and Jeungpyeong-gun (Chungcheongbuk-do)	Boost tourism using *Chojeong* mineral water, renowned for its world-leading quality and developing infrastructure	Ministry of Culture, Sports and Tourism, Ministry of the Environment, Ministry of Land, Infrastructure and Transport	25 billion	Regions with a city >250K
Uiseong-gun (Gyeongsangbuk-do)	Enhance rural vitality by attracting and retaining youth and improving the quality of life of residents in response to population decline	Ministry of Land, Infrastructure and Transport, Ministry of Culture, Sports and Tourism, Ministry of Agriculture, Food and Rural Affairs, Ministry of Health and Welfare	18.2 billion	Regions with a city >250K
Geochang-gun and Hapcheon-gun (Gyeongsangnam-do)	Build a hub of the world's elevator industry	Ministry of the Interior and Safety and Ministry of Trade, Industry and Energy, Ministry of Employment and Labour	24.1 billion	Regions with a city >250K
Sejong	Boost local food production and consumption	Ministry of Agriculture, Food and Rural Affairs, Ministry of Culture, Sports and Tourism, Ministry of the Environment	36.1 billion	Regions near a city >250K
Gangneung-si (Gangwon-do)	Develop an ecosystem for the healthcare industry based on the region's bio and tourism industries	Ministry of Trade, Industry and Energy, Ministry of Culture, Sports and Tourism	18.2 billion	Regions near a city >250K
Hongseong-gun (Chungcheongnam-do)	Build a hub for organic farming including through distribution faculties, ecovillages and processing facilities	Ministry of Agriculture, Food and Rural Affairs, Ministry of Education	18.2 billion	Regions near a city >250K

Name	Title/Objective	Ministries (lead and supporting)	Budget (KRW)	TL3 typology
Wando-gun (Jeollanam-do)	Develop a maritime healing blue zone, combining maritime healing industry with biotechnology and ICT	Ministry of Oceans and Fisheries, Ministry of Health and Welfare/Korea Meteorological Administration	18.2 billion	Regions with/near a city <250K

Note: National budget for each project is KRW 9.1 billion.
Source: OECD (2020[6]), "Questionnaire", Unpublished, OECD, Paris.

Delegation contracts

With delegation contracts, central governments set objectives and delegate the implementation of specific tasks to a capable subnational government, with the aim of adapting national policies to specific local contexts. Contracts aim to avoid a one-size-fits-all approach and leave scope for adapting policies to territorial characteristics while overcoming institutional fragmentation. Contracts can comprise silo approaches and favour a territorial focus for development, taking into account the specific assets and needs of each region. Delegation contracts are based on the assumption that regional and local actors are better positioned to implement national policies at the local level, owing to their proximity to specific populations or territories targeted by the delegated policies (Charbit and Romano, 2017[2]).

Delegation contracts are often characterised by cofounding approaches that involve central governments in local spending. Grants act as strong incentives for effective delivery of the outcomes expected by the central government and their earmarked character can help encourage local actors to clearly set *ex ante* goals (i.e. transactional contract). Delegation contracts may, however, face the risk of "strategic" behaviour from subnational authorities, whereby they manipulate the provided means to deliver general interest goods to pursue their own interests. Conversely, there is also the risk that subnational governments would be mere executors of tasks *vis à vis a* specific outcome, thereby limiting the scope for place-based policies. A certain degree of flexibility would enable a learning process and thus allow the development of adequate policies.

Delegation contracts occur when constitutions or legal frameworks allow for subnational governments to fulfil the task to be delegated. It is often supported by financial incentives from the central government:

- The "Devolution Deals" in England (United Kingdom) are cross-government arrangements between central and subnational government, which involve the devolution of powers and resources, previously allocated at the central level, to city regions and metropolitan areas. Since 2014, a total of 12 Devolution Deals have been secured (Local Government Association, 2016[7]). The Devolution Deals foresee the creation of new governance and administrative arrangements, such as mayors and combined authorities (Sandford, 2016[8]). Alternative arrangements to the elected mayoral model have also been suggested, such as a reduction in councillor numbers, district council mergers, or the creation of unitary authorities (National Audit Office, 2016[9]). As part of these Devolution Deals, concerning transport, education, healthcare and services, the government has announced new additional investment funding of GBP 246.5 million a year (National Audit Office, 2016[9]). The regions, cities or metropolitan areas are required to put in place an extensive programme of evaluation, agreed at the outset with HM Treasury (Local Government Association, 2016[7]). An independent panel, commissioned by the central government and the local areas, will assess if investment funding meets objectives and contributes to national economic growth. However, the central government does not intend to use macro-indicators for the assessment of the Devolution Deals (National Audit Office, 2016[9]). According to certain authors, there are some obstacles to an effective devolution of powers, due to the fact that there is a limit to the extent to which subnational priorities can actually be prioritised and addressed; powers assigned to mayors are negotiable and strategy documents are subject to approval and expenditures audited (Bentley and Pugalis, 2016[10]).

- The Barkly Regional Deal, in the Northern Territory of Australia, is the country's first Regional Deal. Signed on 13 April 2019, the Barkly Regional Deal is an AUD 78.4 million, 10-year commitment between the Australian government, the Northern Territory Government and the Barkly Regional Council to support the productivity and liveability of the Barkly region. The Barkly Regional Deal comprises 28 initiatives identified through an extensive 6-month consultation process with local stakeholders. Taken together, the initiatives are interdependent and respond to three community priority areas: economic development, social development and culture and place-making. These initiatives will strengthen the Barkly region as a great place to live, work, invest and visit. The effectiveness of the Barkly Regional Deal will be measured over the ten-year life of the deal, with a series of reviews scheduled throughout its implementation phase and an independent evaluation also to be undertaken (OECD, 2017[11]).
- The Sustainable Neighbourhood Contracts (*Contrats de quartiers durables*), in the Brussels-Capital Region, were introduced in 1993 to delegate the renovation and improvement of traditional neighbourhoods to municipalities. Contracts had a seven-year timeline. Projects included the construction of public parks, production of low energy homes, energy savings, waste reduction and air quality initiatives, rationalisation of consumption, and promotion of neighbourhood heritage (OECD, 2014[12]). Since 1994, these contracts served to build 1 718 homes and renovated 90 sites of public equipment and infrastructure (Minister for the Environment, Energy and Urban Renewal of the Brussels-Capital Region, 2016[13]). Three contracts were in place in the City of Brussels for the period 2012-16 (Ville de Bruxelles, 2016[14]).
- In the Netherlands, rural contracts aimed to implement the national goals included in the Agenda for a Living Countryside at the subnational level (OECD, 2013[15]). Signed in 2006 by the central government and provinces, contracts were based on precise criteria, instruments and sanctions. The national rural policy described exactly how provinces could achieve their goals. Performance targets were agreed between the national government and the provinces during a negotiation process that resulted in a seven-year contract. Targets were then monitored through performance indicators (OECD, 2008[16]).
- In Québec, Canada, the Rural Pacts establish responsibilities for rural development between the government and elected representatives of the Regional County Municipalities (*Municipalité régionale de comté*, MRCs). The Rural Pacts concern multi-sectoral activities: from education to healthcare and culture. The provincial government decides the general policy directions while local actors design and implement rural measures. These pacts allow for flexibility in defining local assets and resources to be mobilised to promote local growth. The Ministry of Municipal Affairs and Land Occupancy (*Ministère des Affaires municipales, des Régions et de l'Occupation du territoire,* MAMROT) plays an important role in assisting and monitoring commitments made by MRCs (OECD, 2010[17]). The Rural Policy for 2014-24 foresees greater decentralisation and the use of Pacts Plus, devoted to the implementation of forward-looking projects concerning new domains and innovations in local services (MAMROT, 2013[18]).

Policy-sharing contracts – The Korean Regional Development Investment Agreement

Since regional development policy is a shared responsibility across levels of government, policy-sharing contracts are the dominant mechanisms used to align national and regional strategies in mature decentralised contexts. Policy-sharing contracts allow common decision-making, dialogue and collective innovation. This favours information sharing, mutual understanding and generates trust across levels of government. Such contracts allow sharing of financial and political risks by unlocking potential support from third parties (e.g. financial institutions) (OECD, 2007[4]).

Policy-sharing contracts can be implemented when competencies at the subnational level are clearly defined but not yet addressed or in situations where a clear allocation of roles and responsibilities across levels of government for shared tasks is necessary. According to the types of contracts mentioned in

Box 4.3, Korea's Regional Development Investment Agreement can be defined as a policy-sharing contract. In signing the agreements, subnational governments play a leading role in setting goals (creating jobs, bolstering industries, promoting cultural assets and tourism, etc.) and establishing concrete plans while the central government supports them by providing consulting and other assistance. Under the agreement system, subnational governments are given a more active role than before, even equal status with the central government. Moreover, unlike delegation contracts that require separate legal grounds, the agreement system can implement the projects agreed upon between central ministries and subnational authorities solely based on the horizontal contracts with the two parties positioned on an equal footing. The agreement system fits the nature of policy sharing in that details are discussed and adjusted to co-ordinate their interests in the agreement-signing process.

- In Canada, the Vancouver Agreement (VA) involved all three levels of government: the Government of Canada (central level), the Government of British Columbia (intermediate tier) and the city of Vancouver (municipal level). The initial agreement was signed in 2000 and renewed in 2005 until 2010. The Tri-partite Urban Development Agreement aimed to address the challenging economic, social and health conditions in the Downtown Eastside area of the city of Vancouver, establishing roles and responsibilities across the government of Canada, the province and the municipality. The agreement addressed issues such as public security, unemployment and crime, which were not clearly allocated amongst the three levels of the government but generated impacts on all three and citizens. The partnership constructed by the VA was one based on equality of the three participating governments, using unanimity and consensus as to its decision-making rule (OECD, 2007[4]).
- The City Deals in the Netherlands are signed between central and subnational authorities and stakeholders as part of the Dutch Urban Agenda (*Agenda Stat*). The first City Deal was signed on the subject of the development of a roadmap for the next economy, the second on climate adaptation, and others will follow on sustainable energy, healthy cities and clean technology. The Climate Adaptation City Deal was signed in 2016 between the Ministry of Infrastructure and the Environment, three regional water authorities, five cities (Dordrecht, Gouda, Rotterdam, The Hague and Zwolle) and seven other partners (research centres and companies). The aim is to create a learning environment for climate adaptation at the urban level for the next four years. In particular, it promotes innovative ideas to tackle flood risks, to foster an integrated approach between water and spatial planning, and to enhance co-operation in general.
- In Spain, the Collaboration Contracts (*Convenios de colaboración)* are co-operative agreements between the central government and the autonomous communities (ACs). They are negotiated on a sectoral basis and distributed between the different Spanish ministries. Upon signature, the central government provides earmarked funds. Contracts can be renegotiated between the parties without having to restart the process and they are published in the Official Bulletin of the central government. According to the law, each *convenio* must have a monitoring commission responsible for solving problems of interpretation and ensuring compliance with the terms of the deal. There is a wide range of examples of contracts, ranging from the transactional to the relational: several bilateral agreements have been used in the context of promoting science and technology between national and subnational governments (OECD, 2011[19]).
- In its process of decentralisation, the French central government has devolved tasks to different types of subnational authorities.[1] Part of this process is the State-Region Planning Contracts or *contrats de plan État-Région* (CPER), also mentioned in the previous section. Key to the development of these contracts is that they served as a "laboratory" to co-ordinate economic development at the regional level. As described above, regions progressively strengthened their role in interacting with sub-regional entities (*départements* and municipalities), through the negotiation of the fourth (2000-06) and fifth (2007-13) generations of CPERs. Through the CPERs, regions invested in new areas of competency, gaining experience before having them allocated by

law. Policy consistency at the regional level also improved. Typically, the fifth generation of CPERs (2007-13) allowed regions to handle matters related to economic development and transport infrastructure, previously in the hands of the state.

Takeaways for Korea

- Clarity in responsibilities (including sub-functions and major tasks) tailored to local circumstances and mutually acceptable and agreeable to all orders of government should be striven for when it comes to decentralisation. This means responsibilities should be explicit, mutually understood and clear for all actors, including citizens.
- Contracts across levels of government represent a practical and flexible option for co-ordination across levels of government, which allow for roles and responsibilities to be established without changing institutions. They can also build trust between parties and enable experimenting between top-down and bottom-up approaches:
  - Delegation contracts allow an efficient implementation of tasks at the local level but require mature decentralisation systems and expertise of the subnational government.
  - To address overlaps in competencies or when these are unclear because of newly arising needs a policy-sharing contract can favour mutual understanding and action. They also allow sharing of financial risks such as in the example for the Regional Development Investment Agreements.
- Consultation fora and other forms of dialogue can be an additional tool to foster co-operation across levels of government. Ad hoc committees have the advantage to address challenges as they arise while standing commissions and intergovernmental consultation boards are important to create a culture of regular co-operation and communication. It is important to avoid multiplying co-ordination mechanisms with no clear roles or large transaction costs.

Capacity building at the regional and local levels

Building sufficient administrative, institutional, strategic and financial management capacities for the subnational level to carry out the designated functions is essential for the success of the decentralisation process. These capacities ensure that subnational governments can undertake the designated responsibilities in an efficient, fair, accountable, incorruptible and responsive manner that create and sustain public value. Moreover, they are especially critical for the development and implementation of regional development strategies that require substantial citizen input and co-ordination across and beyond governments (OECD, 2019[1]). If decentralisation processes move too fast, subnational administration often lags behind in its ability to plan strategically, procure necessary contracts, invest in infrastructure, oversee service delivery and engage in performance monitoring. From a regional development perspective, lacking capacity can increase regional inequalities if regions with existing competencies are ready to take on new tasks more easily while those that are weaker might be falling further behind.

Especially in rural regions, attention has to be paid to the fact that government capacities might not be the same as in urban contexts or can take longer to build. In a 2015 consultation of subnational governments by the OECD and European Committee of the Regions, more than half of the respondents (56%) stated they lack adequate expertise on infrastructure. These results were particularly apparent in small municipalities and inter-municipal structures (OECD/CoR, 2015[20]). One of the reasons why small and especially rural municipalities face challenges in building capacities is because rural labour markets are generally smaller and more specialised. Consequently, finding people with the right level of education and job experience can be more difficult or require additional training to ensure that employees are ready to take on the new tasks or provide services of the required standard. In addition, these places might offer

lower salaries and limited opportunities for career development, which makes them less attractive to talent. When devising capacity-building strategies, these local specificities need to be taken into account.

Key capacities to build include:

- *Administrative capacity*, including the ability to deliver high-quality services, decide on staffing needs, co-ordinate or co-deliver policies and programmes with other governments and stakeholders, carry out prudent fiscal and financial management and audit and evaluate own services.
- *Institutional capacity*, including having effective legislative, executive, co-ordination, audit, evaluation and citizen feedback institutions in place.
- *Strategic capacity*, including the ability to set strategic goals for outcomes considering the administrative and institutional capacity to realise those goals within the time frames.
- *Financial management capacity*, including ensuring the effective use of internal and external resources with integrity (OECD, 2019[1]).

Overall, local capacity building needs careful long-term preparation and commitment from both central and subnational government levels. All levels of government play their part in capacity building. Central governments can offer support in the form of training and financial incentives and subnational levels need to mobilise local leadership, community participation and ownership. Box 4.4 presents two examples of capacity-building efforts in decentralisation contexts from Chile and Colombia. Furthermore, the section below describes empowerment contracts as a tool for capacity building.

Box 4.4. Examples for strengthening the subnational capacity

The Academia de Capacitación Municipal y Regional was introduced in 2007 in Chile to strengthen human resources in municipalities and regional governments through free training. The training is provided via classroom training as well as through semi-attendance and fully online classes. The academy also functions as a technical reference, providing knowledge and skills across varying territorial situations. Over time, it has developed co-operation with academic centres around the country to provide training in different locations. In 2014, the programme was supplemented by a fund that finances technical and professional studies for municipal personnel. Beneficiaries are required to work in their municipality for the same time they have taken to earn the degree.

As part of the Colombian “Strengthening new heads of subnational governments” strategy, the Department for National Planning developed a toolkit called KiTerritorial to support local governments in formulating their regional development plans. The toolkit covers four dimensions:

1. *Diagnosis*: Compiles information and analysis of the main enablers and barriers for the development of the region.
2. *Strategy*: This dimension focuses on identifying and formulating different objectives, indicators and targets
3. *Investment planning*: Identifies financial resources available to carry out programmes defined in the strategy. The first step is to analyse the financial situation of the municipality and the efforts needed to generate own resources and articulate effectively all the existing financing sources.
4. *Monitoring and evaluation*: Consist of reviewing whether a regional development plan is suitable for monitoring and evaluation. Here the municipality should define responsibilities, outputs and outcomes.

5. In addition to the toolkit, the Department of National Planning also *measures the institutional capacity of municipalities* in relation to: effectiveness, efficiency, compliance with legal requirements and management. Indices are published annually, contributing to improving accountability to citizens.

Source: OECD (2016[21]), *Making the Most of Public Investment in Colombia: Working Effectively across Levels of Government*, https://dx.doi.org/10.1787/9789264265288-en; OECD (2017[22]), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, https://dx.doi.org/10.1787/9789264279049-en.

Empowerment contracts – A tool to build capacities

During the early stages of decentralisation, contracts can help subnational authorities to develop new capacities and gain greater autonomy in dealing with regional development policies. So-called "empowerment contracts" serve as a tool for transferring responsibilities to subnational governments while gradually building capacities for policy implementation. They allow subnational governments (e.g. regions) to acquire in the middle-long run the necessary capacities to develop their own strategy and co-ordinate with lower levels of government (e.g. municipalities) or private actors. Contracts contribute to the building of local capacity by valorising the role of local decision-makers in targeting initiatives and using untapped potential. Central governments can include specific incentives as conditions of their signature, consisting in partnering with private actors, involving neighbouring local governments or adopting specific regulations, etc. (Charbit and Romano, 2017[2]).

Empowerment contracts may concern all regions lacking in expertise at the early stages of decentralisation or "regionalisation" processes:

- In France, State-Regions Contracts *(contrat de plan État-Région*, CPER) initially aimed at building regional capacities, as part of the regionalisation process. The first generation of contracts was launched in 1984. Contracts resulted from long negotiations between elected regional (and local) authorities and the regional *préfet*, representing the central government and its different ministries at the regional level. In practice, parties agreed upon objectives, implementation and funding of specific tasks. Contracts could also imply financial transfers from central to local governments. In 20 years of implementation, from the first to the fifth generation of State-Region Contracts, regions have gradually replaced the central government in local development planning and regional decision-making has progressively included new fields, larger budgets and new actors (Charbit and Romano, 2017[2]).
- In Poland, regional contracts have been negotiated and agreed between the central state (the Ministry for Regional Development) and regional governments. They aimed at being a learning device for regional authorities to deal with EU structural funds in a multi-level governance setting. Regions received a budget for investment in a range of policy fields, such as road infrastructure, healthcare, educational facilities, sports infrastructure, and tourist and leisure/cultural facilities (OECD, 2008[23]; 2013[15]; 2013[24]). Later on, regional contracts became "territorial" ones for the implementation of the National Regional Development Strategy for 2010-20. They aim to create synergies between all regional policy instruments having a territorial dimension (OECD, 2014[12]).
- The Italian Government in 2016 launched the Pacts for the South. A total of 16 pacts have been signed for eight regions (Abruzzo, Apulia, Basilicata, Calabria, Campania, Molise, Sardinia and Sicily), seven metropolitan cities (Bari, Catania, Cagliari, Messina, Naples, Palermo, Reggio Calabria) and for the city of Taranto (Institutional Development Agreement – *Contratto Istituzionale di Sviluppo*, CIS – of Taranto). Contracts aim to achieve economic growth, employment and environmental sustainability goals. The Pacts for the South define priorities, actions for implementation and responsibilities of parties. A steering committee (*Cabina di regia*) has been

created for supporting the proper management of national and European funds (Cohesion Funds 2014-20) and providing technical support. The Agency for Territorial Cohesion is responsible for co-ordinating and monitoring the pact's implementation. Progress should be verified every six months. Sanctions are foreseen, should objectives not be achieved.

- *Contratos Plans* in Colombia are tools for territorial development and help selected lagging areas in improving services (education, healthcare and water sanitation) and infrastructure, such as road connectivity. Interventions are focused on the poorest areas within a *departamento* (equivalent to regions) (OECD, 2014[25]). These are multi-year binding agreements between the central government and either *departamentos*, provinces or groups of municipalities that have to comply with the National Development Plan. The National Planning Department (DNP) co-ordinates the ministerial work for contract implementation. The *Contrato Plan* requires *departamentos* to co-finance policy intervention. On average, 70% is financed by the national government and 30% by the *departamentos*. To date, seven pilot tests have been carried out in nine *departamentos*. In 2012-13, they were introduced in 17 areas of intervention for an overall population of 6 million people in different parts of the territory (OECD, 2014[26]).
- The Brazilian "federal pacts" (*Pactos Federativos*) are the result of a negotiation process between states and municipalities. Federal authorities first engage state governors through "road trips" (e.g. *caravana de educação, caravana de saúde*) designed to illustrate the objective of the contracts for different sectors, such as healthcare and education. Once the state adheres to the initiative, financial incentives might be available. An example is the Pact for Life (*Pacto pela Vida*) launched in 2008 by the Ministry of Health. It defined 11 priorities concerning healthcare for the elderly, reduction of infant and maternal mortality rates, strengthening basic healthcare, etc. Each objective was associated with specific actions and budgets (OECD, 2013[27]).
- The current regionalisation reform in Morocco is implementing a contractual approach to enhance capacities of elected regional governments to implement the policies of their competencies. The Ministry of the Interior plays a kind of intermediary role between regions and the different line ministries to help them to agree to delegate more tasks to regions according to the constitution. Priorities for projects to be "contractualised" are related to the regional development plans that regions are committed to producing to indicate their regional development ambition. The instrument of such delegation is the Programme Contract State-Region, with a key challenge: to improve horizontal co-ordination among line ministries which tend to work in silos (OECD, forthcoming[28]).

Takeaways for Korea

- Capacity development should be tailored to local needs and characteristics of local governments, following a careful assessment of systemic needs. When developing capacities, all four types of capacities need to be considered: i) administrative capacity; ii) institutional capacity; iii) strategic capacity; and iv) financial management capacity. As capacities are developed and might change over time, it is important to ensure ongoing monitoring and adaptation of support. With regard to future decentralisation, consideration may be given towards pursuing an asymmetrical, context-dependent approach that adjusts to territorial capacity, at least in the near term.
- In the past, Korea's central government was largely oriented towards providing technical assistance for regional development. Nowadays, efforts to build capacities are more evident, for instance through expert centres that are part of the Innovation Cities programme and the Regional Development Investment Agreement that has a team of experts, responsible for devising detailed plans, operating and managing them, and monitoring and assessing their progress and performance. Within these programmes, it is important, that they pursue systemic support for the building of capacities. Research has shown that merely delivering assistance to communities, for instance through borrowing and contracting capacities from experts such as higher levels of

government, private sector or other subnational governments, is often not sufficient to ensure long-term development.

- As capacity building takes time, programmes should be designed with a long-term perspective, including sustained resources and commitment to support from all government levels. The creation of special public agencies to support specific aspects of capacity building such as private-public partnerships, financial management and regional development can help to make needed expertise accessible to multiple jurisdictions.
- Empowerment contracts, as per examples above, can be an interesting tool to use in order to build subnational capacities. Empowerment contracts should be set within the context of a central government vision for regional development. The role of the central government would consist of providing relevant guidelines through the existence of a national strategy for regional development; ensuring consistency with regional strategies to support the learning process of subnational governments gradually gaining autonomy in decision-making; properly engaging regions in the priority setting intermediate steps of evaluation and adaptation strategies could help remove unnecessary constraints in contract implementation.

Horizontal co-operation for regional development

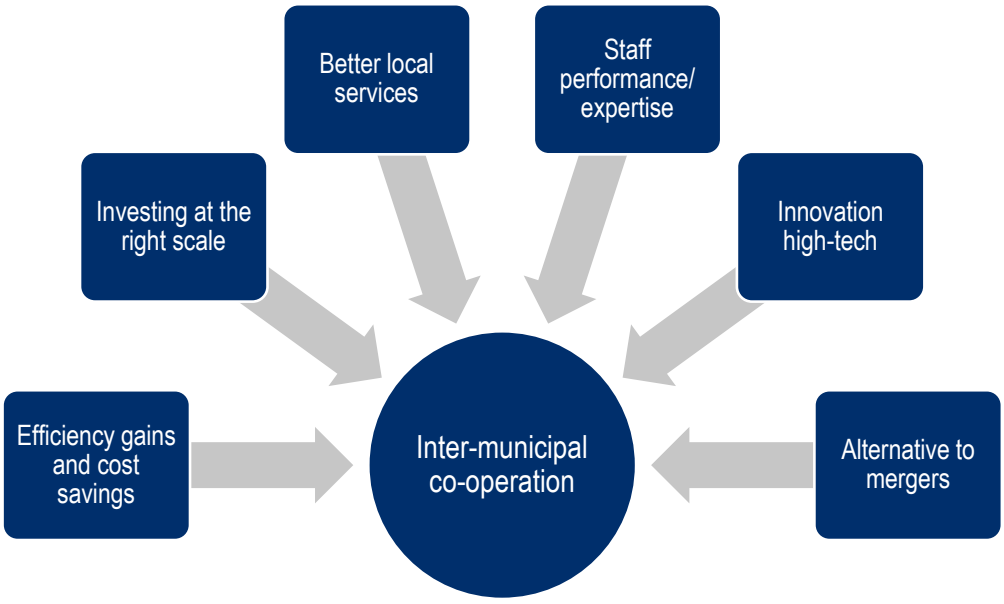
In a decentralisation context, policy co-ordination is a key issue for all levels of government. Horizontal co-ordination amongst regional and local jurisdictions is equally important as horizontal co-ordination at the central government level. Policy interventions that target policy sectors or administrative areas in silos may miss opportunities to unlock synergies and meet broad policy objectives for rural regions and countries. Thus, promoting better co-ordination between different types of regions and stakeholders is fundamental to attain sustainable and effective policy outcomes.

In Korea, intergovernmental co-operation authorities have been established at the local level but little use has been made of them thus far (OECD, 2019[1]). In the light of pending decentralisation, it may be expected that the need for horizontal co-operation will rise. This section provides an overview of possible ways to foster horizontal co-ordination.

If co-operation is missing, fragmentation occurs and possibilities to make use of economies of scale and other synergies between neighbouring jurisdictions are easily lost. This is particularly apparent when administrative boundaries do not relate to the functional and economic flows across land (Charbit and Michalun, 2009[29]; OECD, 2017[22]). For instance, changes in demand for land use that come with economic development including tourism, agriculture or renewable energy, do not start or stop at administrative boundaries. Consequently, investments in infrastructure require close co-ordination amongst subnational government entities. Corresponding co-ordination bodies can also help to align interests and timing when it comes to implementing policies at the horizontal level. A full list of drivers for inter-municipal co-operation can be found in Figure 4.2.

Horizontal-co-ordination bodies are also important for building capacities and sharing good practices and overcoming communication challenges. For instance, co-ordinating bodies can help to represent the interests of the local and regional levels to national-level decision-makers. In Norway, the Association of Local and Regional Authorities plays a role as a national members association for municipalities, counties and public enterprises under municipal or county ownership. There are ongoing contacts between central and local government authorities and the association provides a forum to discuss the framework for the distribution of revenues in relation to the tasks carried out by local governments, the financial situation of local government and efficiency measures (Charbit and Michalun, 2009[29]).

Figure 4.2. Drivers for inter-municipal co-operation in the OECD



Source: OECD (2019[1]), "Making decentralisation work: A handbook for policy-makershttps://dx.doi.org/10.1787/dd49116c-en.

Today, horizontal co-ordinating bodies and inter-municipal co-operation is widespread and covers a large variety of diverse arrangements and mechanisms. They include co-ordinated investment strategies, trans-border co-operation, platforms for dialogue and co-operation as well as single or multi-purpose co-operative agreements/contracts (e.g. shared services arrangements or shared programmes, as well as supra-municipal authorities with delegated functions (OECD, 2017[11])). The following examples of horizontal co-ordination are from Finland, Germany, Italy and Sweden.

Inter-municipal co-operative organisations in Sweden

The Swedish municipal federations are legal entities whose tasks and obligations are formally agreed upon by their members. These inter-municipal co-operative organisations are usually run by boards, whose members are not directly elected but instead nominated by the member municipalities. Over the years, inter-municipal collaboration among Swedish municipalities has increased steadily: in 2005, there were 80 municipal federations and, by 2011, the number of federations increased to 110 (Regeringskansliet, 2005[30]; OECD, 2017[31]). While recent figures for the number of federations are unavailable, the total spending by municipal federations in 2015 was SEK 16.5 billion, representing about 3% of total municipal spending.

Inter-municipal co-operation is practised in several service areas, the most common being rescue services, education, public transport and energy services. Inter-municipal co-operation is indeed more common among the smallest municipalities or municipalities that are in fiscal stress (Sundell, Gilljam and Lapuente, 2009[32]); municipalities with populations above-average engage in a municipal federation also, especially for information technology (IT) services.

The biggest example of a voluntary municipal federation is the Kommuinvest, which is currently the main financing institution for subnational governments and the businesses they own. Kommuninvest is a credit company jointly owned by Swedish municipalities and county councils. It was founded in 1991 because many municipalities had difficulty obtaining financing for their investments and had to pay high-interest rates on loans. Kommuninvest's municipal borrowing could be obtained less expensively and it guaranteed access to secure access to capital during periods of financial market stress. Now, approximately 90% of

Sweden's municipalities and county councils/regions are members and it is the largest lender to the subnational government sector.

Another form of inter-municipal collaboration in Sweden is the common committee (*gemensamma nämd*). In this case, one municipality agrees to take responsibility to produce a certain service or set of services for the inhabitants of a group of municipalities. Unlike the municipal federations, the common committee is not a legal entity and is therefore a less formal co-operation mechanism. The number of common committees has increased rapidly: in 2008, there were about 70 committees and in 2011 the number had more than doubled to 148 committees (OECD, 2017[31]).

Municipal co-operation in Finland – Business Joensuu

At the beginning of the 21st century, a range of smaller municipalities in North Karelia, Finland, decided to set up a joint development agency to address some pressing challenges in the local market. It includes scarcity of resources, lack of special knowledge to handle the business advisory services and competition between neighbouring municipalities. The municipalities created a functional body, called Josek, organised on the level of the region around Joensuu. In 2018, Josek transformed into Business Joensuu, as two municipalities decided to reduce the services acquired and developed business advisory services in house (keeping the access to project development and facilitation services).

Business Joensuu provides services to start-ups, enables municipal growth and foreign investors interested in the region and supports the internationalisation of local companies. In addition, Business Joensuu produces an operating environment for different industries by creating the best conditions for companies to operate in Joensuu Region.

The service areas of the Business Joensuu include:

- Business growth and development services.
- New businesses, businesses, and internationalisation services.
- Placement and attraction, marketing services.
- Space, community and event services for the science park.

Overall, the company manages 25 programmes focused on different sectors including export capacity in the region (ExportGrowth), the bioeconomy sector (Digital Forest Vitality), business digitalisation (Joensuu Smartcity, digital training) and entrepreneurship (women's entrepreneurship). It is also involved in two active EU programmes supporting the mining sector (REMIX and MIREU).

The services are typically 1-3-year-long customer-oriented development projects. They are initiated by designated industry-responsible experts who are responsible for promoting the business environment of their businesses, starting with the business needs of their companies.

The company is governed by a board of directors that is selected by the following institutions:

- The City Council of Joensuu.
- The University of Eastern Finland.
- Joensuu University Support Foundation.
- The North Karelia Educational Council Group Riveria.
- The private sector.
- National politicians.

Regional growth poles in Brandenburg, Germany

In the early 2000s, the region of Brandenburg in Germany started gradually phasing out subsidies to the regions and moved to a model identifying 15 core regional growth areas as part of their regional development strategy. These "growth poles" received preferential financing but are required to:

- Display endogenous growth potential.
- Design integrated development strategies which are harnessed to the region's overall development strategy.
- Spread some of their benefits to other territories.

This policy has been an important element, shifting the mentality in the region and resulting in a new spirit of both competitiveness and collaboration. The policy deliberately targeted enough growth poles to create a diverse development pattern, while also inducing other areas in the region to focus on their own growth potential and also becoming growth poles. Through the programme, cities and regions were no longer recipients of support but aimed to strengthen their own efforts and contribute to change. This resulted in increased self-organisation and the creation of synergies between them and potential partners. They also started to make use of their own development potential through co-operation and networking. Overall, the growth poles have been a key element to the region becoming less dependent on subsidies and transfers and more focused on collaborative growth for development.

The Inner Areas National Strategy, Italy

Italy's Inner Areas National Strategy was launched in 2014 to cope with service delivery and development issues in rural areas of Italy. Inner areas are groups of municipalities characterised by their "inadequate access to essential services". The classification is measured by inner areas' access to education, healthcare and transportation. This national policy requires a multi-governance framework for co-operation among central, regional and municipal governments to ensure joint work towards a common national agenda and efficient investment distribution.

In that sense, contracts between levels of government. materialised in the Programme Framework Agreement, represent a long process of collaboration and joint work between local stakeholders, municipal associations, regional and central governments to design a local development plan.

Inner Areas comprise intermediate and remote areas covering almost 60% of the Italian territory, on which approximately 23% of the population live. This includes more than 4 000 municipalities which represent around 53% of all Italian municipalities. Similarly to Korea, these areas of Italy are experiencing a demographic decline, yet are home to many natural and cultural assets and resources.

The Inner Areas National Strategy aims to contribute to Italy's sustainable development by recovering its marginalised territories and improving its inhabitants' well-being and quality of life. The strategy seeks to foster territorial cohesion by turning differences into competitive strengths and working to overcome the urban-rural divide. In the longer term, the strategy seeks to reinforce the inner areas' demographic structure, which is usually characterised by depopulation and ageing (Lucatelli, 2016[33]).

The national strategy was designed and is implemented in a way to foster participation through an integrated approach to improve access to basic services, and business and employment opportunities. The key features of the approach are the following:

- Operationalised through two interrelated actions: i) improve access to basic services; and ii) local development projects.
- Step-by-step process (one prototype per region is first selected to evaluate the potential success of the strategy and trigger feedback and learning among participants).

- Collaboration and multi-level governance (state, regions, municipalities and inter-municipal partnerships) to foster a participatory approach to local development.
- Multiple funding sources (EAFRD, ERDF and national funds) to support integrated actions (Galeota, 2015[34]).

Access to services and local development

The first aim the strategy pursues is adjusting the selected inner areas inhabitants' access to essential services. Education, health and transport play a fundamental role as a precondition for development; thus, the provision of these services will restore citizenship rights to marginalised populations. This implies a formal commitment from relevant central and local administrations through their respective ordinary policies and resources together with additional interventions.

The second aim of the strategy is to design and implement local development projects. These projects should increase local job creation that profits from local capital. The area-based projects will concentrate on a number of selected fields or development factors that have been established in the national strategy such as: valorisation of natural and cultural assets, agricultural business and production; renewable energy supply chains and energy saving; handicraft and local knowledge (Dipartamento per le Politiche di Cohesione[35]).

Step-by-step process towards the Programme Framework Agreement

The signature of the Programme Framework Agreement is only the result of a long process of analysis, negotiation and debate among local and national stakeholders. Project areas are selected through a standardised public proceeding that involves desk and field analyses of pre-selected areas.

Regional governments together with the Inner Areas Technical Committee conduct the desk analysis. Pre-selected areas are analysed with respect to a series of demographic and socio-economic parameters (utilised agricultural area, deforestation, hydrological risk, population losses, entrepreneurship, tourism and cultural heritage, quality of education and health services among others). Remote and ultra-remote areas are prioritised for pre-selection; similarly, those areas that show critical values in the demographic, economic, social and environmental indicators. The desk analysis identifies a maximum of five pre-selected areas per region to take part in the strategy.

Then, the selection process is completed with the technical committee's field visit to pre-selected areas where they meet with local authorities and relevant stakeholders (mayors, experts, school managers, consumer associations, etc.) (Dipartamento per le Politiche di Cohesione[35]). During the field visit, the technical committee, in collaboration with the regional and municipal authorities, organises focus groups on local development subjects. The sessions are organised in line with the stated objectives of the strategy (local development, healthcare, education and transport services) and 16 speakers are invited (3 local speakers and 1 expert from the relevant ministry for each session). National authorities share indicators with local communities. Generally speaking, local stakeholders are not used to discussing daily problems through data or indicators and the authorities' analysis of local specificities can become a topic for debate. Debate at this stage fosters a common understanding of long-term development objectives between local and central actors (Barca, 2016[36]).

Each area has to produce three documents (initial draft of the local development strategy, preliminary strategy, i.e. extended draft and final local strategy) before the complete package of interventions is formally sanctioned through a Programme Framework Agreement (*Accordo di Programma Quadro*) (Faggian, 2017[37]). The drafting process also involves local communities and encourages local ownership of the development strategy and strengthens the place-based approach. Each draft produced by the local authorities benefits from the comments and feedback from national authorities, thus becoming a collaborative process and represents the joint work among levels of government.

In terms of improving service provision in the inner areas, local strategies usually consider the following:

- *Education*: Reorganising educational facilities by replacing ancient and inefficient structures in individual municipalities with new higher quality facilities in barycentric areas; rethinking the high school system towards the strengthening of technical and vocational education related to local potential; reducing teacher turnover rates in the areas; reorganising the school transport system; and ensuring school networking.
- *Healthcare*: Reorganising healthcare services to ensure rapid emergency response and accessible diagnostic facilities for patients; centralising care services in larger hospitals and ensuring higher quality assistance; improving territorial care networks; promoting doctor associations; and innovating provision of services through "telehealth" services.
- *Mobility*: Reorganising public transport services, avoiding bus/train routes overlap; redesigning transport route options by considering the mobility needs of different users (commuters, students, tourists); encouraging negotiation between specific consumers of mobility (school and hospital managers) for better routing decisions; promoting flexible solutions for off-peak hours and weak mobility consumers (e.g. on-demand minibus service); and supporting on-road cycling, planning new bike lanes and reducing administrative burdens.

The local development part of the strategies tends to focus on three themes common to many rural areas in Italy: tourism, cultural goods/heritage and agriculture and food industry – which in many instances are interrelated. In order to increase tourism productivity in the Italian inner areas, two strategies have been identified: i) investment in tangible assets such as roads, hotels and other tourism facilities; and ii) investment in intangible assets such as education, local skills and network co-ordination (Faggian, 2017[37]).

The intangible assets are particularly important for the inner areas as the creativity poured into "new forms of tourism" will be crucial to differentiate themselves and successfully compete. These new forms of tourism usually refer to "experiential" or "immersive" tourism that is linked to cultural traditions or local industries, e.g. learning manual activities from local craftsmen, nature, food and drink and cultural-heritage-related tourism. Differentiation is paramount for both mature (e.g. Alta Vatellina) and new (e.g. Basso Sangro-Trigno) tourist destinations. Some inner area strategies explicitly state that they want to create a network (critical mass) among tourism operators (e.g. Alta Irpinia) to promote destinations with a common theme, for example the same food product in several municipalities. These kinds of strategies rely on the interconnection of tourism and food production/agriculture (Faggian, 2017[37]).

Multi-level governance

The Inner Areas Strategy is a national intervention where partnerships among different levels of government – central, regional and municipal associations – is essential. It encourages the co-ordination of national and local actions by jointly working together towards a common national agenda. The whole process from the selection of the local development projects to their implementation is meant to be based on a participatory approach that builds on heated, open and informed debate between different levels of government.

The central government´s participation in the strategy is organised through the Inner Areas Technical Committee. Its function is to support municipalities in their association process, thus providing essential services at lower management costs. This national-level team tends to be a proactive force that takes part in all the stages of the strategy building on the field. It provides ground information, promotes work methods and often acts as a "destabilising force" *vis-à-vis* the local elite (Barca, 2016[36]).

Regional government efforts are in charge, together with the central government, of identifying and pre-selecting inner areas able to take part in the strategy through a standardised method based on qualitative and quantitative analysis. They also provide support for the creation of a partnership between

central and local institutional bodies as well as foster understanding of local contexts. In addition, they provide the needed information and draw funding from several axes for the Inner Areas National Strategy.

Responsibility for the implementation of the development project is entrusted to the municipal associations which select a leader among their ranks.

The process for the design of projects within the Inner Areas National Strategy is a bottom-up approach that relies heavily on the active participation of local actors. However, it also combines elements from a top-down approach like the selection of areas, organisation of co-ordination meetings, developing strategies and offering guidance (Faggian, 2017[37]). The results from this top-down-bottom-up approach are materialised in the form of a Programme Framework Agreement (*Accordo di Programma Quadro*), which is a contract among the municipal association, regional and central governments.

Multiple funding sources

Financial contributions to fund the Inner Areas National Strategy come from the national budget and regional EU structural funds. The resources allocated to enhancing the inner areas' access to services or resources for "rights" (education, healthcare and mobility) come from the national budget, more specifically from the Stability Law. Each one of these areas is allocated approximately EUR 4 million, assigned to experimental actions which are made permanent if they prove successful. The financial resources for "growth" or for local development projects come from regional EU structural funds for 2014-20 and on average are three times as much as national funds (Barca, 2016[36]; Dipartamento per le Politiche di Cohesione, n.d.[35]).

Challenges to the Inner Areas National Strategy

It is to be acknowledged that the Inner Areas National Strategy is an innovative place-based approach. However, some challenges should be taken into account for its successful implementation and future selection of projects. The weakness of local institutions is a challenge; and certainly, the quality of local institutions is an important element for the success of a project. That is why a purely bottom-up approach is often unsatisfactory and a more balanced top-down/bottom-up approach is needed.

Although the implementation of the strategy has just started in a few areas, evaluation of the progress and results will be essential to understand its strengths and weaknesses. Evaluation should not be overlooked or underfunded. Instead, joint work between academics and policymakers should be encouraged to produce an insightful evaluation of the strategy.

Another challenge the Inner Areas National Strategy will be the integration of migrants. At the moment, 8.3% of the total population of Italy are immigrants and most of them are relatively young (40% under 29 years of age). Between 2011-15, the average yearly increase in the inflow of migrants was 4.9% (OECD, 2018[38]). This population should be considered in inner areas' development strategies in order to harness their potential contribution to the local economy.

Takeaways for Korea

- Horizontal co-operation allows subnational governments to more efficiently deliver public services and achieve shared priorities by pooling resources and talent. For smaller regions that face the largest capacity constraints, such agreements hold great potential.
- Strong data and measurement are an important factor in both identifying areas where horizontal co-operation may help and in assessing results in a way that bolsters commitment and ongoing participation. The central government has a key role to play in this area.

- Horizontal co-operation agreements need not be restricted to geographically neighbouring jurisdictions but can also incorporate sectoral organisations and other groups with aligned interests, needs and challenges.

Public engagement – How to promote and strengthen it

Participatory governance (at the subnational level) refers to approaches to local public governance that facilitate the participation and engagement of private citizens and other stakeholders (e.g. private for-profit, private non-profit, interest-based or hope/faith-based networks, self-help groups, etc.) in deliberations on public policy choices and the delivery of local public services in partnership or in competition with the formal public sector (OECD, 2019[1]).

The active engagement of citizens within policymaking is a key ingredient to ensure sustainability and local ownership of rural policies. Greater involvement of local actors in policy design and implementation leads to a more transparent, inclusive, legitimate and accountable policymaking process, which in turn strengthens trust in government and in policy interventions. Research has found the higher the rate of public interest group participation, the higher their reported satisfaction, which can ultimately unlock opportunities of direct and representative democratic practices (OECD, 2017[39]). Such stakeholder engagement has increasingly gained relevance since new technologies, fiscal consolidation efforts and socio-political changes are pressing governments to become partners rather than providers in policy implementation (OECD, 2020[40]).

The new Rural Development Policy Framework, *Rural Well-being: Geography of Opportunities*, acknowledges that rural communities are well equipped to identify their local development opportunities. A “bottom-up” approach for rural policy allows rural dwellers to decide and collaborate to implement their own development future. Rural dwellers not only have a better knowledge of local conditions, the participation and involvement of citizens can also address the feeling of not being listened to or being left behind (OECD, 2020[40]).

Countries and regions have adopted different approaches to improving participatory governance. Examples include open government methods, including open and competitive procurement, performance budgeting, citizen right to know and citizen-centric or participatory governance such as participatory budgeting, social audits and direct democracy provisions (OECD, 2019[1]). Modalities of engagement can vary from basic one-way communication, the weakest form of engagement, to full coproduction and codelivery of policies (OECD, 2016[41]). Some successful examples to engage citizens in policy design and implementation at the local level include:

- Participative and open budgeting where citizens can propose projects to be implemented, vote among several proposed projects or prioritise investments. One example of this mechanism occurs in Paris, where the city – since 2014 – gives its citizens the opportunity to decide on the use of 5% of its investment budget (2014-20) and propose projects that are then voted on (OECD, 2016[42]).
- Co-production of social service delivery. In the water sector, for instance, many utilities rely on governance or advisory boards where stakeholders have a say in strategic orientations, or in which different actors take collective decisions. As an example, the public water utility in Grenoble, France, has engaged with consumer associations regarding setting water tariffs for the last 20 years (OECD, 2016[42]).
- Many OECD regions have also established fora or policy summits where citizens can propose and define policy priorities and strategies. Some of these platforms combine elected officials, businesses, social partners and other relevant stakeholders (universities), which contribute to promoting regional development strategies and oversee implementation. Finland’s local

governments, for instance, engage citizens through a variety of fora to seek input on service delivery improvements (OECD, 2019[1]).

Digitalisation and technological advancements also open up opportunities for a new form of citizen engagement in policymaking and implementation. The widespread use of IT, social media and open data allow for new methods to be developed. In rural areas, this might also overcome certain limitations due to long distances, yet the required digital infrastructure and skills need to be in place to allow for good results. For example, in the context of social discontent in France in 2019 (strikes linked to the "Gilets Jaunes" movement), the French government developed a digital platform to collect opinions and recommendations from the population. The platform collected around 1.9 million comments online, which were classified in themes and available to the citizens through open data mechanisms. Another example comes from Colombia, where the Ministry of IT and Communications established the Centre for Digital Public Innovation, aiming to strengthen the public innovation ecosystem to solve complex problems within the public administration (OECD, 2018[43]). The innovation centre provides training courses to increase government capacity, a laboratory for solutions to public challenges, a knowledge agency for research and a collaboration platform to support community and partnerships.

Yet, there are also drawbacks to broader public participation that need to be considered when setting up these processes. Key pitfalls to avoid include:

- Abuse of power, by masking decision-making as participatory while using public funds to serve the interest of small groups of powerful people, including for participatory budgeting. To avoid this, processes must consider political structures including formal and informal power relations.
- Consultation "fatigue" can occur when citizens are asked to participate as part of a box-ticking exercise that does not take their views into consideration and provides limited control over and insights into outcomes. If citizens do not feel their opinions are actually reflected, they are unlikely to take part in future processes. Hence, consultations need to be meaningful and ensure that participants are openly informed about results (OECD, 2017[22]).
- Participatory processes should be guided by local councils or other locally elected bodies. As elected bodies, they can voice citizen choices and preferences and provide oversight on behalf of the voters. Approaches that bypass local councils may risk weakening democratic governance and accountability at the local level (OECD, 2019[1]).

Takeaways for Korea

- To reap the benefits of greater involvement of local actors in policy design and implementation, care must be taken when designing participatory processes, especially in legal and regulatory frameworks, as these can impose costs and may result in pro forma or "box-checking" exercises.
- To provide incentives for participation and to ensure good quality, government grants can be adjusted based on meaningful citizens involvement in outputs. Tournament-based output grants and recognition awards are another tool to encourage citizen engagement from a higher-order government level (OECD, 2019[1]).
- Digital tools can provide an opportunity to facilitate participatory processes, especially in rural areas. Pilot projects can quickly show advantages and challenges.

Subnational fiscal autonomy and effective public investment

A consequence of decentralisation is that subnational governments grow larger – they acquire new competencies and they spend more to deliver on the enlarged set of tasks that fall within their responsibilities. Consequently, they also need additional resources. To act with autonomy, subnational governments require sources of funding that are own-source, or which are unconditional, else they will be autonomous in name only. If powers are decentralised yet the funding to deliver them remains at the

purview of the central government, then a fiscal imbalance results that limits the potential benefits of the decentralisation strategy; indeed, without fiscal decentralisation, political and administrative decentralisation are meaningless.

Yet the fiscal dimension is very often the weak or even missing link of decentralisation. One of the most frequent challenges, particularly in countries at an early stage of decentralisation, is the misalignment between responsibilities allocated to subnational governments and the resources available to them. Unfunded or underfunded mandates – where subnational governments are responsible for providing services or managing policies but without the requisite resources – are common (OECD, 2019[1]; OECD, 2017[44]).

Access to finance should be consistent with functional responsibilities and the division of financing responsibilities should ensure that there are no unfunded or underfunded assignments or mandates. The formulae for determining central government transfers, grants and earmarked funds from the centre to lower levels of government should be transparent and nondiscretionary and should ensure that all the tasks the subnational government has been asked to deliver are sufficiently funded. This funding should go beyond grants and shared tax revenues – to make the most of the potential benefits of decentralisation, subnational governments also need their own-source revenues to have a balanced basket of revenues.

Beyond the fiscal autonomy needed for the day-to-day operations of government and service delivery, investment presents its own challenges. Public investment projects, particularly for infrastructure, often involve funding coming from multiple levels of government and while local governments are often the best-placed to determine what investment is needed, it is often the resources of the national government that are required to pay for them. In addition, many investment projects involve multiple subnational jurisdictions, for example, a rail line that crosses administrative boundaries and so necessitating national co-ordination (OECD, 2013[45]).

To help countries address the challenges associated with public investment, the OECD developed a set of Principles included in the Council Recommendation on Effective Public Investment across Levels of Government. The purpose of these principles is to help governments at all levels assess the strengths and weaknesses of their public investment capacity using a whole-of-government approach and to set priorities for improvement. The 12 principles are grouped into three pillars, which represent systemic multi-level governance challenges for public investment:

- *Co-ordination challenges*: Cross-sector, cross-jurisdictional and intergovernmental co-ordination are necessary but difficult in practice. Moreover, the constellation of actors involved in public investment is large and their interests may need to be aligned.
- *Capacity challenges*: Where the capacities to design and implement investment strategies are weak, policies may fail to achieve their objectives. Evidence suggests the public investment and growth outcomes are correlated to the quality of government, including at the subnational level.
- *Challenges in framework conditions*: Good practices in budgeting, procurement and regulatory quality are integral to successful investment but not always robust or consistent across levels of government.

The first pillar focuses on co-ordination, which tends to include complex interactions between public and private actors. This complexity can generate gaps and duplication in investment between levels of government.

The second pillar of the principles focuses on core capacities for public investment, notably at the subnational level, and the need to promote policy learning at all levels of government. Co-ordination is a necessary condition but not sufficient to achieve successful public investments. If capacities to design and implement investment strategies are weak, co-ordination mechanisms will not be sufficient to produce good outcomes.

The third pillar of the principles provides a macro perspective on the key framework governance conditions for public investment. Strong framework conditions are prerequisites for good investments. If framework conditions are weak, efforts to strengthen co-ordination and (subnational) capacities may miss part of their targets.

The OECD Recommendation on Effective Public Investment Across Levels of Government highlight the key role of the central government, setting the general legal framework to enable sound relations, vertically among the different levels of government and horizontally among the different national sectoral policies and among the different regions or municipalities.

This legal framework should target inter-regional disparities and regulate fair and effective fiscal relations among the different levels of government. Central governments may help local governments carry out their new mandates by offering technical support, co-ordinating the creation of economies of scale in the production of some local public goods and services and, perhaps most importantly, monitoring and evaluating the performance of subnational governments.

Takeaways for Korea

- The government of Korea is decentralising both an array of tasks and new fiscal capacity to its subnational governments, with a shift in fiscal authority from 8:2 to 7:3. While it has been decided, that there will be compensation for the cost of delivering these tasks (for at least three years), the transfer cost has not been finally assessed as this report is written. The Special Committee on Assessing Transfer Costs will be formed in the second half of 2020 to assess the cost of delivering the transferred tasks. The government will also develop measures to provide the necessary budget to cover the costs. This will be crucial to ensure there are no unfunded or underfunded assignments or mandates. To ensure meaningful autonomy, the decentralisation of tasks must be accompanied by the fiscal authority that goes beyond additional grants or shared taxes. Subnational governments must develop their own-source revenues and; over time; achieve a balanced basket of revenue sources that provides them predictability and the capacity to mitigate shocks.
- A key element going forward will be how to more effectively engage the private sector and other non-governmental actors throughout the policy and investment cycle. This will help to build continuity in policies, and capability at a subnational level.
- Sound co-ordination of investment between levels of government and across subnational governments will become more important as decentralisation progresses. Korea's new policy on developing contracts across levels of government can help with co-ordinating more integrated public investments.

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Note

[1] These three types constitute:

1. *Regions (régions) – Large subnational authorities with an average population of 2.5 million inhabitants. Each region is governed by an elected regional council (conseil regional). The central government is represented by a regional prefect in parallel to the elected regional council.*
2. Departments (*départements*): They are the mid-sized subnational authorities. The average population of a department is approximately 300 000 inhabitants, ranging from 2.1 million (Paris) to 73 500 (Lozère). The department is run by a council (*conseil général*) consisting of elected officials. In similar fashion to the regions, the central government is represented by the prefect and by deconcentrated ministerial services. Both regions and departments have responsibilities regarding: economic development; roads and large-scale infrastructure; social services, solidary and housing; and education and culture. More specifically, the region's responsibilities can be described as follows: regional planning, co-ordinating economic development, vocational training, and high schools.
3. Municipalities (*communes*): These are the lowest level of subnational authorities. There are 36 500 municipalities in France, of which 89% have less than 2 000 inhabitants. Each municipality is governed by an elected municipal council (*conseil municipal*). Municipalities are responsible for urban planning, land use controls and security (municipal police).

5 Rural-urban linkages and innovation cities

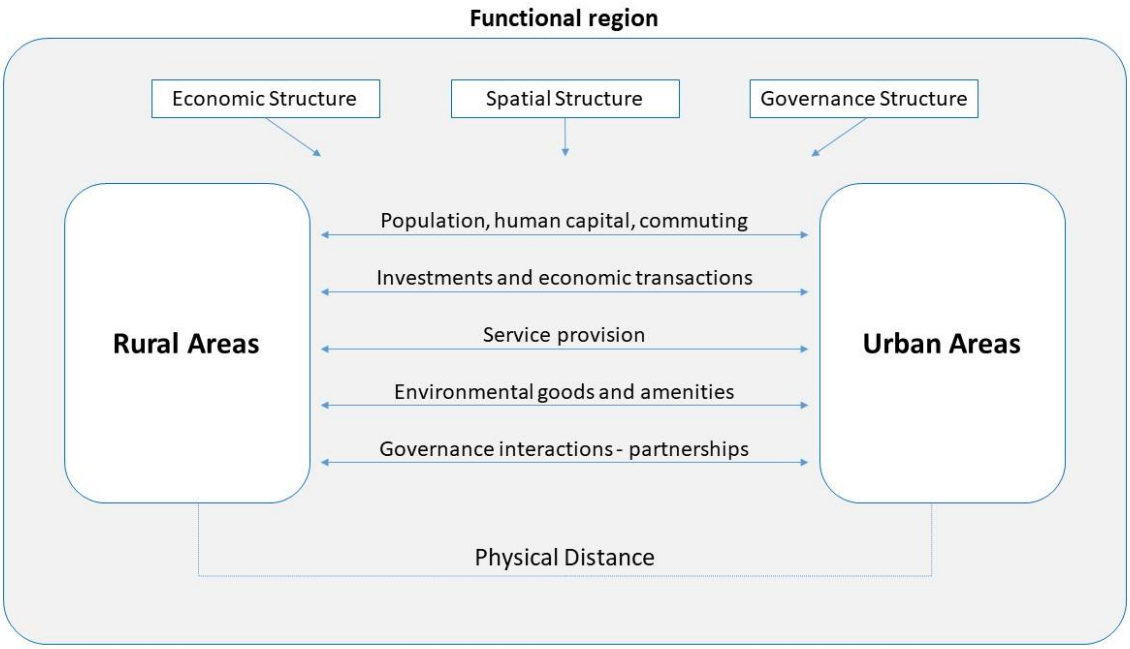
This chapter starts by summarising the OECD framework on rural-urban linkages followed by a description of Korea's innovation cities. It then draws on four examples of linkage development pertinent to the objectives and continued growth of the innovation cities from OECD countries. These examples include: Nuremberg, Germany; Brest-Pays Centre-Ouest Bretagne, France; Southern Ontario, Canada; and finally Scotland from the United Kingdom.

Rural-urban linkages: What are they and why do they matter?

While rural and urban areas are often separated by traditional administrative boundaries, they are nonetheless deeply interconnected through a variety of complex relationships. These relationships stem from the differing characteristics of the rural and urban territories, enabling each to complement the other's assets and help address the other's shortcomings, potentially unlocking socio-economic benefits for both.

Rural-urban linkages exist across several dimensions including demographic, environmental and economic aspects (OECD, 2013[1]). Demographic linkages include commuters and migration patterns. This can include young people moving from rural to urban areas for educational or career opportunities, or urban retirees moving to rural areas to enjoy a slower pace of life, a greater sense of community and proximity to nature. Environmental linkages can include shared assets, such as water, and amenities for public enjoyment, such as natural beauty spots. Economic linkages include a wide variety of relationships, including trade and supply-chain links between firms across the rural-urban continuum, investments and relationships around research and innovation that support the development and commercialisation of new products and services.

Figure 5.1. Linkages between rural and urban areas within functional regions



Source: OECD (2013[1]), *Rural-Urban Partnerships: An Integrated Approach to Economic Development*, https://dx.doi.org/10.1787/9789264204812-en.

Linkages tend to be stronger in rural areas that are close to cities. Compared to other OECD counties, Korea is quite densely populated and has many rural regions that have a functional urban area (FUA) or are also close to a small- or medium-sized city. Firms and workers in these rural areas benefit from good access to markets, services and agglomeration of talent present in urban areas, benefits often referred to as "borrowed" agglomeration effects. Rural areas close to cities often enjoy environmental amenities and lower land and housing costs than cities, making them both attractive places to live and in which businesses can invest. The commuting zones around urban areas in Korea have seen their populations

grow much more rapidly than the urban centres themselves, with among the largest difference in growth rate observed anywhere in the OECD (2001-11) (Veneri, 2018[2]).

Today the potential for linkages across the rural-urban continuum, and for rural areas to participate in the global economy beyond, is greater than ever thanks to improved digital and physical infrastructure that has made possible new ways of living and working. The COVID-19 crisis may further accelerate these changes through the growth of remote working, online public service delivery and the emerging need for resilient domestic supply chains for some goods, all of which may offer new opportunities for rural areas. Korea's recently announced investments to expand 5G coverage, support farmers and food security, upgrade rural hospitals and improve the wireless Internet infrastructure in some rural schools (OECD, 2020[3]) can all support the growth of these links.

Better integration between rural and urban areas is important for socio-economic performance. On average, places where "rural" and "urban" are closer, and where institutions are more inclusive, perform better than others in terms of growth of population and gross domestic product (GDP) per capita respectively (OECD, 2013[1]). Yet stronger linkages alone may not benefit all residents and can, in some cases, be detrimental. It has been shown that in rural areas, where a high proportion of the population participates in an urban labour market (e.g. by commuting to jobs in a nearby city), while this often leads to indicators of high income, high education and high quality of life in that area, such indicators may mask underlying problems. Those rural residents who do not commute and who continue to work locally may see a rising cost of living, particularly for housing, and a falling relative wage (Bosworth and Venhorst, 2018[4]).

Policy interventions can help create, strengthen and optimise rural-urban linkages to deliver economic development and well-being to rural and urban residents while mitigating potential pitfalls. While these interventions can take many forms, there are two broad categories:

- Interventions to facilitate partnerships between governments – including both formal and informal arrangements, voluntary or mandated, between municipalities and the administrations of rural areas and/or to create new regional authorities.
- Interventions to facilitate linkages between non-governmental entities – including between educational and research institutions, not-for-profit organisations and private businesses.

Partnerships between governments are often used to facilitate regional cohesion and identity, and co-ordinate improvements in regional transportation and other public services that involve spatial planning such as education and health provision, where they can help achieve economies of scale and strengthen agglomeration economies. They can also be used to manage and protect shared resources such as water and air quality.

Interventions that support linkage formation between non-governmental entitles may be leveraged to connect businesses with supply chains, support the development of consortia between businesses and research institutions, support the commercialisation of research and provide services that support entrepreneurs across the rural-urban continuum.

From innovation cities to regional hubs

Korea's Innovation Cities initiative began in 2004 with the execution of the Special Act on the Construction and Support of Innovative City Acceptance of Public Institutes Relocating to Local Cities. Initially led by the central government, the Innovation Cities initiative was intended to ease pressure on Seoul while catalysing the development of the country's secondary cities through the relocation of public institutions, along with their staff and their families. A total of 153 public institutions were relocated from the capital area and distributed across 10 of the country's secondary cities, a process that was complete as of May 2020. The initiative has involved the development of new districts within each of the host cities,

including new offices and other commercial amenities for the relocated institutions and new housing areas for the relocated workforce.

A near-term impact of the initiative has been to drive up the population of the host cities. With the Innovation City districts now home to a combined population of 204 716 inhabitants, this population grew 11% in 2019 over 2018 and supported similar growth, of 10.9%, in local tax revenue. Along with the relocation of public institutions, the initiative has sought to bring together academia, research institutions and enterprises with the intent to spark new engines of innovation and economic growth. At the same time, the government has invested to improve the public services, housing, cultural amenities and transportation infrastructure in these cities to encourage the relocation of staff and help them integrate into their new communities. For each of the cities involved (Figure 5.2), the policy has notably identified a theme aligned with the city's existing industrial characteristics (OECD, 2012[5]). The theme informed the selection of public institutions that were relocated to each city and the intent is to develop these themes into brands that will enhance the city's image and help attract investment.

Table 5.1. Innovation Cities and their theme

Region(s)	City/Urban district	Theme
Gangwon-do	Wonju-si	Vitality City, realising harmony of health, life and tourism
Jeollabuk-do	Jeonju-si	Bio-industry hub connecting traditional culture with state-of-the-art technology
Busan	Yeongdo-gu, Nam-gu Y	Hub for maritime affairs and fisheries, film and finance, connecting land and sea
Ulsan	Jung-gu	Environmentally friendly high-tech energy hub
Chungcheongbuk-do	Jincheon-gun and Eumseong-gun	Inno-valley of innovation and culture
Gwangju, Jeollanam-do	Naju-si	Capital of high-tech futuristic industrial cluster
Gyeongsangbuk-do	Gimcheon-si	Hub for state-of-the-art science technology and transportation
Gyeonsangnam-do	Jinju-si	Hub for leading mechatronics industry
Jeju	Seogwipo-si Y	Leading international exchange and educational training
Daegu	Dong-gu	Hub for educational and academic industries; centre of the southeast's industrial cluster

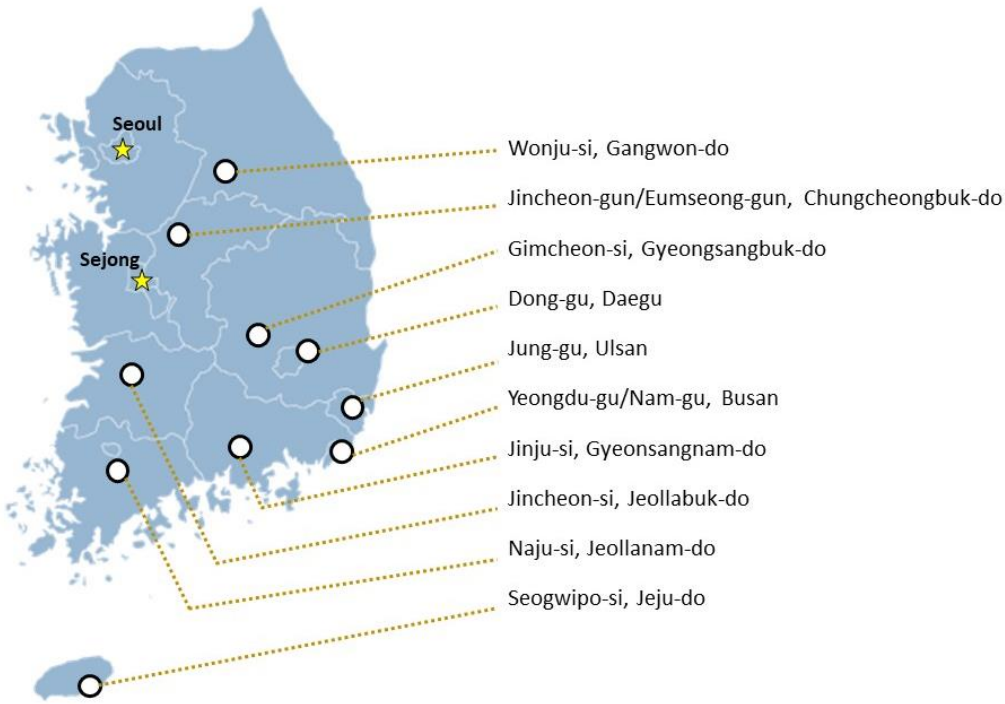
Source: OECD (2012[5]), *OECD Urban Policy Reviews, Korea 2012*, https://doi.org/10.1787/9789264174153-en.

With the relocation of institutions now complete, the initiative is now moving into its "second season". In this phase, control has shifted from the central government towards local leadership, with local governments taking the lead on planning for the further development of their Innovation City over the next five years. In this second season, a new emphasis has been placed on better integrating the relocated institutions into the local community and on improving quality of life for residents by building social infrastructure. To strengthen the relationship between the relocated institutions and their host cities, new targets have been set for 2022 on local hiring (30%) and on leveraging local suppliers in procurement activities (20%). In 2019, 25.9% of individuals hired by the relocated public institutions were of local origin (21% was targeted) and 13.4% of procured goods were locally sourced. Focus is also shifting from public institutions towards the private sector. An important goal of the Innovation Cities initiative moving forward will be to foster regional hubs, innovation clusters that leverage the existing strengths of each place in combination with the relocated public institutions and with investment and incentives to spur private sector innovation and growth.

In support of these objectives – greater connection with the local community, improved well-being for local people and the emergence of private-sector driven innovation clusters that leverage regional strengths – rural-urban linkages will have an important role. As the initiative evolves from its top-down origins into a

more organic engine of regional development, policy interventions by the central and local governments can help ensure that the initiative is inclusive of rural residents and firms and that it supports the well-being of both rural and urban people.

Figure 5.2. Map of Korea's Innovation Cities



Source: OECD elaboration based on MOLIT (2020[6]), *Innocity*, https://innocity.molit.go.kr/.

Experiences in building linkages from other OECD member countries

The examples that follow draw on the experiences of other OECD members that have sought to strengthen linkages across the rural-urban continuum. Selected examples focus on aspects in common with Korea's Innovation Cities initiative, specifically:

- Building regional governance and a regional brand identity in Germany.
- The importance of reciprocity in the rural-urban relationship in France.
- Strengthening regional clusters by including rural entrepreneurs and small- and medium-sized enterprises (SMEs) in Canada.
- Leveraging rural assets as testbeds for emerging technology in Scotland (UK).

Germany: The Nuremberg Metropolitan Region

A rural-urban partnership to better compete in a globalised world

The Nuremberg Metropolitan Region (NMR) is home to approximately 3.5 million people covering an area of 21 349 square kilometres and 33 administrative districts (11 of them urban, 22 rural) (OECD, 2013[1]). It is one of Germany's ten largest economic regions. The boundary of the region covers a much wider

geography than a conventional functional area defined in terms of labour market self-containment. Its territory encompasses four different functional metropolitan areas and a wide rural territory surrounding them. One of the main determinants of the current boundary of the NMR is the integrated public transport system. This network of public transport is a strong unifying element that allows for reciprocal exchanges of the population (carrying workers from the periphery to the centre and tourists from the centre to the periphery).

Since 2005, these districts have been voluntarily co-operating in projects of shared interest. Their partnership was initially sparked by the German government's Demonstration Project of Spatial Planning for cross border functional regions – the MORO initiative – which launched a three-year pilot project on spatial development led by the Federal Ministry of Transport, Building and Urban Affairs, in collaboration with the Federal Institute for Research on Building, Urban Affairs and Spatial Development. The intent of this initiative was to provide incentives for urban and rural areas in Germany to engage in project-oriented co-operation. Funding for the initiative was low, providing only around EUR 80 000-100 000 to the region over the pilot period: it was sufficient to support co-ordination and knowledge sharing activities but not meaningful investment (Richardson, Bae and Choe, 2011[7]).

The "cluster concepts" strategy was introduced by regional authorities in the Nuremberg region in the 1990s, due to the rapid increase in employment in the service sector and the decrease of employment in the manufacturing sectors. Global fields of growth, areas that represented the "strengths" of the region, were identified. The Bavarian state installed several universities of applied sciences in the districts of the NMR to support the maintenance and development of industrial activities (SMEs) in these fields and to stabilise the rural areas. The aim was to combat this downturn by strengthening the regional labour market and stimulating co-operation and the formation of networks between companies, as well as between companies and institutions.

With the region facing a declining and ageing population and the need to keep young and skilled labour within the region after educating them, the leaders of Nuremberg and the other core cities (Erlangen, Fürth and Schwabach) recognised that due to their small size, they were not able to become a leading hub without the co-operation of their surrounding rural areas. Together with leaders from the other districts and other levels of government, they sought to build a region better equipped to compete in a globalised economy, in both the domestic and international markets, by becoming more integrated, cohesive and recognised as a single entity. They each shared a vision that region-building would help combat the pressures of globalisation. Nuremberg was well placed to lead this initiative, because the city saw itself as being linked with, and not in opposition to, surrounding areas. The cultivation of a new, shared identity in response to globalisation was the essence of the approach to the partnership. Both urban and rural partners acknowledged that a more integrated region was more likely to remain "on the map" or to gain visibility, which made it necessary to work across traditional administrative boundaries.

The basis for the NMR is the Bad Windsheim Declaration, a document which sets out the principles for the partnership, one of which is rural-urban collaboration. The document notes that separating rural and urban areas or treating urban and rural as separate and/or opposing "does not correspond to historical, economic, sociological or cultural realities". The core activities for the partnership include:

- Developing an international brand, the "Nuremberg Metropolitan Region".
- Setting up a metropolitan development model based on urban and rural partnership.
- Strengthening the knowledge society through a cluster policy.
- Promoting integration with the Trans-European Transport Network.

Partnership structure

The power-sharing inner structure guarantees the functioning of the partnership. At the core is the council of elected officials (55 lord mayors, mayors and rural district administrators, including representatives of

the Bavarian state government). In the council, decisions about strategies and common projects can only be made by consensus; each member has one vote, regardless of population size or economic strength, the “same eye level” principle set out in the Metropolitan Charter. The principle of “one voice, one vote” has helped build trust and overcome partners’ suspicions of the big city, since the rural counties outnumber the cities and could have dominated the partnership. The council is supported and guided in this process by several entities, each with its own function: the NMR Presidency, the NMR Central Office, the Steering Committee and the seven fora of expertise. In the fora, around 600 participants work on addressing the core issues concerning the metropolitan region. The steering committee discusses issues and projects concerning the metropolitan region and brings them before the council. The management office manages the issues for the council and the steering committee as well as the day-to-day business of the NMR.

Leadership played an important role in the emergence of the rural-urban partnership. Building a regional identity and fostering co-operation among areas with no history of trust has involved a two-stage approach to rural-urban partnerships, with the first phase devoted primarily to region and identity building. The choice of “win-win” projects helped to avoid conflict both within the partnership (between the partners) and outside it (in relation to state and municipal responsibilities) and the adoption of a consensus approach and a principle of equal representation helped to overcome partners' suspicions that a dominant partner with more resources and capacity would shape the debate. Factors that have enabled the partnership to thrive include an understanding of the interdependence of rural and urban areas, clearly defined objectives, representational membership, democratic participation and strong leadership. Factors that could slow the growth of the partnership are a financial situation dependent on subsidies and a focus on measuring inputs, rather than results.

Takeaways for Korea

- Overcoming the limitations of size by building a network of interconnected territories and cities was seen in Nuremberg as a way to achieve network economies that could make them competitive with large metropolitan areas. In Gwangju/Jeollanam-do, a similar approach has been applied through their “win-win consultative body” to better position their region *vis-à-vis* the capital. This approach may also help Innovation Cities to more quickly achieve such scale, and several of the themes identified for the initiative, such as those on vitality and tourism, bio industries, fisheries and environmentally friendly energy, may lend themselves particularly well to the inclusion of surrounding rural areas in their branding and clustering efforts.
- In structuring rural-urban partnerships, principles such as “one voice, one vote” can help overcome fears rural leaders may have of being dominated by larger and wealthier cities.
- Integrated public transport systems that cut across the rural-urban boundary can support regional cohesion and unlock agglomeration benefits by increasing the mobility of labour and visitors.
- Large investments may not be necessary – where shared interests are recognised, a small incentive from the central government may be sufficient to prompt the development of partnerships at the local level.

France: The Brest-Pays Centre-Ouest Bretagne reciprocity contract

National government as a driver of urban-rural linkages at the local level

In 2016, the French government launched a new initiative named “city-countryside reciprocity contracts”. These contracts stem from the acknowledgement by the national government of the complementarity potential of its different urban and rural territories. The initiative was developed with the explicit goal of reducing the gap between urban and rural territories in France, strengthening linkages across traditional administrative boundaries. The reciprocity contract initiative is an experimental tool to promote inter-municipal co-operation and to empower a new subnational entity: metropolitan areas. The agreements are

adaptable to different territorial realities. Their jurisdictions are not predefined and this allows them to cover different areas depending on the local priorities and contexts (OECD, 2016, p. p.210[8]; European Network For Rural Development, n.d.[9]).

This policy initiative stemmed from a national consultation process on rural challenges that lasted two years, through which the diversity of rural areas was acknowledged and an understanding that rural-urban interactions should address not just proximity issues (e.g. commuting patterns) but also consider reciprocal exchanges in order to build meaningful partnerships. Potential areas for co-operation through the pilot initiative include:

- Environmental and energy transition (e.g. food security, waste management, preservation of agricultural land and bioenergy development).
- Economic development (joint promotion of the territory and the development of joint territorial strategies, land use policies, support for business and the development of teleworking to help maintain remote town centres).
- Quality of services (promoting touristic sites, access to sports facilities, leisure, heritage and access to health services).
- Administrative organisation (mobilisation of staff with specific skills to support key projects).

Four territorial partnerships were selected on a voluntary basis: the metropolis of Lyon and Pays d'Aurillac, the metropolis of Brest and Pays Centre Ouest Bretagne, the metropolitan territory of Toulouse and the Massif des Pyrénées, and the urban community of Le Creusot-Montceau les Mines and the Natural Regional Park of Morvan (European Network For Rural Development[9]).

Brest Métropole Océane is a harbour city of 207 000 inhabitants. It is renowned for its research and development activities and its robust service sector. Its rationale for pursuing the reciprocity contract was linked to the medium-long-term risk of losing competitiveness and attractiveness in comparison to the regional hub of Rennes. The Pays Centre-Ouest Bretagne has a population of 97 000 inhabitants and has experienced a significant decline in productive employment since 2009, mainly due to the agro-food crisis that impacted the milk sector. Its motivation for joining the reciprocity contracts stemmed from the risk of the area becoming a medical desert and the presence of a fast-growing wood sector looking for new markets.

In that sense, the city of Brest and the rural area of Centre-Ouest Bretagne worked together to fulfil their respective priorities and agreed to support innovative projects around four main strands: i) economic development; ii) social inclusion; iii) health, culture and services; and iv) environment and energy transition. In order to determine each of these strands, local government officials and residents from both areas met three to four times in 2015 to negotiate win-win partnerships and joint activities to address areas of common concern. This bottom-up process was facilitated by Brest-Bretagne urban agency planning. It led to the development of a joint roadmap, which was formally adopted by the local assemblies before being signed with French government representatives in November 2016.

The initial reciprocity contract did not include any financial commitment from either side. However, there was a provision for the addition of a new budget line in the multiannual framework contract, the *Contrat de Plan État-Région* (CPER, the state-region planning contract), agreed by the central government and the regional authority of Brittany that led to a public grant of EUR 2 million for the 2015-20 period (with potential for seeking European Structural and Investment Funds as well).

A year after the signature of the reciprocity contract, there are already incipient results in terms of supporting an audio-visual cluster (a regional hub for documentary films), healthcare (services provided by Brest Hospital are also made available to the rural areas of Pays Centre-Ouest Bretagne) and bioenergy (wood energy cluster that brings together all local timber industry businesses).

Takeaways for Korea

- As in Germany, the French national government played a facilitating role, creating a new initiative and leveraging only a small amount of incremental funding, and was able to encourage linkage formation where there had been none before.
- Key to the success of the French initiative was the notion of reciprocity: both sides were expected to contribute to the relationship, and both expected to get something back in return. To forge successful partnerships that receive buy-in from all sides, it may be necessary to identify the ways rural areas can help Innovation Cities as well Innovation Cities can help rural areas.

Canada: The Southern Ontario Scale-up Platform

Entrepreneurial supports available wherever you live

Southern Ontario is a cornerstone of the Canadian economy with the region accounting for more than a third of Canada's population, jobs and economic output. The province of Ontario generates nearly half of the country's business research & development spending, almost two-thirds of patent applications and over 40% of Canada's science, technology, engineering, and mathematics (STEM) related workforce – all critical inputs to drive growth and innovation in the digital economy. With over 46 000 SMEs and 1 million Ontarians employed in knowledge-intensive sectors, the Southern Ontario Region has grown into the second-largest technology cluster in North America and the Greater Toronto Area has become the fastest-growing global technology market, recently surpassing San Francisco, Seattle and Washington combined – with a total of 241 000 technology industry jobs. The city of Waterloo, around an hour west of Toronto, has the second-highest density of technology start-ups on the continent and the concentration of technology talent in the national capital, Ottawa, five hours east of Toronto, is among the highest in North America. These three cities, Ottawa, Toronto and Waterloo, have together been at the heart of Southern Ontario's technology cluster for many years now.

In each city, the sector is supported by a strong business accelerator organisation, specifically the MaRS Discovery District, Communitech and Invest Ottawa, in Toronto, Waterloo and in the capital respectively. These organisations work closely with local universities, researchers, investors, business strategists and mentors, as well as with the government, to provide entrepreneurs and SMEs with the tools, advice and access to finance their need to innovate, commercialise new ideas and technologies, and grow their companies.

Outside of these cities though, the picture is quite different. Rural areas in Southern Ontario have not shared in the recent success of the region's major cities. In the decade following the economic recession of 2008, Ontario saw the creation of 865 000 net jobs. However, 87% of this job growth was concentrated in Ottawa and Toronto, while rural communities experienced the loss of 76 000 jobs over the same period. On a national scale, although employment is up by close to 15%, rural employment remained below pre-recession levels, as of 2019.

Relative to rural areas in other parts of Canada, rural areas in Southern Ontario are relatively close to cities and well connected by roads, rail and broadband services; however, rural entrepreneurs have not had access to the array of support available to their counterparts in the major cities. Recognising this issue, the Federal Economic Development Agency for Southern Ontario, which provides funding to the three major business accelerators, included a provision in recent funding negotiations to develop rural-urban linkages between the three major business accelerators and other innovation centres serving smaller communities and rural areas across the Southern Ontario Region. The resulting Southern Ontario Scale-Up Platform, announced in 2019, brings together MaRS, Communitech and Invest Ottawa into a new partnership. A goal of the new platform is to make the programming, advisory services and other

support offered by these organisations at their urban locations available to entrepreneurs and SMEs located outside the three major cities, by partnering with local innovation centres.

To that end, Invest Ottawa has developed its Eastern Ontario Collaborator initiative and is signing partnership agreements with other organisations throughout Eastern Ontario, a rural area surrounding Ottawa. In one example, Invest Ottawa provided funding support to Queens University, in Kingston (population: 117 660, 196 km from Ottawa) to develop their Launch Lab initiative, including a boot camp for early-stage start-ups, a pre-commercialisation pilot for intellectual property holders and a growth accelerator programme for SMEs. The boot camp has been offered in rural Lanark County and the town of Cornwall (population: 45 723, 103 km from Ottawa) and all programming is being adapted for virtual delivery. Invest Ottawa has also partnered with a local vocational college, St. Lawrence College, with three campuses across Eastern Ontario to develop a business ecosystem pathfinding tool to assist start-ups and scale-ups in connecting with available resources. The inclusion of traditionally underrepresented groups has also been a priority, and so Invest Ottawa is collaborating with Algonquin College to develop and implement an early-stage entrepreneurship programme specifically for Indigenous entrepreneurs that aims to foster Indigenous learning and collaboration. Programming will include peer-to-peer networking and mentorship opportunities, events and lecture series with Indigenous business leaders.

By helping rural residents with business ambitions fulfil those ambitions in their own communities, without having to move into the cities to find the help they need or to commute, the benefits of their efforts may be captured locally, supporting the development of rural communities. Linkages forged via the Scale-Up Platform are also expanding the capacity of the smaller innovation centres outside the major cities, while fostering a stronger network between these centres and the major platform members, creating new opportunities for knowledge sharing and idea development across a wider area.

Takeaways for Korea

- Linkage formation does not necessarily require new agreements between governments, which can be time-consuming and require political leadership. By leveraging its role as a funder, the government can also foster the creation of meaningful rural-urban linkages between non-governmental organisations through a relatively simple contracting process.
- Strengthening linkages between Innovation Cities and surrounding rural areas can support economic development and inclusion for rural residents, particularly if linkage programming is adapted to the characteristics of the rural communities, while at the same time strengthening the cluster by expanding the available talent pool and idea pipeline.

Scotland (UK): The European Marine Energy Centre (EMEC)

Leading-edge research in a sparsely populated rural community

Orkney, an archipelago of 70 islands lying approximately 16 km north of the Scottish mainland, is a sparsely populated rural area (population: 22 270, density: 22 inhabitants per km²) of rugged terrain and wet, windy weather (NRS, 2019[10]; HIE, 2019[11]). Since 2003, the area has been home to the European Marine Energy Centre (EMEC), a testbed facility for developers of wave and tidal energy converters, technologies that generate electricity by harnessing the power of waves and tidal streams.

EMEC is a not-for-profit private company, initially established with public funding. The centre has received a total of approximately GBP 34 million from Highlands and Islands Enterprise, Scottish Enterprise, the Scottish and United Kingdom (UK) governments, the Orkney Islands Council, the European Union and the Carbon Trust, though, in 2011, it became financially self-sufficient. Orkney was selected thanks in part to attributes of its rurality – a rugged environment with relatively light sea traffic and some of the world's strongest tidal currents. The strength of the wave patterns and tidal currents around the islands, in

combination with its sheltered harbours and, crucially, an infrastructure asset: connection to the national power grid, make the area an ideal location for proving technologies designed to survive in harsh marine environments. The centre offers purpose-built, accredited open-sea testing facilities, with 13 grid-connected test berths and 2 scale test sites where smaller-scale devices, or those at an earlier stage in their development, can gain real sea experience in less challenging conditions than those experienced at the grid-connected wave and tidal test sites (Figure 5.3). They also have a hydrogen production plant where hydrogen is generated from tidal and wind energy.

Figure 5.3. EMEC Test Site locations around Orkney

Source: (EMEC, 2016[12]), Pathways to commercialisation: An EMEC guide to research, development and testing of marine energy technology, EMEC, 2016.

EMEC provides an example of a rural-urban linkage, initially established through state support that enables innovation and economic development for both rural and urban areas. Urban-based partners, including universities, energy companies and engineering firms, rely on EMEC for its capabilities and EMEC, in turn,

relies on them; neither could function optimally without the other. The centre works closely with many urban partners in Scotland and beyond, including:

- The FloWave ocean energy research facility at the University of Edinburgh, where real-world data collected by EMEC's offshore buoys is being used to support the university's research, permitting the development of accurate scale models of complex sea environments in a tank.
- The Offshore Renewable Energy Catapult in Glasgow and the University of Strathclyde's Advanced Forming Research Centre, where EMEC is providing forensic analysis of component points of failure and developing a database of common failure mechanisms in wave and tidal energy devices. The Catapult in Glasgow has supported over 600 SMEs to develop and commercialise new offshore renewable energy products and the information EMEC is collecting is expected to provide a better understanding of the issues around component reliability, leading to improved performance and, ultimately, lower-cost, more competitive marine energy.
- Orbital Marine Power, an Edinburgh- and Orkney- based company that has developed a new tidal-energy device, prototypes of which were tested at EMEC. Their new device, being built in the city of Dundee where manufacturing is expected to support up to 100 jobs (Mclaren, 2019[13]) will have a generation capacity of 2 MW. Along with hosting the new device, EMEC's role will involve undertaking an independent performance assessment, helping to de-risk the company's technology and improve investor confidence as it approaches full commercialisation.

In addition to informing research and supporting employment and business development in cities, EMEC has fuelled economic development in Orkney itself. Local marine firms, already experts in the local marine environment, now support approximately 300 jobs (Orkney Marine Renewables, 2016[14]) providing supply chain services to EMEC's activities and customers, which include major corporations like e.on and Alstom, with further benefits for the local economy from business travellers visiting the centre (Westbrook, 2019[15]). In the years since its founding, EMEC itself has developed world-leading expertise in the marine energy sector that has opened a new avenue of economic opportunity in consulting. The centre has advised on over 100 projects with other organisations and governments, including in Japan, Korea and the United States, on the development of the marine energy sector and the creation of EMEC-like testbed facilities elsewhere. EMEC has also developed expertise in several adjacent sectors, such as marine cables and connectors, device support structures and moorings, monitoring devices, impact assessment and undersea acoustics, providing many new avenues of opportunity for Orkney and their urban research institutions and industrial partners.

Box 5.1. COVE and IGNITE

Rural-urban linkages to develop an ocean technology cluster in Atlantic Canada

The Centre for Ocean Ventures & Entrepreneurship (COVE) is a collaborative facility for applied innovation in the ocean sector located on the water's edge in Halifax Harbour, Nova Scotia. The centre is home to ocean technology businesses, post-secondary institutions, researchers and marine-based and service businesses that support the ocean sector. It supports pre-commercial start-ups, ocean technology firms of all sizes, traditional marine supply chain companies and academic collaborations with industry.

IGNITE is a technology incubator/accelerator focused on rural Nova Scotia. It brings together entrepreneurs, start-ups, and small businesses to work together, providing them with structure, mentorship, and opportunities to operate and grow. It aims to encourage more rural Nova Scotians to explore entrepreneurship as a career path and helps to link its members with the wider region's business community, start-up ventures and educational institutions.

In April 2019, COVE and IGNITE signed an agreement to work together, forming a rural-urban linkage that the two organisations expect will be mutually beneficial and will help strengthen Nova Scotia's growing ocean cluster. For IGNITE and its members, the relationship with COVE provides them access to COVE's services, expertise in ocean technology, deep ocean research and engineering and its linkages with universities and major firms with potential supply chain opportunities, including, for example, naval shipbuilders and other firms in the defence sector. Meanwhile, the partnership will also help strengthen COVE's expertise in the areas of capture fisheries and aquaculture, the "fish tech" sector that is an important industry in rural Nova Scotia.

Takeaways for Korea

- By identifying rural assets (both natural and human capital), and leveraging these to support the research, development and commercialisation activities in Innovation Cities, rural areas can play a central role in their economic development, delivering benefits to both urban and rural areas.
- Unlocking the potential of rural places to best support the development of Innovation Cities may require some targeted infrastructure investment. In Orkney, a key factor was that the islands were connected to the UK's national power grid (other possible sites were rejected because they lacked this).
- Programming to support innovation activity in rural areas should be flexible enough to permit exploration across sectors. Innovation in rural areas often occurs through adaptive measures that apply existing technologies in new ways to solve problems in adjacent or unrelated sectors, thus the sectoral themes identified for the Innovation Cities may prove unnecessarily constraining if used to determine eligibility.

Strengthening the impact of Innovation Cities in the surrounding rural areas

Improving rural-urban linkages can be a good way to achieve better and more inclusive development. When rural and urban areas are more connected, they can benefit from the complementarity of their different endowments, facilitating innovation and firm growth, better access to jobs, amenities and different types of services. Yet rural-urban interactions are complex and creating new linkages is not always risk-free.

Achieving meaningful linkages may entail costs and additional administrative burdens. It may be necessary to overcome administrative constraints and co-operate across levels of government, both horizontally and vertically. Developing processes for this may require time and resources, as well as capacities that are not in place at the start of the co-operation process, the development of which may involve additional investment. Linkages may also require improvements to physical and digital infrastructure and political will from all sides. What is more, as linkages are developed, care must be taken to see that the benefits they unlock are experienced in an inclusive way, giving due consideration to local sensitivities and leaving no one behind.

Korea's Innovation Cities are unusual in that they were developed as largely self-contained urban areas transplanted from elsewhere in the country. They did not grow organically and their residents are, for the most part, not originally from the area in which they now live. Their extended families may not live in the area and it may feature distinctions in language, food and other cultural attributes that differ from those they are used to. Consequently, these cities may be less well integrated with and connected to the surrounding rural areas than would be an ordinary city, presenting a unique set of challenges moving forward. As the Innovation Cities enter their second season as regional innovation hubs, there are several specific ways they may explore through which to form tighter links with their surrounding rural areas and that may contribute to their development:

- **To increase the integration of the cities with their host communities**, residents in the surrounding area may be encouraged to live in the Innovation City, while workers for the relocated public institutions may be encouraged to reside elsewhere in the broader community and not necessarily within the city's purpose-built housing. Improvements to connectivity with the surrounding rural areas may be necessary to facilitate commuting. This would offer the incoming residents a wider variety of places to live and greater proximity to nature while helping local people feel like they too are part of the innovation city, with improved access to its services and amenities.
- **To be more inclusive of rural people**, by increasing the availability of support for entrepreneurs and SMEs in rural areas so they can participate in the growing cluster alongside those in the cities. Local spill-overs may also be supported by expanding existing procurement activities among the relocated public institutions, with incentives for other participants in the not-for-profit and private sector to also contribute.
- **To achieve scale and develop a strong regional identity**, by partnering with neighbouring jurisdictions and the provincial governments to identify a shared identity and achieve weight sufficient to compete with the capital.
- **To accelerate innovation and strengthen emerging clusters**, by leveraging the assets of rural areas to support the development of the cluster and widen the pool of talent and ideas.

Having a clear sense of the advantages that can be achieved and the specific links intended is a way of motivating the relevant actors to co-operate, as is taking care to structure the relationships such that rural participants feel their voices are heard and they are not dominated by a much larger city. Beginning small and ramping up the co-operation over time helps develop trust as participants begin to see the positive outcomes and provides time for participants to develop new capacities.

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6 Case study of Chungcheongbuk-do and Jeollanam-do

The final chapter focuses on a case study of two of Korea's regions, Chungcheongbuk-do and Jeollanam-do. This includes a review of the demographic and economic trends in each region, followed by an identification of the main drivers and bottlenecks influencing these trends. The policy approaches currently underway in each region will then be reviewed and a number of recommendations identified.

Introduction

On the whole, Korean rural economies are very competitive in an international context and are significant contributors to the national economy. As mentioned in Chapter 1, the predominantly rural regions of Korea, uniquely among OECD member countries, benefit from per capita gross domestic product (GDP) that is, on average, higher than that of the country's urban regions and higher than the national average. Averages, however, do not reveal intraregional disparities. On closer inspection, these regions include some growing communities, mostly those that are the subject of major national initiatives (e.g. Innovation Cities) and also some for which the data show more troubling signals.

This chapter reviews two provinces, Chungcheongbuk-do (Chungbuk) and Jeollanam-do (Jeonnam), which in recent years have performed well and less well respectively, to examine how Korea's balanced national development policy has impacted these areas. The chapter begins with a review of the data to understand the current situation in these provinces, followed by a discussion of the outlook and current policy initiatives and finally recommendations.

Demographic overview and trends

Situated at the southwestern tip of the Korean peninsula, Jeollanam-do is home to 1.87 million people (2019). The country's iconic agricultural province is blessed with relatively flat land and a warmer climate than other parts of the country, making it ideally suited for farming. The region produces a variety of livestock, fruits, vegetables and grains, including rice, barley, plums, turmeric and the widely exported Naju pear. The province also benefits from 6 743 km of coastline, including 2 165 islands. It is home to almost half the country's harbours (1 099 of them) and 40% of its fishing fleet (26 939 vessels). Chungcheongbuk-do province is located in the centre of Korea and is home to 1.60 million people (2019). It is South Korea's only landlocked province and occupies a largely mountainous area (70% of the territory) with the Sobaek range running along the province's southern border. Mining has been and remains a significant source of economic activity for the province. Currently, operating mines produce gold, silver, tungsten, zinc and other metals and minerals. Over the past 20 years, both provinces have been undergoing a period of transition as their economic drivers have increasingly shifted away from traditional land, sea and resource-based activities towards new sources of growth, primarily in manufacturing.

In terms of population, since 2001, Chungcheongbuk-do has seen its population climb by a total of 8.4%, putting it slightly ahead of the OECD average for TL3 regions (Figure 6.1). Jeollanam-do has seen an 11.9% decline over the period, though the rate of decline was significantly attenuated (and slightly reversed) in the 2010-19 period as compared with the first decade of the new century.

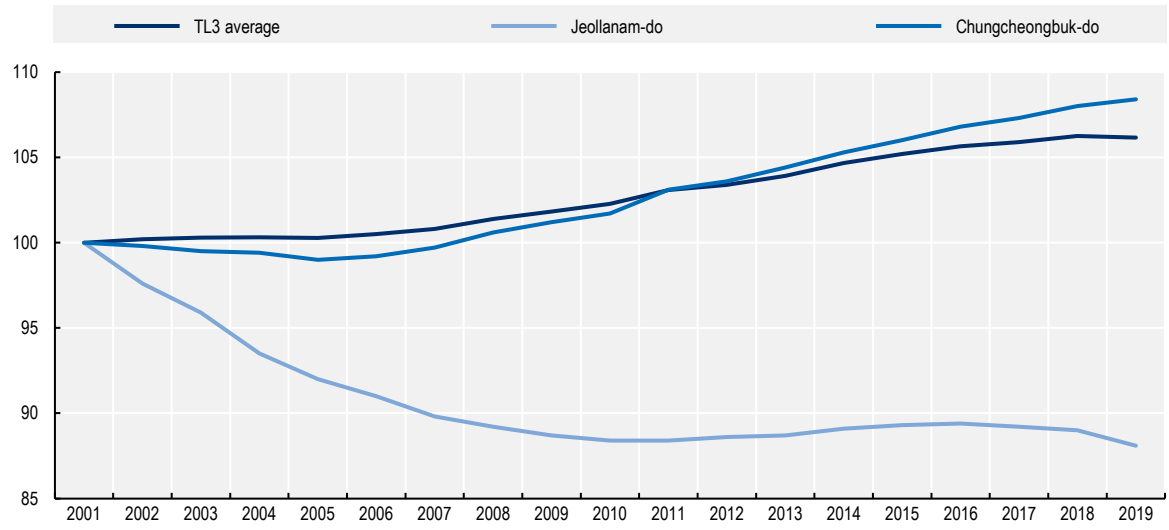
Migration patterns have contributed to the population trend, as Jeollanam-do saw significant outward migration to elsewhere in Korea during the period 2000-10, mirroring the overall the population trend. This outflow was significantly mitigated in the past 10 years though showed signs of deteriorating again in 2018. Chungcheongbuk-do in comparison has seen a slow but steady inflow of newcomers for the past decade (Figure 6.2).

Given the outward migration it has experienced, it is not surprising to find that Jeollanam-do's population is older than Chungcheongbuk-do's with a higher proportion of elderly people. In 2019, Jeollanam-do had an elderly dependency ratio over 40% higher than Chungcheongbuk-do and significantly higher than the OECD average. The inward migration that Chungcheongbuk-do has benefitted from over the past decade has slowed the growth of its elderly dependency, such that it is now very close to the OECD average (Figure 6.3). Examining the population within each province underscores that population ageing has a clear rural dimension. Approximately 15% of Chungcheongbuk-do's urban residents (*si*) are aged 65 or more, a proportion that is not significantly different to the 16% seen in Jeollanam-do's urban areas; however, in the counties (*gun*) of Chungcheongbuk-do, the portion of elderly people is approximately 23% while, in Jeollanam-do, it is 31%. Chungcheongbuk-do has had greater success in recent years in attracting

new residents to its largely rural counties, outside of its cities. Several of Jeollanam-do's counties are experiencing high levels of ageing: for example, in Goheung County, almost 40% of the residents are aged 65 or more while, in neighbouring Boseong County, the rate is 37% (all figures from 2019).

Figure 6.1. Population density growth index (2001=100)

Percentage change in the population density of Chungcheongbuk-do, Jeollanam-do and the OECD average for TL3 regions

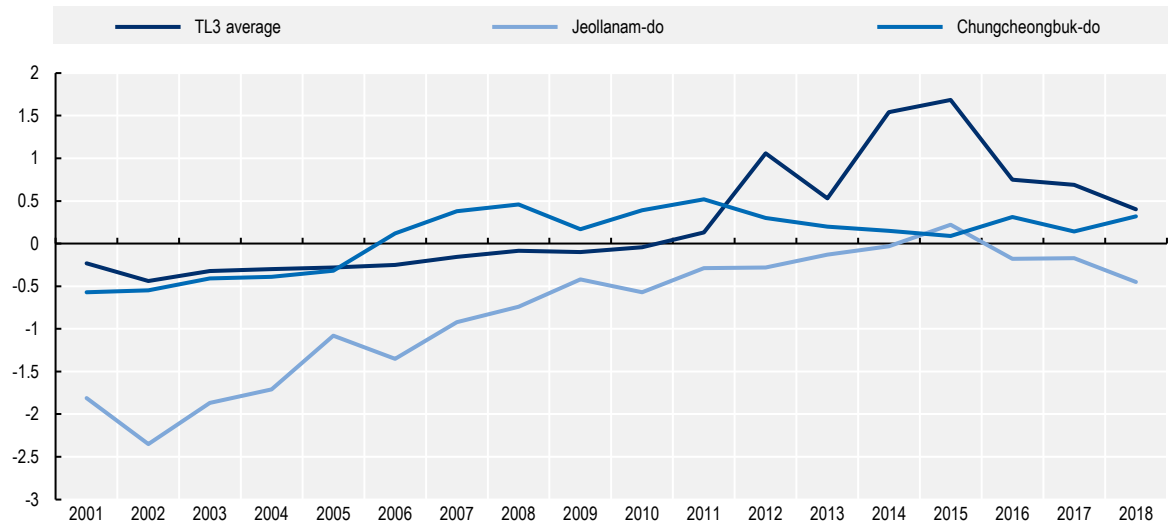


Source: (OECD, n.d.[1]), *Regional Demography (database)*, OECD, Paris, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR.

StatLink https://doi.org/10.1787/888934222662

Figure 6.2. Inter-regional net migration

Net flow of migrants, as a percentage of the population, for Chungcheongbuk-do, Jeollanam-do and OECD TL3 average



Source: (OECD, n.d.[1]), *Regional Demography (database)*, OECD, Paris, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR.

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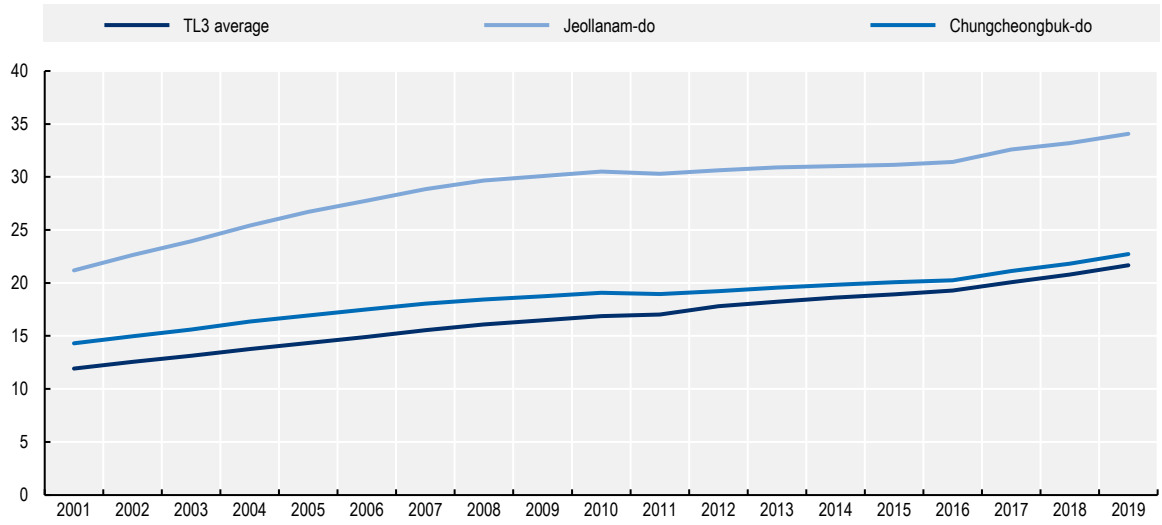
Figure 6.3. Elderly dependency

Elderly dependency for Chungcheongbuk-do, Jeollanam-do and OECD TL3 average.



Note: Elderly dependency is defined as the number of people aged 65 or older for every 100 people of working age (20-64).
Source: (OECD, n.d.[1]), *Regional Demography (database)*, OECD, Paris, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR.

StatLink https://doi.org/10.1787/888934222700

Examining population trends at a more detailed level, important intraregional patterns emerge. Jeollanam-do is composed of 17 counties (*gun*) and 5 cities (*si*). In the period 2011-19, 16 of the 17 counties saw their population decline by an average 8.1% over the period. These counties lost an average of 4 115 people during the period. Two of the 5 cities also saw declines, though by a smaller 4.7% on average. Of the four areas that experience growth within the province, the cities of Gwangyang, Naju, Suncheon and the county of Muan, all of these areas are notable because they have all been the beneficiaries of specific government interventions in recent years, specifically:

- Naju – Innovation City (Bitgaram).
- Suncheon and Gwangyan – Gwangyang Bay Free Economic Zone.
- Muan – Enterprise City and new seat of the provincial government.

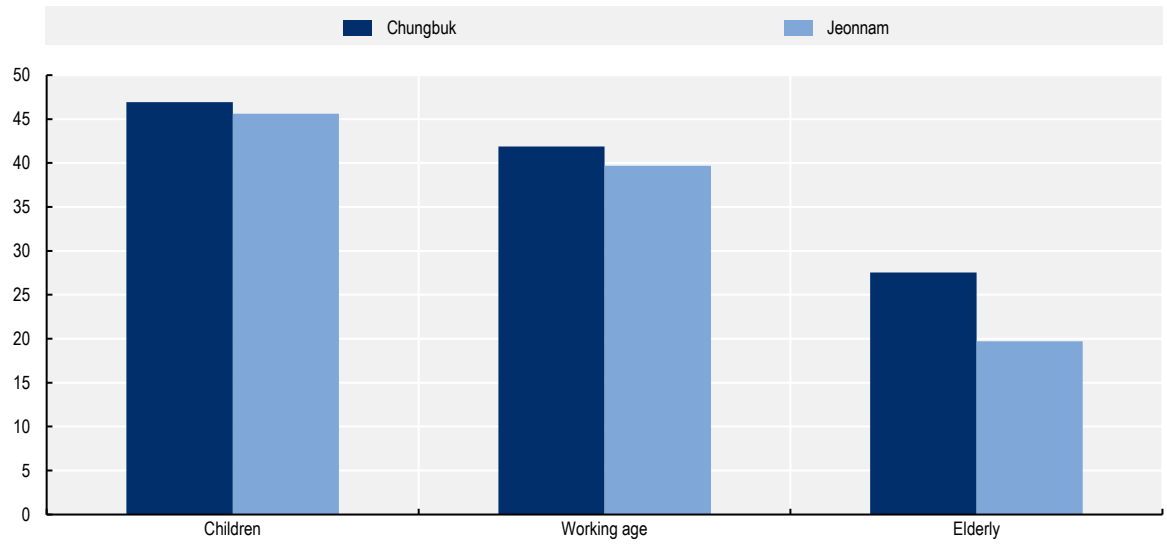
A similar analysis of Chungcheongbuk-do finds that, of its eight counties and three cities (including one specific city, Cheongju, the provincial capital), growth was much more widespread, with four of the eight counties and two of the three cities showing growth. Of those counties where population declined over 2011-19, the decline was less severe, at -4.8% on average or 1 990 people. Of those counties that experienced growth, a similar pattern emerges – those counties and cities that experienced growth were beneficiaries of the Chungcheongbuk-do Free Economic Zone, while the strongest growth was seen in Jincheon County, the location for an Innovation City. The areas of Chungcheongbuk-do that showed growth were also clustered in the northwest corner of the province, near the provincial capital and in proximity to the national capital and Sejong, suggesting proximity to these centres may have been a factor. The areas of the province that experienced population decline were on the periphery, to the northeast and southern end of the province.

Regarding the strong growth seen in Jincheon, which grew around 29% from 2011-19, a similar experience was had in Naju, Jeollanam-do, where the Bitgaram Innovation City is located. Naju also showed the strongest population growth in its province over the period and also grew around 29% from 2011-19, with

a sharp uptick in the population after KEPCO (an anchor tenant of the Innovation City) opened its new headquarters there at the end of 2014. Given that the initial residents of these developments are expected to be incoming migrant employees and their families (relocated from the capital), it is unclear what impact these projects are having on the population patterns of local people. In Jeollanam-do, the three neighbouring counties of Naju, namely Hampyeong, Hwasun and Yeongam, each saw their population fall by approximately 9.1% over the period, slightly higher than the average population loss for counties in the province that are experiencing a decline (8.1%), suggesting that one of the effects of the new city might be to accelerate the already declining vitality of these neighbouring counties.

A concentration index calculated at the provincial level, by age group (children: 0-19 years of age; working-age adults: 20-69; the elderly: 70 or older) finds that, in both Chungcheongbuk-do and Jeollanam-do, the youth population is more concentrated than the elderly (Figure 6.4), though the gap is wider in Jeollanam-do. The index for the retirement-age population in Jeollanam-do is less than half that of the working population, which may present special challenges for service delivery and municipal finances in the province. The relatively high concentration of children in both provinces may indicate that parents are making choices on where to live based on perceived access to services related to children (e.g. childcare, education), and that perceived weaknesses in the delivery of these services in rural areas may therefore be contributing to the population decline of these areas.

Figure 6.4. Concentration index by age group



Note: Children: 0-19, Working age: 20-69, Elderly: 70 and older.
Source: KOSIS (2020[2]), Resident Population in Five-Year Age Groups (2019 data), https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B04005N&language=en.

StatLink https://doi.org/10.1787/888934222719

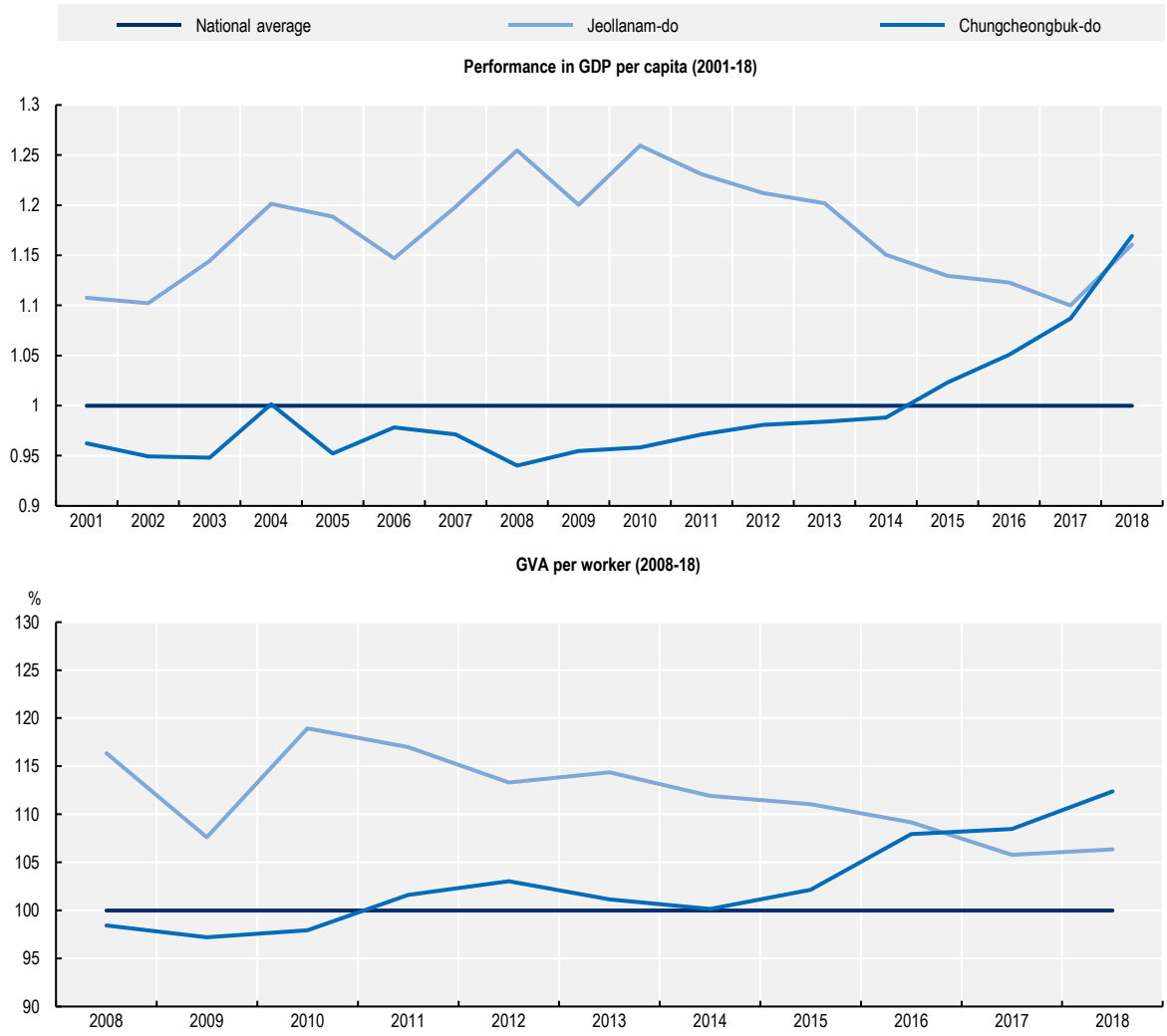
The observed changes in population suggest that the major initiatives of Korea's balanced national development policy are having a meaningful impact on population patterns in Chungcheongbuk-do and Jeollanam-do. However, their impact appears limited to the specific areas where they are being implemented and, particularly in Jeollanam-do, they do not appear to have fundamentally changed the broader trends taking place in the province.

Economic overview and trends

Both Chungcheongbuk-do and Jeollanam-do experienced per capita GDP that was above the national average in 2018. Jeollanam-do generated USD 47 617 (PPP, 2015 base) and Chungcheongbuk-do USD 47 969, compared with USD 41 022 nationally, at 116% and 117% respectively (Figure 6.5). Both provinces also deliver gross value added (GVA) that is above the national average, at 106% in Jeollanam-do and 112% in Chungcheongbuk-do (2018). In the decade since 2008, Chungcheongbuk-do has trended upwards: after beginning the decade slightly below the national average, it is now quite substantially beyond it while, in Jeollanam-do, the trend is headed in the opposite direction, having reached 126% of the national average per capita GDP in 2010, it has declined since then, though partly recovered in 2018.

Figure 6.5. Per capita GDP and GVA

In Chungcheongbuk-do and Jeollanam-do in relation to the national average



Source: (OECD, n.d.[3]), *OECD Regional Statistics (database)*,OECD, Paris, https://doi.org/10.1787/region-data-en

StatLink https://doi.org/10.1787/888934222738 (GDP) | https://doi.org/10.1787/888934222757 (GVA)

The performance of the two provinces is underpinned by economies focused on tradeable goods, whether in traditional sectors like resource extraction, agriculture and fisheries or, increasingly, in the manufacturing sector. Chungcheongbuk-do and Jeollanam-do are both home to sizeable manufacturing capacity. In Jeollanam-do, the sector is highly specialised in chemicals and metals (approximately 85% of all manufacturing in the province is in these sub-sectors) and is centred on the Gwangyang Bay Free Economic Zone where steel manufacturing facilities of POSCO (Gwangyang) and Hyundai (Suncheon) are located. There are also several chemical production facilities in nearby Yeosu, including GS Caltrex, BASF and LG Chem.

In Chungcheongbuk-do, the sector is focused on electrical and electronics manufacturing though this sub-sector only represents around 47% of its total manufacturing activity. Major firms include SK Hynix (semiconductors), Hanwha Solutions Corporation (photovoltaic cells) and Hyundai Mobis (hydrogen fuel cells). Geographically these facilities are clustered in the northwest corner of the province, in Jincheon and Eumseong Counties, and in and around the provincial capital, Cheongju, putting them in relatively close proximity to Seoul. Chungcheongbuk-do's more diversified manufacturing sector also has a presence in food/beverage/tobacco, machinery/equipment and metals and chemicals. Jeollanam-do experienced a rapid expansion of its manufacturing base from 1985 to 2005 but it has since stabilised. Chungcheongbuk-do has been experiencing a rapid expansion of the sector in recent years (Table 6.1).

Table 6.1. Growth of manufacturing

Percentage of gross regional domestic product (GRDP) from manufacturing

	1985	1995	2005	2015	2018P
Jeollanam-do	16.9	22.1	31	31.7	31.8
Chungcheongbuk-do	30.1	36.1	34.9	41.9	44.8

Note : 2018P = Projected
Source: OECD (2020[4]), "Questionnaire", Unpublished, OECD, Paris.

Table 6.2. Economic structure

Economic structure by sector nationally and for Jeollanam-do and Chungcheongbuk-do.

	National	Jeollanam-do	Chungcheongbuk-do
Agriculture, forestry, and fishery (T)	1.8	7.0	3.0
Mining (T)	0.1	0.2	0.4
Manufacturing (T)	26.6	31.8	44.8
Electricity, gas, steam, and air conditioning supply (T)	1.3	2.9	0.5
Construction (NT)	5.4	6.3	6.5
Wholesale and retail (NT)	7.3	3.0	3.3
Shipping and storage (NT)	2.9	3.3	2.1
Accommodation and restaurants (NT)	2.3	1.6	1.7
Information and communication technology (ICT) (T)	4.3	1.5	1.0
Financials and insurance (T)	5.5	2.9	2.9
Real estate (NT)	7.2	3.3	3.8
Business sector services (NT)	8.7	3.1	4.5
Public administration, defence, and social security (NT)	6.1	9.6	7.3
Education (NT)	4.8	4.6	4.8
Public health and social welfare (NT)	4.3	3.9	3.2
Leisure and other services (NT)	2.8	2.3	2.6

Note: (T) denotes tradeable sectors, (NT) denotes non-tradeable.
Source: OECD (2020[4]), "Questionnaire", Unpublished, OECD, Paris.

The economies of both provinces include a large mix of tradeable sectors (Table 6.2), with approximately 46% of Jeollanam-do's total economic activity in tradeable sectors and 53% in Chungcheongbuk-do, both higher than the national average of 40%. Though the role of traditional sectors has declined in both Chungcheongbuk-do and Jeollanam-do, both provinces continue to play a significant role in these sectors within the national context. Jeollanam-do's fisheries are responsible for 56% of Korea's total catch by volume and 38% by value. The sector employs 42 584 people in the province, 37% of the country's total fishery workers. The fishery, agriculture and forestry sector in Jeollanam-do is responsible for 15.5% of Korea's national output in this sector (and 14.6% of its jobs), far outweighing the 4% contribution of Jeollanam-do to national output overall.

In Chungcheongbuk-do, the agriculture, fishery and forestry sector is smaller and has declined moderately from 7.4% of national production in 1985 to 6.0% in 2018 (Table 6.3); however, this is still an outsized contribution to output given that Chungcheongbuk-do's overall contribution to GRDP is 3.7%. Notably, the sector is also responsible for 6.72% of national employment in the sector, indicating that sectoral productivity in Chungcheongbuk-do is lower than in Jeollanam-do. The largely mountainous province has a scarcity of land suitable for agriculture and development and has elected to develop that land for higher-value industrial uses rather than preserve it for agriculture. The province remains active in the mining sector and its share of national activity in this sector has been increasing, to 10.6% of national mining output in 2018, from 7.0% in 2015 and 6.2% in 1995. The mining sector in the province is responsible for 15.8% of all mining sector jobs in Korea.

Table 6.3. Contribution of mining, agriculture, forestry and fisheries

The contribution of Chungcheongbuk-do and Jeollanam-do to national output and employment in total and by selected sectors

Sector	Province	Contribution to national output and employment	2018
GRDP	Jeollanam-do	% KRW	4.0
		% employment	3.58
	Chungcheongbuk-do	% KRW	3.7
		% employment	3.27
Agriculture, forestry and fisheries	Jeollanam-do	% KRW	15.5
		% employment	14.63
	Chungcheongbuk-do	% KRW	6.0
		% employment	6.72
Mining	Jeollanam-do	% KRW	5.3
		% employment	..
	Chungcheongbuk-do	% KRW	10.6
		% employment	15.79

Note : Mining employment in Jeollanam-do unavailable.
Source: OECD (2020[4]), "Questionnaire", Unpublished, OECD, Paris.

Nationally, farm household incomes have risen steadily over the past decade, by an average 4.67% per year, however, farm incomes grew only 2.03% per year, with the rest of the growth coming from non-farm income (6.93% per year) and a rapid expansion of transfers from the government (8.76% annual growth). Non-farm incomes now account for 40.3% and are the largest share of income. Consequently, the proportion of farm household income derived from transfers has risen from 21% to 31% over the past decade and agricultural production is today responsible for only 22.5% of the income of farm households. In May 2020, the government introduced a new subsidy system for farmers that is expected to further increase these transfers. The new system shifts emphasis from rice-growers and large farm operators towards smaller farms and a wider variety of produce. A portion of the subsidy is accorded regardless of

farm size, thus the total subsidy received per square kilometre will be higher for those who operate smaller farms. The farming industry has struggled to attract young people and the existing farmers are ageing rapidly. In Jeollanam-do, the number of farming households has declined by an average of 2.1% per annum in 2010-18.

Outlook and policy

Looking ahead, Chungcheongbuk-do and Jeollanam-do face a variety of challenges and opportunities, some of which they share. Key among these is the future of rural communities in the face of rapid ageing and depopulation. Several initiatives are underway in an effort to address that issue, to raise farmer incomes and attract young farmers, to diversify the rural economy and improve rural service delivery. The provinces have also developed longer-term plans for economic expansion that aim to leverage their respective assets and opportunities.

Raising rural incomes

Income support and price stabilisation

In addition to the national farm subsidies mentioned above, beginning in 2020, Jeollanam-do will introduce an additional public-value allowance for its farmers and fishermen. The allowance, of up to KRW 600 000 per year, is intended to compensate farmers and fishermen for the positive externalities they provide a society that is not reflected in the income they receive from selling their produce. These include food security for the country, environmental conservation, landscape conservation, flood prevention, community maintenance and the preservation of traditional culture and heritage.

The importance of rural life and communities to the landscape and culture of Korea, and the need to develop ways to preserve it, is increasingly recognised. Though Jeollanam-do's allowance will be the first, it is not alone in this new initiative. Similar allowances are being introduced this year in Chungcheongnam-do and Jeollabuk-do and at the county level in Cheongsong, Gyeongbuk, though at the moment there is no plan for one in Chungcheongbuk-do. In addition to the allowance, Jeollanam-do also placed a number of the region's speciality products under price stabilisation this year in an effort to support farmers.

Eco-friendly and advanced agriculture

Approximately 57% of all Korean agricultural land certified for eco-friendly agriculture is in Jeollanam-do (46 460 ha, 2019) and the province is seeking to expand the organic certification for produce and livestock grown on these lands. The province is also encouraging the use of circular farming practices. These efforts have several potential benefits:

- Organic certification can increase the value of the food produced, helping local farmers to compete with cheaper imports.
- These practices help preserve the natural environment and lower the carbon footprint.
- Focusing on eco-friendly agriculture may help attract youth to the sector, with 40% of young farmers (less than 40 years old) in the province already engaged in eco-friendly production.

The province has recently established a new facility named Changnong Town for young farmers and others interested in agriculture-related businesses including food processing and marketing firms. Changnong Town will be a business incubator/accelerator for those aged 20-40 and will be linked with agricultural research infrastructure to help foster start-ups in agricultural science and technology-based agricultural industries. It will provide training and mentoring to help young people start and grow businesses in the sector. The new facility is located in Naju County, where the county government is also working to develop

a pilot facility for the use of unmanned and automated farming machinery, technologies that may alleviate pressures associated with a shrinking and ageing workforce. Naju County is also home to the Bitgaram Innovation City.

In addition to these province- and county-led activities, MAFRA is leading the creation of a Smart Farm Innovation Valley in Goheung County on Jeollanam-do's southern coast (approximately 120 km from Naju). The innovation valley project also aims to support young farmers with business incubation efforts and it will conduct research on the application of ICT to food production, aiming to enhance food safety and productivity through precise data-based environmental control and growth management. The Jeollanam-do innovation valley is one of four currently under development by MAFRA across the country.

Beyond agriculture

The concept of the sixth industrialisation of agriculture has been promoted in Korea as a means to transform agricultural communities towards higher-value and more diverse economic activities. The sixth concept is derived from combining farming (primary industrialisation) with food and bioprocessing (secondary industrialisation) and with high-value services like agro-tourism (tertiary industrialisation). As discussed earlier, for many farm households, agricultural production already plays a minor role in their household income. These households now derive almost twice as much from non-farm sources (40.3%) on average as they do from farming (22.5%). In Jeollanam-do, as of June 2020, 256 cases had been certified, 15.2% of the national total, in alignment with Jeollanam-do's share of the agricultural/forestry/fisheries sector nationally (15.5%). Chungcheongbuk-do is similarly applying this sixth industrialisation concept with efforts to nurture community-based enterprises, food- and bioprocessing and higher-value service-oriented industries.

In addition to its work on the sixth industrialisation, Jeollanam-do is promoting the concept of recreation villages, with 164 of these villages designated across the province. A recreation village offers visitors the chance to experience nature and traditional culture through hands-on experience in agriculture. They facilitate urban-rural exchange and provide farmers with an additional income source. Approximately 1 million visitors to recreation villages have generated KRW 13.3 billion for the province to date (2019).

Rural service delivery and well-being

Delivery of public services in rural areas may be logistically and financially challenging, particularly in areas where the population is ageing and declining. In Jeollanam-do, service delivery is further complicated by the region's many islands, for example, of the 296 inhabited islands in Jeollanam-do, 45% (134) do not have any resident healthcare professional. The Korean government has identified a set of public service standards it aims to achieve for all rural residents, with 17 criteria across 7 sectors. These standards, established by presidential decree, are intended to be guaranteed by the national government, with monitoring in place since 2011 (available data covers 14 of the 17 criteria). In most cases, the services being delivered do not meet the targets (Table 6.4), with average scores for rural areas nationwide below the target level in all but one criterion, the provision of emergency care. In Chungcheongbuk-do, service delivery is below target in 11 of the 14 measured criteria and below the national average in 6, while Jeollanam-do is currently failing to achieve service targets in 13 of the 14 and is below the national average in 11 of them.

Table 6.4. Rural service delivery

Delivery of rural services in Chungcheongbuk-do and Jeollanam-do in relation to national service standards, 2018

Sector	Service area	Target provision	National average provision	Chungcheongbuk-do	Jeollanam-do
Healthcare	Medical treatment	80	78.4	90.9	57.1
	Emergency care	97	99.4	99.6	99
	Seniors	80	73.8	73.2	73.5
	Infants	80	78.2	68.6	64.6
Education	Elementary/Middle schools	100	74.3	60.8	74.7
	Lifelong learning	40	25.0	24.5	15.3
Living infrastructure	Housing	95	0.0	-	-
	Tap water	82	73.4	64.9	70.6
	Heating	65	60.7	63.7	43.2
	Public transport	100	86.7	92.5	88.9
	Broadband	90	0.0	-	-
Economic development	Consulting and training for start-ups and employment	100	76.2	72.7	81
Leisure/Culture	Cultural facilities and programmes	100	92.5	100	90.5
Environment	Water waste treatment	85	81.5	81.7	73.4
Safety and security	Crime prevention	60	54.7	68.4	41.1
	Police patrol	100	0.0	-	-
	Firefighting	55	18.7	25	17.4

Note : All figures are percentages, representing the level of service provision as measured under the national service standards.
Source: OECD (2020[4]), "Questionnaire", Unpublished, OECD, Paris.

Jeollanam-do is particularly challenged in several areas of its public service delivery. In terms of healthcare delivery, primary care in major medical areas is available in 12 of the province's 22 local authorities, maternity services are available in an additional 9 and 4 local authorities offer on-demand access to obstetrics and gynaecological care. In education, the availability of elementary and middle schools is lacking in all local authorities except for Jindo, Wando and Yeosu, while only Muan, the provincial capital county, met the standards for lifelong learning. With regard to essential utilities, standards were met in 7 of the 22 local authorities for potable water while only 3 met the standard for wastewater treatment. Jeollanam-do also has the country's lowest level of Internet uptake, with 84.3% of residents reporting they had used the Internet in the last month as of July 2019, as compared with 91.8% for Korea as a whole.

With regard to public transport, all cities and counties in Jeollanam-do operate semi-public transport programmes but the service quality is lacking in those areas with island jurisdiction (e.g. Jindo, Shinan, Wando, Yeosu). There are no public bus services available in 472 out of the province's 8 963 villages (5.3%) while, in others, the provision may be sparse with few stops. A high proportion of residents in these villages are seniors, many with limited mobility, so a lack of transport provision can have a significantly detrimental impact on their quality of life. In an effort to resolve this situation in a cost-effective way, Jeollanam-do introduced subsidised taxi services that enable residents in areas that lack a proper bus service to use taxis for a bus-fare-like price. This initiative has since been expanded nationwide by the national government.

In terms of leisure and recreational activities, all local authorities in Jeollanam-do operate local cultural and art centres. These centres are intended to organise cultural programmes for their communities; however,

the level of activity between centres varies and several of them are failing to offer these initiatives as regularly as intended. Finally, in the safety and security sector, only 7 of the 22 local authorities (Damyang, Gokseong, Haenam, Jangheung, Jangseong, Wando and Yeosu) have met the standard for CCTV installation and all 22 are currently failing to achieve the 5-minute response time target for fire services.

Chungcheongbuk-do shares several of these problems but to a lesser degree of severity, with challenges in providing quality services to the ageing and in some cases shrinking populations, including for water provision. The province has initiated the subsidised taxi service for rural residents that began in Jeollanam-do and reports higher than average Internet use (95.6%). Efforts are underway to improve the efficiency of service delivery through horizontal co-operation. Local authorities in Chungcheongbuk-do are working together through bilateral and multilateral agreements to deal with issues like waste disposal (landfill/incinerator), crematoriums and integrated public transport networks. Despite these efforts, the challenges remain and fiscal constraints are limiting their ability to deliver services effectively.

Both Chungcheongbuk-do and Jeollanam-do expect service delivery costs to continue to increase, particularly in their low-density rural areas. Jeollanam-do's population has relatively low fiscal self-reliance with a large portion of the population reliant on state transfers and welfare (e.g. farmers and fishermen). Given that Chungcheongbuk-do is a largely mountainous region and Jeollanam-do has almost 300 inhabited islands, both provinces are subject to geographical constraints that impede efforts to increase the efficiency of service delivery. In many cases, the spatial complexity necessitates highly dispersed service locations while at the same time, the populations of the remote areas are those rising fastest, where the need for services is most acute. While fiscal constraints remain a major bottleneck, the provinces are receiving co-operation and administrative support from the central government in their efforts to improve service delivery.

In an effort to address some of the challenges of service delivery, Jeollanam-do recently launched a pilot community care initiative in Suncheon to provide elderly residents with care in their community rather than moving them to nursing homes or hospitals. The province is also seeking to rejuvenate farming and fishery villages to tackle depopulation issues and is looking to create a new public agency for social services to deal with welfare research and service delivery needs.

Long-term economic development

The blue economy in Jeollanam-do

Jeollanam-do is pursuing a longer-term vision for its balanced and sustainable economic development. The province is concerned that the chemical and steel industries that are major economic contributors today are in decline and recognises the need to transition to new sectors. In July 2019, the province announced its new blue economy vision which was developed in close consultation with the central government. The vision includes six themes: energy, tourism, biotechnology, transport, agriculture and fishery products, and cities. The strategy seeks to leverage the specific advantages of the province's geography, supporting the growth of enterprises and the development and commercialisation of new products that make use of ingredients and materials found locally and which leverage environmentally friendly and circular production techniques. A component of this effort will be the development of a "maritime healing blue zone", a project that is part-funded by the central government through its new Regional Development Investment Agreement. This project will develop a research centre that will combine biotechnology and ICT with oceanic research to develop new products/services for personal well-being and healthcare. In the tourism sector, the "blue tourism" strategy will seek to develop sustainable tourism focused on Jeollanam-do's abundant nature and unspoilt coastal environment.

The provincial government also plans to position the region as a hub for research and development (R&D) in the field of new materials and parts, targeting the shipping, automotive and other transportation sectors. To that end, it is supporting small- and medium-sized enterprises (SMEs) in collaborating with universities,

public agencies, think tanks and research institutes to support commercialisation and it is strengthening its support for validation testing in the region, using local infrastructure such as the testbed in Goheung, the Korea Automotive Technology Institute in Yeongam, and the e-mobility centre in Yeonggwang.

In the energy sector, an "energy valley" is being developed, centred around the Bitgaram Innovation City, where KEPCO and energy-related research institutes were relocated. This effort will leverage Jeollanam-do's leading position in renewable energy – it is currently Korea's largest producer of renewable energy, generating 21.4% of the national total. It is also seeking to establish what has been tentatively named the KEPCO University of Science and Technology (KEPCO Tech) to increase the supply of skilled labour in this sector, which may help better integrate KEPCO and other recently relocated institutions into the local economy and labour market. The region is also seeking to accelerate private investment in these and other sectors by designating regulation-free zones to facilitate innovation in areas such as e-mobility and drones.

An ICT and bio-health cluster in Chungcheongbuk-do

In Chungcheongbuk-do, the provincial government is seeking to leverage its proximity to Korea's major urban centres, including the capital region and, more recently, Sejong. Over the last 15 years, the province has seen a substantial expansion of its manufacturing sector with new plants in semiconductors, photovoltaic cells and batteries (e.g. for electric vehicles). The growth of the sector has helped push net migration into positive territory for the province, though the growth of the working-age population has been concentrated among older workers. In Jincheon County, one of the fastest-growing areas of the province, the growth of the population from 2011-19 among those aged 45-69 has been twice as fast (47%) as that of young working adults aged 20-39 (23%). The province is concerned that a relative lack of high-value service sector jobs of the type preferred by young professionals may see them lose these key workers.

Another driver of the provincial economy has been the development of a biotechnology cluster around the town of Osong. The Osong BioValley, part of the Chungcheongbuk-do Free Economic Zone, has benefitted from the relocation of 6 of the state's medical agencies, including the Ministry of Food and Drug Safety and its Centre for Disease Control, and is today home to over 100 companies operating in the biotechnology field. A key advantage of the town is its transportation infrastructure. With a position that is roughly equidistant between the Chungcheongbuk-do capital, Cheongju, and the national administrative capital, Sejong, Osong currently serves as a key access point for both these cities. Osong sits at the intersection of both the Honam and Gyeonbu high-speed KTX rail lines, which connect Seoul with Mokpo (Jeollanam-do) and Busan respectively, meaning Seoul is only 45 minutes away. Cheongju international airport is also nearby (around 30 minutes' drive) with connections to Cambodia, Viet Nam, Hong Kong and several other cities in China and Southeast Asia. In 2022, construction of a synchrotron radiation accelerator will begin in Cheongju, due for completion in 2028. The accelerator has numerous applications in biotechnology and life sciences research that is expected to further cement Chungcheongbuk-do's competitive position in these areas.

Chungcheongbuk-do's proximity to Sejong and Seoul provides advantages as it seeks investment in its growing biotechnology and manufacturing sectors and its current role as a gateway for those heading to Sejong provides additional opportunities for it to benefit from this aspect of the balanced national development policy, specifically for its service sector SMEs. High-speed rail connectivity coupled with commuter rail passes may create an opportunity for people to live in Chungcheongbuk-do and work in Seoul over 100 km away. The lack of a station in Sejong itself, however, is a significant inconvenience for travellers, since the bus ride from Sejong to Osong almost doubles the journey time between political and administrative capitals. The mayor of Sejong has called on his city to have its own station to speed connections, but this could risk reducing service to Osong and the loss of Sejong-bound travellers spending any time in Chungcheongbuk-do. Given the importance of connectivity like KTX services to the development of the high-value service sector and therefore of Chungcheongbuk-do's ability to attract and

retain young professionals going forward, it will be important to continue to develop these connections alongside the further development of Sejong.

As a mountainous region with lakes, rivers and a relatively unspoilt environment, coupled with a United Nations Educational, Scientific and Cultural Organization (UNESCO) world heritage site and a rich history that includes one of the world's earliest moveable-type printing presses (developed around 60 years before Gutenberg), Chungcheongbuk-do has the potential to develop its tourism sector though this potential remains underdeveloped. Economic policy has hitherto been focused on industrial development rather than tertiary services and the province notes that its capital city lacks parklands and green spaces, attributes that could make it both a more attractive place for tourists to visit and a more pleasant place to live. Investments in improving the physical infrastructure that supports quality of life may benefit both the growth of the tourism sector and make the province more attractive for the young professionals in tertiary service sectors that it seeks to attract and retain.

Research and development

In support of their economic development agendas, both Chungcheongbuk-do and Jeollanam-do invest in public research and development activities. These investments are complemented by private sector R&D activity in their provinces. While Chungcheongbuk-do saw over 4 times the total investment in Jeollanam-do in 2017, this resulted in only 15% more patents. Jeollanam-do achieved more patent registrations per researcher than any other Korean jurisdiction. The provincial government in that province has emphasised its research agenda, with the highest proportion of science faculty per student in its middle/high schools and a top rank in achieving academia-business collaboration.

Table 6.5. Research and development

R&D resources and patent outputs for Chungcheongbuk-do and Jeollanam-do, 2017

	Public R&D (KRW 100M)	Private R&D (KRW 100M)	Total R&D (KRW 100M)	R&D workforce	Patent applications	Patent registration
Chungcheongbuk-do	904	21 225	22 129	19 367	3 166	1 861
Jeollanam-do	831	4 660	5 491	7 186	2 902	1 616

Source: OECD (2020[4]), "Questionnaire", Unpublished, OECD, Paris.

Fiscal constraints

Both Chungcheongbuk-do and Jeollanam-do have noted that they feel constrained in their economic development activities by the central government. Though they acknowledge that they have a leading role in regional development, in setting the vision and in policymaking and implementation, they both note a tendency to prioritise the central government's directions as a means to avert any difficulties in funding projects. New fiscal capacity being delivered as part of the ongoing decentralisation may help but these resources will likely be needed to deliver the tasks being simultaneously devolved so further steps may be necessary to provide provinces and municipalities the flexibility they are looking for to direct their own development.

Recommendations

Service delivery

Delivering quality public services to rural areas is a challenge for both Chungcheongbuk-do and Jeollanam-do. The ageing and shrinking populations in these areas have rising needs yet efficient service delivery is complicated by topographical issues (mountains and islands) and fiscal constraints. As the population shrinks, the additional per capita investment will be needed just to stand still yet that will not be enough to revitalise these areas. Population density analysis in the two provinces by age group shows families are choosing to raise their children in cities, possibly explained by the poor grade received for elementary and middle school provision in rural areas under the national service standards. Yet these issues are not unique to these provinces, as shown in Chapter 2, Korea as a whole encounters rising age dependency and population loss is an issue facing large tracts of the country.

The attractiveness of rural areas can be improved through the availability of high-quality public services. Integrated service delivery is one approach frequently implemented to deliver these in a cost-effective way. Four forms of integration that may be deployed include:

- *Colocation*: Putting multiple services together in one building to reduce cost. For example, a health clinic, school, post office and other basic public services could be combined into a single community hub in rural areas.
- *Collaboration*: Brings together different departments/agencies to share their information and training. It can help reduce gaps in service provision by providing opportunities for horizontal and vertical service integration. By sharing knowledge, institutions and agencies can ensure rural dwellers have knowledge of and access to services.
- *Co-operation*: Entails different levels of government communicating and working together on multi-agency teams. This form of integration strives to lower the costs of delivering services and reduce duplication. One area identified where deeper co-operation may be possible is between the national government's Smart Farm Innovation Valley and the provincial government's Changnong Town in Jeollanam-do.
- *Coproduction*: A form of integration that involves community and non-profit groups, also known as the third sector, in providing services. By partnering with citizens and local organisations, public service providers can ensure products and programmes reflect the needs of the community as identified by the people receiving the services. Engaging citizens and citizen organisations in the design, production and delivery of services leads to higher satisfaction and cost reductions.

Given that service delivery often involves a physical location – a school for example – the development and replacement of which happens only intermittently, avenues towards service integration require long-term holistic planning that cuts across traditional ministerial silos and levels of government. By planning now and involving the public in the planning process and the realities of an ageing and shrinking population, the community can be reconciled with the need to, over time, consolidate, integrate and centralise service delivery.

Another avenue through which to improve service delivery is to take advantage of new technology, for example, to provide distance education in rural areas or some medical consultations. Emerging technologies, such as drones for delivering medical supplies or wearable technology for monitoring health may also have useful applications in rural settings. Given that medical technology is a focus area for Korean industry, the government may spur innovation in the private sector by setting challenges for the industry to solve in this area.

In the case of Chungcheongbuk-do and particularly Jeollanam-do, integrated service delivery and the application of new technology may help but may not be sufficient. With recent statistics showing the

national population may have peaked in 2019, the prospect of eventually revitalising and growing all existing communities may not be realistic. The current situation whereby the elderly are much more broadly distributed across the countryside than the working-age population adds additional cost and complexity in service delivery (such as the absence of any medical professional from 134 of the inhabited islands). Looking ahead to a period of ongoing national population contraction, consideration may be given to consolidating some communities and withdrawing from some areas, such as the most sparsely populated islands, or most remote mountain villages, as a means to ensure quality services will continue to be available to all. This may be in alignment with the fifth Comprehensive National Territorial Plan's (CNTP) focus on compressed development through spatial rearrangement.

Vertical and horizontal co-ordination

In questionnaire responses, the provincial governments expressed appreciation for the administrative support and expertise provided by the central government in support of their economic development efforts and, at the same time, some frustration that their fiscal dependency on central government resources means their initiatives are occasionally overtaken by the central government's own policy direction. The nature of the relationship will likely change somewhat following the decentralisation and transfer of some fiscal authority. However, even after these changes, it is still expected that the provincial and municipal governments will remain dependent on the centre for a great deal of their capacity. It is therefore important that the central government be aware of the local policy and project priorities in each jurisdiction and reflect these in its decisions where possible.

One area where there may be an opportunity for the central government is to improve co-ordination across provincial and municipal governments. While each should be encouraged to specialise in regional strengths, priorities identified in different areas of the country must be complementary to avoid any potential race to the bottom. For example, several jurisdictions in Korea are currently seeking to develop industrial clusters in the biotechnology sector, including Chungcheongbuk-do and Jeollanam-do. Gyeongnam's provincial government is seeking to develop an anti-ageing bio-industry, while Gangwon is seeking to develop a nano-biotechnology industry cluster. While this is a rapidly growing sector with many opportunities, there is a risk that if several different jurisdictions target investments from the same pool of companies in this sector at the same time then the result will be less than optimal for Korea. The central government might therefore seek to co-ordinate approaches to help the subnational governments identify regional specialities and complementarities. Another area where an opportunity may exist for greater horizontal co-ordination is between Jeollanam-do's blue economy initiative in maritime industries, including the maritime healing blue zone project and the maritime industrial Innovation City in Busan.

In Jeollanam-do, MAFRA is developing a Smart Farm Innovation Valley in Goheung county while regional efforts are underway in Naju county to develop Changong Town. Both these initiatives aim to support entrepreneurship in the agri-food sector, alongside research activities on the application of advanced technology in food production. To avoid duplication of efforts and maximise the impact of these initiatives it may make sense for them to collaborate, for example on their curriculum and programme eligibility. To support them in achieving their objectives, it may also be necessary to consider axillary service provision: for example, Goeheung is a rapidly ageing county and the Smart Farm hopes to attract young farmers, so consideration for housing provision, childcare, educational services and recreational facilities in this area may be warranted alongside MAFRA's project to increase its attractiveness for young adults, necessitating horizontal co-ordination across multiple ministries not directly associated with agriculture.

Spreading the benefits of policy initiatives

The demographic analysis revealed that the government's major initiatives are impacting the specific counties and cities where they are taking place but that these benefits appear geographically limited to these areas while surrounding counties are largely unmoved. As seen in Chapter 2, Korea's population is

highly concentrated, particularly among the young, and in the context of an ageing and declining population, this implicates significant challenges for the maintenance of rural communities in the future if a more balanced development pattern cannot be achieved. The government's major investment initiatives should aim to benefit the whole region and to avoid potentially draining vitality from the surrounding areas. To address this, closer linkages are needed between initiatives like the free economic zones and innovation cities with the other parts of their regions, with particular sensitivity to developing opportunities in these areas for younger people. This could, for example, include involving Hampyeong, Hwasun and Yeongam Countries as a testbed for energy sector innovations developed in Bitgaram, or developing recreational attractions and amenities for workers from the free economic zone and Innovation City in northwest Chungcheongbuk-do. Jobs alone are likely insufficient, however, with consideration also needed for public service quality and availability, and resident well-being in these areas.

Driving tourism and retaining young adults

Chungcheongbuk-do and Jeollanam-do have both identified the tourism sector as a focus for future growth and both provinces benefit from the unspoilt natural beauty that could potentially support this sector. With its KTX connection to Seoul and several ferry links to Jeju (a major tourism hotspot), Jeollanam-do may be able to leverage its status as a transit point to retain more tourism at its own islands and coastline.

In Chungcheongbuk-do, the desire to grow the tourism sector is aligned with its desire to attract and retain more young professionals – both groups seek attractive places with amenities that deliver a high quality of life. Investments that address the current lack of green space and parks in the provincial capital, and which help connect urban residents (including those in nearby Sejong) with Chungcheongbuk-do's rural/natural attractions, may therefore help attract both groups. Targeted initiatives aimed at attracting high-value service employers, in the same way as has historically been done to develop the manufacturing sector, may also be beneficial, particularly if these efforts are combined with the amenities that please staff, and with the accessibility (such as proximity to Osong station) that lowers the costs and perceived risks for employers considering relocation.

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OECD Rural Studies

Perspectives on Decentralisation and Rural-Urban Linkages in Korea

The economic development of Korea is widely considered as a success story. Yet, as the country joins the ranks of the world's most advanced economies, its rapid pace of development has not fully reached every part of its territory. The pace of urbanisation, particularly around Seoul, has placed mounting pressure on the capital's quality of life, while in rural regions the country's success has felt distant. To address these regional disparities, successive governments have pursued a policy of balanced national development, with major initiatives aimed at spreading economic opportunities throughout the country while at the same time transferring authority and resources to regional and local governments, to increasingly empower them to navigate their own path forward. This study takes stock of these efforts in the context of rural development and finds evidence of progress in several areas, yet opportunities remain in others. The study includes advice and recommendations on multi-level governance, rural-urban linkages and other issues drawn from the experience of OECD countries on how Korea's efforts in pursuit of inclusive growth may be further strengthened to improve the well-being of the country's rural regions.

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