

Building sustainable, resilient and thriving rural places

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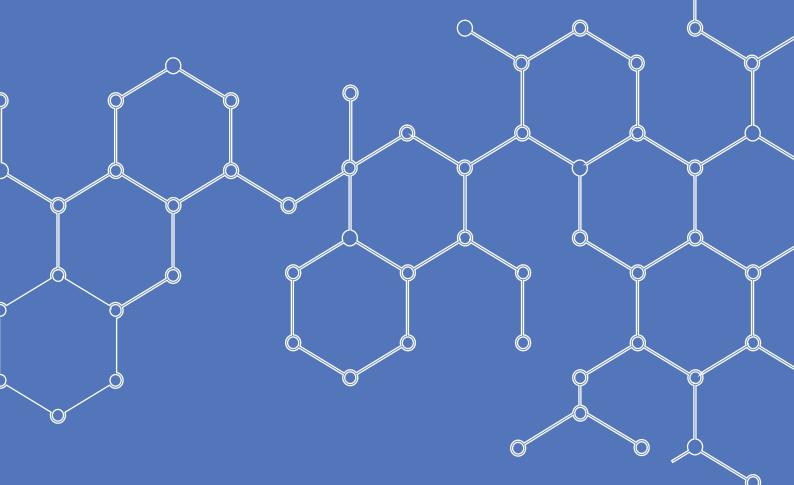


Table of contents

Building S	ustainable,	Reslient and	Thriving	Rural	Places
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1. Introduction	2
Unlocking innovation-based opportunities in rural regions	6
3. Leveraging the green transition in rural regions	9
4. Seizing the opportunities of digitalisation	12
5. Tackling the energy crisis and boosting the resilience of rural regions	15
6. Adapting rural areas to demographic change	18
7. Promoting inclusion in rural areas	23
References	27

FIGURES

Figure 1. Income disparities between rural areas and cities have grown	3
Figure 2. Share of individuals living in rural area and cities with basis or above digital skills, 2019	7
Figure 3. Per capita greenhouse gas emissions by type of TL3 region, 2018	9
Figure 4. Gaps in download speeds experienced by users by degree of urbanisation, OECD and G20	
countries	12
Figure 5. Cities had the largest increases in remote working	13
Figure 6. Non-metropolitan regions close to a small or medium city account for the largest share of energy poor regions	15
Figure 7. The share of the population in metropolitan regions increased in the last two decades	18
Figure 8. Rural-city gap in reading performance, OECD and G20 countries	19
Figure 9. Health problems by gender by degree of urbanisation, countries from all world regions and income	
groups	20
Figure 10. Average marginal effects of female labour force participation rate on remote working rates	24

1. Introduction

As OECD countries advance in the recovery from the COVID-19 pandemic, Russia's large-scale aggression against Ukraine has sent new shock waves around the world, disrupting energy and food markets, and jeopardising governments' efforts to rebuild their economies. These shocks are having a profound impact on OECD rural regions at a time when they face structural transformations brought by the impact of the twin green and digital transitions, ageing, migration, population decline, the production revolution, globalisation, and urbanisation. These transformative megatrends bring both opportunities and challenges such as the acceleration of remote work and the need to invest in net-zero energy sources. These shifts and shocks are already influencing how people in rural societies live, work, produce and consume, and will continue to do so for years to come.

In response, it is more important than ever for governments to put in place ambitious policies to leverage the transformative role of rural regions in keeping recovery from the pandemic on track and preparing for shocks. Anticipating and addressing risks, maximising development opportunities, mobilising citizens, and building long-term resilience in rural regions will be the main focus of the 13th OECD *Rural Development Conference Building Sustainable, Resilient and Thriving Rural Places*.

This issues note describes the main trends shaping the future of OECD rural regions and summarises the opportunities and challenges emerging from them, along with the policy actions to make the most of these changes.

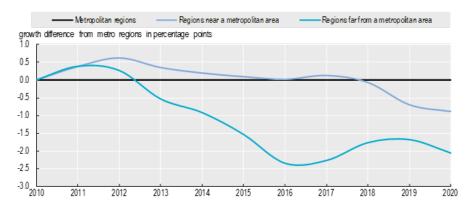
Background

Rural regions are home to one third of the OECD population and contain the vast majority of land, water and other natural resources. Three-quarters of rural residents live in regions with close connections to cities but close to 1 in ten of the total population (75 million people) live in remote rural regions: over 1 in 5 in Greece, Norway, Finland, Sweden, Estonia and Australia.

There are large, persistent disparities between rural and metropolitan regions that can fuel geographies of discontent. Rural regions provide essential services to the economy, including food, mineral resources, energy, water, carbon sinks but also other important services, including tourism and culture, that contribute to societal well-being – indeed two-thirds of jobs in rural areas are in the services sector. However they typically lag metropolitan regions income per capita, productivity, access to services, health outcomes and on a number of other key economic and social criteria, (Figure 1). Whilst some of these gaps reflect comparative advantages of cities, in particular, agglomeration effects, better connectivity, diversification and economies of scale, they are not insurmountable if the right policies are in place. This divergence within countries has leading many to feel they belong to "places that do not matter" (Dijkstra, Poelman and Rodríguez-Pose, 2019[1]). Across OECD, non-metro rural and small and medium size regions closed the gap in GDP per capita before the crisis from 2000-2008 with respect to metro regions by 2.8 full percentage points. From 2008 to 2001 the gap was stable and from 2011 to 2020 the gap increased by 1.3 percentage point on average.

Figure 1. Income disparities between rural areas and cities have grown

GDP per capita growth by type of region relative to metropolitan regions



Source: OECD 2022, Regions and Cities at a Glance, forthcoming

Megatrends and global shocks provide challenges to addressing disparities but they also provide opportunities, not least to boost sustainability and resilience. The global economy has been buffeted by a number of shocks and crises in recent years, including the 2008 financial crisis, the COVID-19 pandemic, and most recently Russia's war against Ukraine, which has sparked inflationary pressures, concerns around food and energy security, as well as renewed challenges to global supply chains. These have come of top of, and indeed in some cases accelerated or reshaped, megatrends such as digitalisation, the green transition, demographic change and globalisation. Whilst all regions have been adversely affected by these shocks, their capacities to adapt to them, and indeed their capacities to adapt to and capitalise on the opportunities of megatrends (as shown in this note), vary significantly, highlighting the importance of place-based policies.

Rural regions were hard hit by second way of the pandemic. The COVID-19 pandemic revealed the importance of action (through both the economic and social costs of earlier inactions) to address vulnerabilities in rural regions. Whilst densely populated urban areas were hardest hit during the first wave (1st half of 2020), pre-existing vulnerabilities in rural areas made them more vulnerable in subsequent waves (OECD, 2021[2]). Rural regions have a higher share of people at risk of severe illness (e.g., elderly and the poor), a much less diversified economy and a higher share of workers in essential jobs (e.g., agriculture, food processing etc.). In addition, rural health centres were often poorly equipped with limited supplies, and more difficult to access (including digitally), whilst more limited digital infrastructure also acted as a barrier to remote working. For example:

- Among European regions, the excess mortality in urban regions during the 1st wave peaked at 80%, while in the 2nd wave excess mortality in rural regions was the highest reaching at peak of 55% (European Commission, 2022_[3]).
- In the second half of 2020, the outbreak was more deadly in rural areas in the United States (USDA ERS, 2021_[4]), France and Italy, and, to a lesser extent, the UK (OECD, 2021_[5]).
- In the US, between March 2020 and May 2021, rural communities experienced 175 deaths per 100,000 residents, compared with 151 deaths per 100,000 residents for urban communities (McKinsey & Company, 2021_[6]). Vaccination coverage was also lower; during December 14, 2020–January 31, 2022, rural counties had lower first-dose vaccination coverage (58.5%) than did urban counties (75.4%) (Saelee et al., 2022_[7]).

Rural regions had a greater lack of hospital beds. Exacerbating access issues (as well as fewer specialist facilities and medical workers) was the lower rate of hospital beds per capita in rural regions. For

21 OECD countries with available data for small regions (TL3), hospital bed rates were almost 50% higher in metropolitan regions compared to regions far from metropolitan areas. A gap that increased by five percentage points with respect to the pre-pandemic period (from 2017 to 2020). (OECD, 2022[8])).

Vaccination uptake has been lower in rural areas. Cultural barriers in Indigenous and ethnic communities as well as greater difficulty in accessing the appropriate healthcare information, has weighed down on vaccination uptake in rural areas ¹. Research from the US suggests that the rate of new COVID-19 cases per 1 000 people is four times higher in Indian reservations than in other parts of the US (OECD, 2021_[2]). Moreover, attitudes to the pandemic differed between urban and rural regions. For example, there was more resistance to mask-wearing in rural areas than urban ones (Haischer et al., 2020_[9])..

Reliance on a smaller number of activities meant the overall slowdown in aggregate demand affected rural economies severely. Many rural regions have a higher reliance on tradable activities particularly those with specialisation in mining and tourism. For example, Island regions (e.g., Corsica in France, Greece's Ionian Islands and Spain's Balearic Islands), in addition to the Algarve region of Portugal have the most tourist-centric economies in the OECD. They saw declines of more than 70% in tourist stays from 2019-2020 meaning sharp declines in revenue and employment (OECD, 2022[8]).

Russia's large-scale aggression to Ukraine has fuelled inflationary pressures and increases in energy and gas prices making rural regions vulnerable to energy poverty. Energy price inflation jumped to 40.7% year-on-year in June 2022, up from 35.4% in May across OECD countries. Rural regions are more vulnerable to energy poverty due to their lower household incomes and lower savings rates, higher energy demand due to larger dwellings and car dependency and greater reliance on higher energy dependant industries.

Policy action

The OECD's *Rural Well-being Framework* provides a key tool to guide place-based policies for rural areas, ensuring that rural policy objectives are multi-dimensional and improve well-being.

Priority areas for rural regions

The *Rural Well-being* framework and its three pillars of well-being comprising the economic, social and environmental dimension identify a number of priority areas for rural regions:

- Focus on improving the well-being of citizens living in rural regions as the key deliverable.
- Raise productivity by developing strategies for rural communities to add value to tradable activities, internationalise SMEs, retain more value in rural communities and strengthening rural skills.
- Design forward-looking policies to provide sustainable services on education and health.
- Develop sustainable services to ensure inclusive rural areas for all.
- Make rural communities attractive for youth, the elderly and newcomers.
- Put rural regions at the centre of the transition to a zero-carbon economy.

And the *OECD Principles on Rural Policy* emphasize the importance of multi-level and horizontal approaches. Policy interventions that target administrative boundaries or economic sectors in silos miss opportunities to unlock synergies and meet broad policy objectives for rural regions and countries.

¹ The OECD Regional Recovery Platform provides data on the large regional divides in vaccination uptake

Recovery from external shocks, such as the COVID-19 crisis, calls for greater multi-level governance and stakeholder co-ordination.

A multi-level governance framework encourages different levels of government to engage in vertical (across different levels of government), horizontal (among the same levels of government) or networked co-operation in order to design and implement better policies. The *OECD Principles on Rural Policy* provides the first multilateral guidelines on rural development, adopted at OECD's 2019 Ministerial meeting on Regional Development in Athens, Greece.

Rural Policy Implementation

Horizontal coordination across levels of government involves an approach in which national policy makers mainstream rural issues across all policies to ensure rural needs are taken into account. A sound rural proofing approach should involve not only reviewing new policy initiatives through a rural lens but also ensuring they are well integrated to the needs of different types of rural regions. Other important aspects for successful co-ordination among governments include:

- Identifying the right scale of intervention by adapting policies and governance to functional borders.
- Setting a clear leadership role at the national scale such as inter-ministerial committees can help overcome a sectoral bias or siloed policy making.
- Strengthening inter-municipal co-operation arrangements between regions or municipalities including cross-border cooperation.
- Promoting rural-urban partnerships to take advantage of functional links.

This issues note builds on these tools and principles by identifying 6 (not mutually exclusive) priority areas for policy action:

- Unlocking innovation-based opportunities in rural regions
- Leveraging the green transition in rural regions
- Seizing the opportunities of digitalisation
- Tackling the energy crisis and boosting the resilience of rural regions
- · Adapting rural areas to demographic change
- Promoting inclusion in rural regions

Links to related publications:

- (OECD, 2020), Rural Well-being: Geography of Opportunities
- (OECD, 2019), <u>OECD Principles on Rural Policy</u>
- (OECD, 2022) Making the most of public investment to address regional inequalities, megatrends and future shocks
- OECD Regional Recovery Platform

2. Unlocking innovation-based opportunities in rural regions

Boosting innovation is key to unlocking opportunities emerging from the twin green and digital transitions and in building resilience in rural regions, as well as in attracting investment, delivering improved essential services (including education, housing and healthcare), and in boosting growth and job creation.

Rural regions can benefit significantly from boosting innovation. The average number of patents per 10,000 inhabitants in 2016 was 1.9 in metropolitan regions 1.0 in regions near a large city, 0.6 in regions with or near a small/medium city and 0.5 in remote regions (OECD, 2019_[10]), i.e. on average cities had 4 times the propensity to innovate than some remote rural areas. Whilst these gaps reflect, in large part, differences in regional industrial structures (and the propensity for different activities to use or generate innovations, for example, in the US, adjusting for the occupational make-up of regions explains only 75% of this gap), it also reflects the significant potential for rural areas to boost innovation, and in doing so boost productivity and income. Indeed, increased patent intensity is associated with an 86% increase in household incomes for those regions with a relatively high share of non-metropolitan populations but only 30% in regions with relatively fewer non-metropolitan populations (OECD, 2022_[11]).

Broader notions of innovation are particularly relevant to rural places. However, while efforts to unlock traditional science and technology innovations, can pay dividends, a narrow focus on just these innovations may be holding rural areas back from accessing support needed to fully exploit the benefits of innovation in a broader sense. In particular innovations in areas that can help close income, productivity and in turn, well-being gaps in differentiated rural areas, i,e. that are specific to the challenges and opportunities different areas face. A broader notion of innovation, in this sense, encompasses entrepreneurs and entrepreneurship, recognising not just their capacities to develop traditional science and technology innovations but also their capacities to develop new ideas, business models and indeed absorption of other innovations that can address or correct failures that are particular to rural places.

However, rural places have fewer young start-up entrepreneurs compared to cities. Young and new entrepreneurs are important drivers of innovation, yet, they are lagging in rural areas. In European rural areas for example, there are 2 missing young start-up entrepreneurs per 1000 inhabitants—that is 25% less young start-up entrepreneurs in rural areas as compared to cities (OECD, 2022_[11]). Furthermore in European OECD countries, young rural entrepreneurs are 8.6% less likely to start a company than those in cities.

Addressing training gaps can boost entrepreneurship in rural places. Young entrepreneurs in cities have a 57% likelihood of having received training the year prior to starting a firm, but the comparable figure in rural areas, towns and suburbs was only 26% (OECD, 2022[11]).

Digital skills are significantly lower in rural places representing an important bottleneck for innovation. Skilled human capital along with sound information and communication technology (ICT) and public infrastructure are cornerstones to developing an ecosystem that sparks innovation at the local level. Low levels of high-skilled workers can be a bottleneck for innovation and productivity in rural places. For instance, across European countries, individuals living in rural regions strongly lag behind their peers in cities with regard to their level of digital skills. While on average 66% of individuals in cities had basic or above digital skills, only 30% had in rural areas (Figure 2).

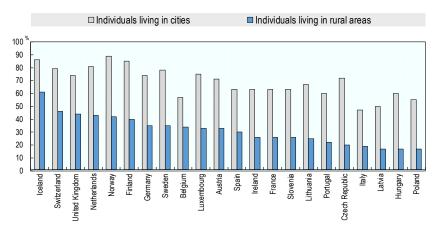


Figure 2. Share of individuals living in rural area and cities with basis or above digital skills, 2019

Note: Not all OECD countries covered by data source. For further information on the Eurostat classification of areas by degree of urbanisation, see https://ec.europa.eu/eurostat/web/degree-of-urbanisation/background
Source: Eurostat (2020) EU European Social Survey

Opportunities and challenges

Rural regions need the appropriate framework conditions to unlock rural innovation, which include labour, physical and digital markets, access to finance and government services. Building a level playing field for entrepreneurs in rural regions means reflecting on place-based challenges. It involves improving government capacity, reducing costs of services or local regulations that may hinder effective implementation of policies in rural regions. It also requires a focus on framework conditions, such as early-stage education for entrepreneurs and enabling local authorities to create incentives for increasing deployment and affordability of digital infrastructure.

Rural regions can add value by specialising in niche markets and product differentiation. Whereas more concentrated urban economies may be able to use vertical integration to control multiple activities in a GVC, rural economies generally rely on specialisations that focus on one, or very few, parts value chains (Mudambi, 2008_[12]). Increased competition from emerging economies calls for a shift to policies that promote differentiation and niche markets instead of low-cost manufacturing. Policy makers can help improve firm's integration, including upgrading, through supporting enabling factors such as skills, and innovation.

One of the key challenges is the lack of understanding that innovation occurs differently in rural areas. It also has a different impact in rural economies than in densely populated ones. Rural regions typically do not have large universities and R&D centres, and hence applying a narrow view of innovation to these places can represent a missed opportunity.

If mobilised effectively, social innovation and entrepreneurship can play a pivotal role for rural areas. With a primary purpose that goes beyond profit-maximization, innovative social entrepreneurs can play an important role in tackling systemic vulnerabilities, including in the provision of essential services to rural communities. However, there are often barriers that can hold them back from leveraging on their full potential, which the OECD's first social and solidarity recommendation (OECD, n.d.[13])can help to overcome.

There are a large number of emerging technologies that can be used to the benefit of rural regions. These include automation and artificial intelligence, decentralised energy generation, cloud computing and the Internet of Things, and Nano technologies. If utilised effectively, they can result in labour saving technologies and product innovations in agriculture, manufacturing, forestry, mining. Advances in

communications technologies and digital literacy can also open new ways of accessing services that can overcome the tyranny of distance. It includes virtual modes of deliver education, health or government services. 3-D printing can create opportunities for localised small-scale manufacturing, and drones for transporting goods. Likewise, electric and autonomous vehicles or green hydrogen provide significant scope to reduce CO2 emissions in rural regions in particular, not least given the proportionately higher emissions per capita from car-use in rural areas.

Policy Action

Unlocking opportunities through innovation

There is significant potential to boost productivity growth, by creating place-based policies to encourage broader entrepreneurial innovations in rural regions:

- Supporting smart specialisation strategies through greater diversification among related sectors or activities in rural economies.
- Strengthening the links of rural economies with urban regions and GVCs, and generating common environments that concentrate firms, entrepreneurs, and research institutions.
- Improving the local business environment (e.g. simplified administrative process), supporting cooperation of SMEs with large firms and providing specific support and training (especially for women and disadvantaged groups) in enhancing entrepreneurship capacities.
- Internationalising SMEs by improving networks and connections with external markets (e.g. participation in international fairs and with business organisations).
- Going beyond science and technology as indicators of innovation in rural regions.
- Targeting barriers such as limited access to improving skills and government resources that hinder the potential for rural entrepreneurs.
- Unlocking barriers that include legal status and access to funding and resources, for social innovators and entrepreneurs

Links to related publications

- (OECD, 2022), Unlocking rural Innovation
- (OECD, 2020), Rural Well-being: Geography of Opportunities
- (OECD, 2014), Innovation and Modernising the Rural Economy

3. Leveraging the green transition in rural regions

Rural policies have an important role to play in reaching net-zero GHG emission targets, but too often, their role is not always sufficiently recognised in national policy approaches. Rural regions cover around 80% of the territory in OECD countries. Their associated natural resources, biodiversity and ecosystem services are needed to sustain our lives. For instance, they produce food and energy, clean water and air, and sequester carbon. Simultaneously, there is an urgent need to transform emission-intensive activities in rural regions into environmentally friendly and net-zero alternatives.

Many rural regions are home to large energy and emissions intensive industries. The green transition presents significant challenges not just for these firms but also their workers, the business eco-systems they support, and the communities that host them. At the same time, rural areas are also places of opportunity. Many for instance are leaders in renewable electricity production and offer the possibility to expand the shift to a bio-circular economy. Accelerating climate change mitigation and adaptation measures in rural regions also requires diversification of rural economies dependent on carbon-intensive activities, which can, in turn, improve local energy security.

In many OECD countries rural regions have the highest emissions per capita including Chile, Finland, Germany, the United Kingdom, and the United States. This is often driven by the lack of deployed sustainable alternatives and the demands of metropolitan areas for power generation, mineral extraction and agricultural production (OECD, 2021_[14]). Average emissions per capita in OECD countries were three times higher in remote rural regions Remote regions, home to about 8% of the OECD population, contributed 26.3 tons of CO2 per capita compared to large metropolitan regions (9.3 tons of CO2 per capita) (Figure 3).

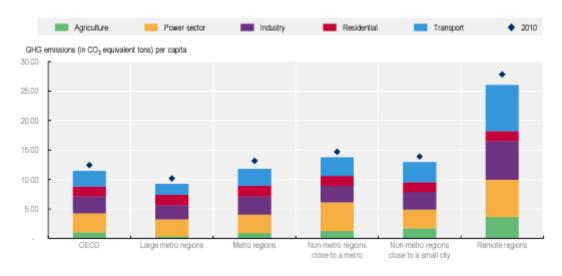


Figure 3. Per capita greenhouse gas emissions by type of TL3 region, 2018

Note: OECD countries, Bulgaria and Romania. GHG emissions excluding emissions from land use and land use change. Source: OECD calculations based on EC (2020[84]), EDGAR - Emissions Database for Global Atmospheric Research, Joint Research Centre, European Commission

Overall, the use of renewable sources tends to increase with distance to metropolitan areas. The share of total production in remote regions from renewable sources stood at 51% in 2017, against 32% in non-metro regions close to a small city and 25% in non-metro regions close to a metro region and 16% in metro regions.

Opportunities and challenges

Many rural economies (e.g. agriculture, forestry, fisheries, mining and energy, etc.) are suffering from the increased frequency and intensity of extreme weather events such as storms, floods and landslides. In many rural regions across the world, increasing heat waves will contribute to water scarcity, and in turn impact on food production. As nature loses its capacity to provide important services, rural economies will suffer significant losses as they rely on the direct extraction of resources from forests, agricultural land and oceans or the provision of ecosystem services such as healthy soils, clean water, pollination and a stable climate.

While rural places are not without their challenges, they are also, unquestionably, places of opportunity that are key in delivering wider well-being to current and future generations. This can be realised through more sustainable land management, higher valorisation of ecosystem services, making use of innovative production processes around agriculture, mining and renewable energies and new modes of transportation. At the same time, this requires a fundamental transformation to rural economies and societies.

Rural communities often struggle to adapt and prepare for transformational challenges required to move to net-zero emissions. Rural regions will require transformations in activities with high emissions, (especially in transport and industry). However, smaller administrations often lack knowledge, ability, skills, and funds to manage the transition. Population ageing, limited economic diversity and dependence on external markets and transport often accentuate these shortcomings. Given the large scale of financial resources required and the new business opportunities the green transition can create in rural regions, there will be a challenge in upskilling local and regional administration. There is also potential to work across sectors and attract green private investment to increase economic activity while safeguarding the natural environment and reducing emissions.

Obtaining local ownership and support of climate policies in rural regions is essential to accelerate and secure a 'Just Transition' and their long-term effectiveness. There is increased focus on both the social and the economic dimensions of climate-related policy, as well as increasing awareness that the transition will affect some communities more than others. Although few countries have regions with over 5% of employment at risk from the transition to a zero-carbon economy, employment impacts tends to concentrate locally. For example, Finland's Åland Islands have 18% risk of employment loss and Poland's Silesia region with 7%. Spatially blind policies that fail to consider these effects may undermine the political and social support needed to achieve transformation processes. The 'Just Transition' concept demands policymakers consider environmental sustainability in concert with delivering decent work and social inclusion.

Policy action

Leveraging the green transition in rural areas

Climate change policies are often spatially blind, targeted to specific sectors or apply uniformly within countries, raising risks of policy fragmentation and sub-optimal outcomes. This can lead to ineffective use of public funds and trade-offs between climate change mitigation and other policy goals.

A place-based approach can support developing capabilities needed to manage transition processes by mobilising local stakeholders and bottom-up initiatives, making use of local knowledge and data, and enhancing innovation. The OECD *Rural Agenda for Climate Action* identifies six main action areas to drive progress including:

- 1. In line with the principle of 'Just Transition', empower rural communities to develop and implement effective transition strategies, ensuring they are involved and have sufficient enabling conditions (i.e. institutional capacity, digital infrastructure, and funding) to adapt and build resilience to climate change as well as assure the uptake of climate change mitigation actions that can create win-win situations for rural development.
- 2. Build on the competitive advantage of rural regions in producing renewable energy, establish local innovation ecosystems and link them to new initiatives such as green hydrogen production.
- 3. Support the sustainable management of natural capital, sustainable land-management practices and value creation from restoring, preserving and enhancing ecosystems for rural development. Promoting higher valorisation of ecosystem services.
- 4. Support the shift to a circular and bio-economy to minimise environmental pressures and promote resource efficiency to offer opportunities for new rural business models and create new markets
- 5. Contribute to decarbonising transport in rural regions by accelerating the transition to more sustainable and innovative mobility options whilst developing and smartly connecting the required physical and digital infrastructure

Strengthen the evidence base by collecting and consolidating regional and local data assessing how opportunities and challenges related to climate change will play out rural areas.

Links to publications

- (OECD, 2021), <u>Regional Outlook</u>
- (OECD, 2021), OECD's Rural Agenda for Climate Action
- (OECD, 2020), Regions and Cities at a Glance

4. Seizing the opportunities of digitalisation

Despite advancements in broadband coverage, there are still important gaps in connectivity and download speeds between rural and urban regions in OECD countries. Gaps in provision have fallen by half in almost all OECD countries, with the average share of rural households with broadband connection (82%) coming close to that in urban areas (89%). However, In 2019, only 59%, 67% and 77% of rural households in Europe, Canada and the United States were located in regions where access to fixed broadband with a minimum speed of 30 Mbps was available, in comparison to 86%, 93% and 94.4% of households in all areas overall (OECD, 2019[10]).

Figure 4. Gaps in download speeds experienced by users by degree of urbanisation, OECD and G20 countries

Gaps estimated as percentage deviation from national averages (2020Q4)

Note: Speedtest data corresponds to 2020Q4. The data for average fixed and mobile broadband download Speedtests reported by Ookla measures the sustained peak throughput achieved by users of the network. The measure is a simple average of the deviations in actual download speeds experienced in rural areas with respect to national average download speeds. Measurements are based on self-administered tests by users, carried over iOS and mobile devices. Aggregation according to the degree of urbanisation was based on GHS Settlement Model (GHS-SMOD) layer grids from (Florczyk, 2019_[14]). The figure presents average peak speed tests, weighted by the number of tests. For further information on the degree of urbanisation, the definition and treatment of the Speedtest data see (OECD, 2021_[15]).

Source: OECD calculations based on Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps. Based on analysis by Ookla of Speedtest Intelligence® data for 2020Q4. Provided by Ookla and accessed 2021-01-27. Ookla trademarks used under license and reprinted with permission

Without direct access to high-speed internet, rural communities face challenges in acquiring knowledge and skills, accessing e-services (like telehealth initiatives), participating in democracy, communicating digitally, working remotely, and creating, or indeed, offering their skills to digitally intensive firms. The digital divide also stifles innovation, business development and the potential for existing firms to grow. Bridging digital divides in access to broadband and in digital skills will be paramount for rural regions

to fully leverage the benefits of digitalisation. Investment in digital infrastructure and skills will also help rural areas exploit the benefits of the digitalisation of work and social interactions and in particular, remote working.

In order to seize the benefits of digitalisation, access to communication infrastructure needs to be complemented by the widespread adoption of digital technologies and by a minimum level of digital skills. Recent evidence from OECD countries shows that there is still a clear regional divide in the take-up of digital technologies. On average, there is a 7.7 percentage point gap in the share of people using the Internet between the regions with the highest and lowest use. In countries like Ireland, Turkey and Japan, the gap can be greater than 20 percentage points (OECD, 2021_[25]).

The uptake of remote working has been lower in rural regions. The suitability of jobs to remote working depends on the type of skills required to carry out occupational tasks. A large share of workers in essential jobs (agriculture, food processing, etc.), which are the predominant form of employment in rural areas, have a limited capability to work remotely. The share of employees working remotely in 2020, at the height of the first COVID wave, was almost twice as large in urban areas (15.7%) than in rural (8.7%) (Figure 5). Indeed, the share of remote workers tripled in capital regions. In contrast in towns and semi-dense areas it doubled and in rural areas it only increased by 70% between 2019 and 2020.

2020 2019 Share of workers (%) 18 15.7 16 14 12 10.5 10 27 8 6.2 5.0 4.9 6 4 2 0 Cities Towns and semi-dense areas Rural Areas

Figure 5. Cities had the largest increases in remote working

Source: Forthcoming 2022 Regions and Cities at a Glance

Opportunities and challenges

Improving digital infrastructures and digital accessibility can bring about opportunities for rural regions. Access to quality broadband is crucial for accessing essential services, boosting well-being, driving entrepreneurship, innovation, growth and productivity. In addition, it can help leverage on the opportunities presented by remote working, including reduced transport-related emissions, greater flexibility of working, improved attractiveness for skilled workers and entrepreneurs to move to rural areas. Digitalisation can reduce trade times and costs, enhance the exchange of new types of products and services, and allow new ways to work and join the labour market. Without active policies to close the digital divide, it can lead to greater territorial inequalities, especially in terms of digital skills, productivity, or access to public services. For example, low-speed networks (less than 20 Mbps) are a barrier in the adoption of many technologies, including advanced telemedicine and cloud computing.

Remote working can bring new growth opportunities for rural economies. The acceleration of remote working is impacting where people and firms choose to live and locate and thus it may create new settlement patterns. Remote working may also create new job opportunities for people that would not have otherwise been able to join the labour market, particularly mothers and people with certain disabilities. Although the longer-term effects of remote working on settlement patterns remains speculative and uncertain, a higher adoption could incentivise demand outside large cities because of more affordable and suitable housing and office spaces with better access to environmental amenities. Some OECD countries have developed policies to better prepare rural areas to benefit from remote working arrangements. For example, by funding co-working spaces (Ireland), or incentivising remote working of public officials (Japan).

However, If not well-managed, changes in mobility patterns from remote working could have negative impacts. These include environmental impacts in the form of land use pressures or inefficiencies with regard to resource management-water, electricity or waste at home, or pressures in public service delivery, i.e. education and health delivery in small regions with new permanent or temporary residents.

Policy action

Closing digital divides

Requires complementing policies to increase nationwide competition, promoting investment and reducing deployment costs, with policies that embody provision and access to regions often left behind. This includes, for example, supporting:

- demand aggregation models to ensure financial viability of projects,
- public private partnership (PPP) initiatives,
- public funding to expand connectivity in rural/remote areas, including through the use of market mechanisms, such as reverse auctions, to provide funding to market players to deploy their networks in rural and remote areas,
- bottom-up approaches: open access municipal and community-led networks,
- addressing, in particular, "the last mile" challenges in rural and remote areas, and
- coverage obligations in spectrum auctions (for wireless networks).

Making the most of remote working opportunities

- Improve linkages between rural and urban areas via transport land use and housing polices and investing in digital infrastructure.
- Invest in digital skills for workers and ICT capacity for firms, especially SMEs. This includes implementing training on use of ICT technologies and capacity building on software maintenance.
- Provide key support services, such as childcare or work-life balance measures to enhance conditions for remote working to all population groups, particularly mothers and youth.
- Adapt environmental policies to the effects of a greater dispersion of economic actors. This
 includes adjusting energy efficiency policies in housing and resource management (water and
 waste) to changes in population, while avoiding urban sprawl effects

Links to related publications

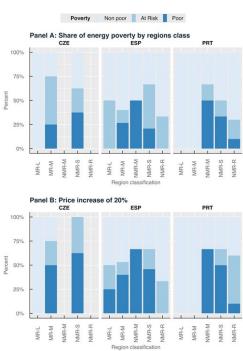
- (OECD, 2022), Unlocking Rural Innovation
- (OECD, 2021), Bridging digital divides in G20 countries
- (OECD, 2021), <u>Implications of Remote Working Adoption on Place Based Policies: A Focus on G7 Countries</u>

5. Tackling the energy crisis and boosting the resilience of rural regions

High energy prices and supply chain disruptions have shed light on how vulnerable rural regions are to energy poverty. Household energy prices, among other household expenditures, have increased substantially as a result of the war. Energy price inflation jumped to 40.7% year-on-year in June 2022, up from 35.4% in May across OECD countries. Inflation has already reached 40-year highs in Germany, the United Kingdom and the United States, undermining real wages in many OECD countries (OECD, n.d.[17]). Rural regions are particularly exposed due to their lower average household income, proportionately higher energy demand and greater sensitivity to industry-specific sectoral shocks. Furthermore, supply-chain disruptions put further pressure on rural regions, especially those with a less-diversified economic base or with a higher import dependency.

Rural regions are more likely to be energy poor.² Estimates of energy poverty in 91 regions of Spain, Czech Republic and Portugal show that 31% of non-metro regions are energy poor, with an additional 14% of regions being at risk (Figure 6). When considering a range of factors contributing to energy poverty, living in a non-metro region increases the chance of energy poverty by 35% in the regions from the 3 countries.

Figure 6. Non-metropolitan regions close to a small or medium city account for the largest share of energy poor regions



The classification of regions as energy poor, at risk and non-poor follows the definitions given above. Region classification is given by the OECD classification scheme Large metro: MR-M; medium metro: MR-M; non-metropolitan with access to metropolitan area: NMR-M; non-metropolitan with access to a small/medium city: NMR-S; non-metropolitan remote: NMR-R (Fadic et al., 2019[16]). According to the OECD, definitions, the Czech Republic, does not have NMR-M nor NMR-R regions. Source: OECD statistics; (OECD, n.d.[17]).

² Defined broadly as the inability to maintain adequate indoor temperature and undertake standard household activity.

The vulnerability of rural regions to energy poverty is driven by:

- Lower average household incomes and lower savings rates. Energy price increases will have a
 higher impact on households with lower disposable incomes, which are disproportionately more
 present in non-metropolitan regions. This will in turn elevate risks of energy poverty.
- **Higher energy demand due to larger dwellings and car dependency**. Energy demand for heating is about 19% higher in non-metropolitan across European regions. Likewise, due to the high distances, car-dependency is 15% higher in non-metro regions than in metro regions and 30% higher in remote regions than in large metro regions.
- Greater reliance on high energy dependant industries. Low-density regions producing a limited
 range of goods and services are more vulnerable to industry-specific shocks than the more diversified
 economic base of larger and denser regions (OECD, 2020). Rural regions are more likely to host
 industries in the petrochemical, metal, and non-metallic minerals sector that are likely to be more
 exposed.

Russia's large-scale aggression against Ukraine has deepened food-insecurity in certain regions. The ongoing conflict is disrupting agricultural production and is strongly affecting the global food supply chain. Ukraine is a major world producer of staple commodities, including wheat and maize whose prices have increased by 41% and 34% respectively since January 2022, and may have difficulties harvesting in the current season and seeding for the next. Furthermore, sanctions on Russia and Belarus are a key driver of the rise in global fertiliser costs. In 2019, Russia accounted for 19% of potassium, 15% of nitrogen and 14% of phosphorous fertiliser exports, while Belarus accounted for 18% of potassium fertiliser exports. (Food and Agriculture Organization of the United Nations, 2019). Other countries such as China have introduced export controls on their fertilisers to limit a rise in domestic food prices. These disruptions are causing concerns for the viability of many rural businesses and communities, in developed, emerging and developing countries. With the risk of worsening world hunger, policy action is likely to be required to avert the prospect of increased food poverty in low-income and other affected regions.

Opportunities and challenges

Diversifying energy sources. Energy prices are expected to rise more than 50% in 2022 before easing in 2023 and 2024 (World Bank, 2022_[18]). Nevertheless, commodity prices are expected to remain well above the most recent five-year average. In a scenario where prices increase by 10%, the percentage of energy poor regions in non-metro regions increases from 27% to 38%. This spike could provide a stepping-stone for longer term shifts towards more sustainable energy sources that provides a better energy mix which helps energy security. Fertiliser shortages may also drive an acceleration towards the production of biofuels.

There is also opportunity to capitalise on new technologies (i.e. see innovation section) that can accelerate the diversification of energy sources and help drive the green transition by reducing transport related carbon footprints.

Disruption in food markets provides an opportunity to increase resilience in food systems and reduce carbon footprints from food supply chains. A more resilient food value chain can embrace the importance of just-in-case modes of production relative to just-in-time, diversification of certain key inputs and relocation of production closer to the point of consumption. This also requires adopting new technologies to increase efficiency of food production and improve the environmental and social spill overs of production networks. Technology can also help increase transparency across the entire value chain to reduce environmental impact. For example, ensuring that food production fulfils environmental sustainability and contributes to the livelihoods of farmers and rural inhabitants by supporting inclusion and gender equality.

Policy action

Addressing energy poverty and increasing rural resilience, including in food systems

Rural policies should complement national ones relating to tackling energy poverty by:

- Mitigating the impact of higher energy costs, through differentiated measures that take account of specific energy-demand characteristics of rural areas/communities, including households.
- Reducing energy dependency. This includes assisting businesses and homes to improve their energy efficiency. This can be via installation of smart meters and new insulation among other measures.
- Accelerate the development and utilisation of green energy. Incentivise to power new public buildings and social or affordable housing projects using renewable energy sources (C40 Cities Climate Leadership Group and C40 Knowledge Hub). Support the acceleration of renewable energy deployments, the bio and circular economy.

Other actions to boost overall rural resilience include:

- Promoting strategies to support pluri-activity in economic activities. For example, among farm
 households, to supplement income from primary production. These can be supported with
 cross-sectorial labour market links along with training programmes on common needs for the
 region.
- Improve access to finance for rural SMEs with special attention to adapt risk assessment methods to rural characteristics and ease the red tape. OECD's Platform on Financing SMEs for Sustainability could support this action.

Links to related publications

- (OECD, 2022), The implications for OECD regions of the war in Ukraine: An initial analysis
- (OECD, 2022), Economic Outlook: The Prince of War
- (OECD, 2021) OECD Platform on Financing SMEs for Sustainability

6. Adapting rural areas to demographic change

Population decline and ageing in rural regions is likely to further strain the trade-off between costs and access over the coming decades, especially in remote regions. Over the past two decades, the share of population living in metropolitan regions increased in all OECD countries (except Greece, Korea and the Netherlands) at the expense of rural outmigration in many rural communities, particularly among youth (Figure 7).

Elderly dependency ratios are significantly higher in rural areas. Population ageing is a widespread phenomenon across the OECD. The dependency ratio for the OECD as a whole increased by almost 8 percentage points since 1980 and is anticipated to grow by another 25 percentage points by 2050. Elderly dependency ratios were 2.8 percentage points (pp) higher in non-metropolitan regions than in metropolitan regions in 2021, and in regions close to metropolitan areas they were 6 full pp higher than in large metropolitan regions (OECD, 2020[19]).

An ageing population, in particular, increases demand for labour in health and social care, and in a range of personal services. New markets could emerge, providing opportunities for new investment, but more traditional ones may have to adapt or disappear. There is also significant social capital to be accrued from engaging and empowering ageing populations in rural communities.

Figure 7. The share of the population in metropolitan regions increased in the last two decades

Change in the share of metropolitan regions between 2001 and 2019 (percentage points)

Note: Metropolitan regions include regions with a city of at least 250 000 inhabitants.

Source: (OECD, 2022[20]). OECD Regional Statistics (database), accessible at: https://www.oecd.org/regional/regional-statistics/

Declining youth in rural areas has implications for quality education. Many rural schools are facing or will soon face declining student numbers, bringing consequentially smaller schools, class sizes and student-teacher ratios. While smaller sizes can present some opportunities such as more teaching time per student, many small rural schools operate in isolation and under capacity with a limited educational offer and their principals and teachers struggle with multiple roles. At the same time, rural schools often benefit from stronger community engagement and are in the best position to benefit from increased

diversity from digital education. Fewer schools per student also imply longer access and travel times as well as educational challenges related to fewer specialised and more generic subject matters. A study for Europe shows that students in remote rural areas have to travel on average 5 additional kilometres to reach a school compared to students in other areas, and that 9 out of 10 municipalities without a school were rural (Europ ean Commission et al., 2022_[21])

It is to no surprise that education outcomes in rural areas are lower.

- Students in city schools obtained higher scores in reading than their peers in schools located elsewhere in all but two G20 countries with available data before controlling for socio-economic factors. Results from PISA³ also show that in some countries, this gap was above 40 percentage points (p.p.) more than the equivalent of a year of schooling.
- Analyses examining the main drivers on PISA scores identifies, even after controlling for socioeconomic characteristics, that performance gaps remain significant in many countries.

Figure 8. Rural-city gap in reading performance, OECD and G20 countries

Based on PISA (2018) scores on test administered to secondary school students

Note: Schools are allocated to "rural" if they are in a village, hamlet or rural area with fewer than 3 000 people and to "cities" if they are in settlements with more than 100 000 people. EU27 average does not include Romania because of lack of data.

Source: Adapted from (OECD, 2020_[22]). *PISA 2018 Database*, https://www.oecd.org/pisa/data/2018database/ (accessed on 15 May 2022) based on (Echazarra and Radinger, 2019_[23]) Learning in rural schools: Insights from PISA, TALIS and the literature", OECD Education Working Papers, No. 196, OECD Publishing, Paris, https://doi.org/10.1787/8b1a5cb9-en.

Demographic factors also precondition the quality of health outcomes in rural regions. The provision of health care is a territorial issue because balancing costs, quality and access necessarily

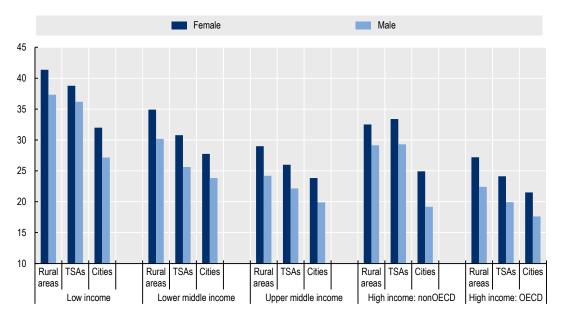
³ The OECD Programme for International Student Assessment (PISA) is an international assessment that measures 15-year-old students' reading, mathematics, and science literacy every 3 years.

involves factoring in density and distance. Many rural populations face longer travel times to access rural care facilities, which in turn face the constant threat of declining user numbers and difficulties in recruiting and retaining health care professionals. The supply of health care services in many rural communities, especially after the 2008 financial crisis, has not kept pace with increasing demand from rural dwellers who, compared to urban dwellers, are on average older, have shorter life spans, display worse health outcomes and suffer more from chronic diseases.

- Almost a third of residents of rural areas reported suffering from health problems. As defined by the degree of urbanisation, across a global sample of countries, this is a larger share than city residents reporting similar issues (24.6%).
- Across European countries, rural residents reported significantly higher unmet needs for health (4.2% in rural areas versus 3.8% in towns and suburbs and 3.5% in cities) resulting from problems in accessing care such as distance from providers or financial barriers. Across 23 OECD countries, about one in five adults in rural areas reported postponing or forgoing care due to long waiting times or difficulties with transportation, and one in six reported putting off or forgoing care because of cost (OECD, 2019_[24]).
- Lack of access to quality care can translate into worse health outcomes, higher incidence of chronic disease, lower quality of life and ultimately higher mortality rates (OECD, 2021_[25]). In the United States, age-adjusted mortality rates for five leading causes of death are higher in non-metropolitan areas than in metropolitan areas. In Australia, mortality rates increase with the level of remoteness, leading to a gap of about 200 additional deaths per 100 000 inhabitants in very remote areas compared to cities (OECD, 2021_[25])

Figure 9. Health problems by gender by degree of urbanisation, countries from all world regions and income groups





Note: TSAs denote towns and semi-dense areas. Data come from the Gallup World Poll and consist of countries from all world regions and all country income groups. In total, 13% are high-income countries, 65% middle-income countries (32% upper- and 33% lower-middle income) and 22% low-income countries.

Source: (OECD/European Commission, 2020_[26]), based on (Gallup, 2017_[27]), Gallup World Poll, 2016-17, https://www.gallup.com/analytics/232838/world-poll.aspx; elaborated by EC and OECD, 2019

Opportunities and challenges

There are both economic and social challenges related to educational provision. Lack of access to quality opportunities in education has been shown to lead not only to lower lifelong employment opportunities, incomes and wellbeing, but also to higher intergenerational inequalities (Hanushek and Woessmann, 2020_[28]). Migration induced by inadequate access to services can lead to brain-drain and exacerbate existing gaps in the availability of educated workers such as doctors and teachers in rural areas.

The main challenge of territorial equity in service provision is to balance proximity and costefficiency with quality. Service provision across territories involves an unavoidable trade-off between facility scale and proximity to users. Lower access to quality services, especially basic ones, can lead to increased spending on social support services and more complex health care and indeed lower taxes (related to lower employment outcomes). Many countries therefore are experimenting with novel approaches including mobile and digital provision.

Although rural schools typically suffer from a lack of resources, they often benefit from stronger community engagement. Research has shown that rural schools benefit from a larger share of parents participating in extracurricular, voluntary and fundraising activities. One motivation for this increased involvement is the heightened role that schools play in rural life, with the school often playing a central role, at the heart of the community, in social cohesion.

More limited beds per capita can easily lead to hospitals being overwhelmed. Urban hospital systems have a greater ability to handle idiosyncratic surges. For example, if an outbreak happens in one part of a large city, doctors and emergency services can direct patients to a nearby hospital with spare capacity. Instead, in rural areas, the next-closest hospital may be prohibitively far.

Demographic change can bring new markets as part of a flourishing "silver economy", while more traditional ones may have to adapt or will even disappear. Ageing also implies changes in lifestyle and consumption patterns - the consumer spending power of elderly people is significant. This will have significant implications for the types of products and services in demand which can pave the way for new markets to emerge

Policy action

Improving educational and health outcomes in rural regions

Education:

The challenges of demographic change in rural areas require effective policy responses to deliver services in rural communities. To prepare rural schools for the future:

- Countries need to rethink traditional approaches to education provision, starting from going beyond relocating rural students to larger, more distant schools.
- Governments should consider a more flexible approach to class and school size regulation so rural schools can maximise the resources available to them while prioritising investments in the attraction, retention, development and empowerment of teachers in rural communities.
- School clusters involving formal collaboration between rural schools can also help mitigate size-based challenges, for example through economies of scale in specialised facilities and a better use of scarce educational professionals.
- Distance learning is a valuable resource for small schools to offer more training opportunities for teachers and support school communities, while service co-location can expand the traditional scope of schools.

Health

To ensure access to quality health care across territories, policies should focus on:

- Reinforcing primary and integrated care, because it is expected to be the first point of contact for the majority of patients' needs.
- Primary care (regular, preventive and person-focused care), is best placed to deal with higher levels of multiple chronic conditions and higher demand for long-term and chronic care in older populations, as it helps to prevent unnecessary hospital admissions in rural areas.
- More extensive use of tele-medicine and new configurations of care, such as clinical networks, are key to the sustainability of rural health care provision.
- Strategies for workforce attraction that combine financial incentives, multidisciplinary medical homes and sharing of responsibilities.
- These strategies will be in vain without active and continuous efforts to overcome workforce shortages in rural areas that combine multiple strategies including financial incentives, educational reforms and rethinking health care provision and the organisation of medical teams.

Links to related publications

- (OECD, 2021), Access and Cost of Education and Health Services
- (OECD 2021), Delivering Quality Education and Health Care to All

7. Promoting inclusion in rural areas

Successfully integrating women, young people, elderly and migrants in the labour market, entrepreneurship, public life and society is crucial not only for their own personal well-being and economic prospects, but also for inclusive economic growth and social cohesion in rural regions. Their energy, vision, innovative thinking and new ideas can positively impact on the scale and intensity of rural development ambition.

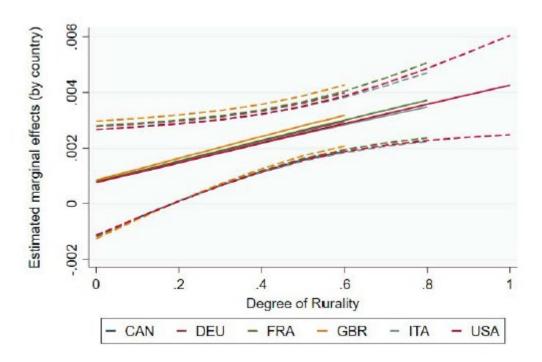
In recent years, women have increased their participation in the economy of all types of rural regions driven by the tertiarisation of the economy. This trend can be ascribed to an increase in service activities in rural regions and a higher level of education of women. Still, rural economies offer fewer jobs to females, with many jobs located in resource-related industries with low shares of female participation. In 18 out of 30 OECD countries with available data, remote regions had larger shares of male versus female workforce in 2017 (OECD, 2019[10]). Policies adapted to women in terms of training and entrepreneurship can help with integration of women in rural labour markets as well as the adoption of remote working. In large TL2 regions with more than a quarter of the population living in rural areas, higher rates of remote working are associated with higher female labour participation (Figure 10).

Rural regions typically experience youth outmigration. Young people from rural areas migrate to cities looking for new economic opportunities, amenities and diversity. A shrinking share of the younger population creates labour market shortages, reduces rates of entrepreneurship and affects local cultural life, weakening the mechanisms to integrate new inhabitants and migrants to local communities. Demographic trends in OECD rural regions outline a pattern of outmigration of youth: in 2016-2019, young migrants between 15 and 29 years old (which accounted for more than half of total within-country flows in OECD countries with available data) moved almost exclusively to metropolitan regions.

Remobilising the elderly can bring hidden benefits to rural regions. Rapid population ageing accelerates the shrinking of the workforce in rural regions. In all except one OECD country, the elderly dependency ratio is much higher in rural regions than in metropolitan regions. This phenomenon contributes to a decline in the rural labour force and hampers attractiveness of the rural business environment to meet labour demands. Remobilising the elderly into productive activities of rural communities and the community life through volunteer schemes, technological innovations and mentoring programmes can represent a hidden asset.

Figure 10. Average marginal effects of female labour force participation rate on remote working rates

Female Participation Rate



Note: Female participation rate refers to active labour force between the ages of 15 and 64 that are female, within each TL2 Source: EULFS (2019), OECD Regional Indicators

Migrants and refugees typically settle in metropolitan areas. Migrants and refugees generally follow settlement patterns that reflect earlier arrivals from their home countries, typically in cities and metropolitan areas, to accelerate and smooth the integration process. This can often put pressure on local services notably on education and housing - and can negatively impact host communities' perception of migration, which can in turn hamper integration.

Rural areas can play an important role in easing these pressures and fostering integration, whilst also addressing demographic challenges (ageing/shrinking). However, there are important challenges and bottlenecks to overcome, including the male-dominated structure of rural labour markets, lower access to essential services, such as childcare, public transportation and language courses, as well as potential prejudices towards immigrants (Claire CHARBIT and Margaux THARAUX, 2021_[29]). Nevertheless, examples of strong mobilisation of local authorities, residents and employers, such as the Canadian Atlantic Immigration Programme, show that these challenges are not insurmountable (OECD, 2022_[30]).

Opportunities and challenges

Rural regions forfeit potential productivity gains in rural regions when women are forced to choose between child-rearing and full participation on the labour market, which also entails significant costs for the women themselves. These costs go far beyond the wages forgone during the period of pregnancy or when their children are of school age. The evidence suggests that long periods outside the workforce or in non-regular employment result in lower wages over the rest of the working life. The prospect of lower

lifetime earnings, in turn, tends to depress the returns to investment in human capital and may thus encourage women to make lower investments in skills. Achieving higher female labour force participation, will require to making it easier to combine careers with parenthood. Better child-care provision will be of particular importance.

Places with strong population imbalances, such as those that are losing their young and working age populations at a fast pace face, are at high risk of losing their economic dynamism. A shrinking share of the younger population creates labour market shortages, reduces rates of entrepreneurship and affects local cultural life, weakening the mechanisms to integrate new inhabitants and migrants to the local community. Engaging and encouraging youth to take active roles in the community and leadership positions can improve their inclusion into the local economy and reduce outmigration rates. Initiatives that better connect educational programmes with local jobs can also strengthen their inclusion.

The elderly can encourage entrepreneurship in rural places. While much of the literature suggests that older people are less likely to take entrepreneurial risk, it also finds that older entrepreneurs are more likely to be successful, not least because they have more developed networks, more experience and, in many cases higher skills and more financial resources. Moreover, it appears that the propensity of older people to start businesses – whether simply to be self-employed or to build a job-creating business – is rising over time. Seniors may also play a role in promoting entrepreneurship without going into business themselves. One should not overlook the entrepreneurial potential of older workers, particularly retired managers and executives, as a resource for younger entrepreneurs. This is particularly true with respect to the large cadre of retired or soon-to-be retired managers of SMEs.

Testing and providing "silver" services in rural places is an opportunity to increase the economic inclusion of the elderly population and can attract investment to rural economies. Technological innovations focused on living well as we age are at the heart of this market. Elderly people also bring institutional knowledge, social maturity and stability and can pass on business relationships to younger workers. This is important for newcomers who want to set up businesses in rural places and need help navigating new environments. Furthermore, retirees, who have free time, can be vital in contributing to voluntary work and help mitigate gaps in regional support structures including childcare or integration of migrants.

Limited municipal capacities and skills can hamper migrant integration. Local civil servants, especially in rural areas, do not always have the necessary skills or experience to ensure access to services for all. It may be because of language barriers, preconceived ideas or lack of experience in dealing with integration issues. Rural-urban partnerships can also help provide access to public services to refugees located in neighbouring rural areas. There are many examples of good practices for migrant and refugee integration in rural and mountainous regions as shown by the European MATILDE project and the French Inter-ministerial Delegation for the Reception and Integration of Refugees. Finally, integration mechanisms that factor in refugees' particular needs (childcare facilities, digital equipment to follow language courses, etc.) as well as hosting territories' characteristic (housing availability, voluntary local employers, etc.) can improve the capacities of rural areas to integrate migrants and refugees.

Indigenous peoples are making an important contribution to the culture, heritage and economic development of these member countries. Yet, across far too many indicators – income, employment, life expectancy and educational attainment – there are significant gaps between Indigenous and non-Indigenous populations in many countries. According to the United Nations, while Indigenous peoples represent about 5% of the world's population, they comprise 15% of the world's extreme poor and one-third of the rural poor.

Policy action

Attracting the youth, migrants, mobilising the elderly population and empowering Indigenous communities

- Developing services related to maternal health, childcare and integration to help young parents and especially women remain active in the workforce.
- Supporting deployment and adoption of technologies that focus on improving living conditions of elderly population.
- Establishing strategies in partnership with private companies and education centres to involve the elderly population in knowledge exchange or voluntary work to mitigate gaps in regional support structures, including childcare. Developing "silver" services that address challenges faced by the elderly population including in health, transportation and social isolation.
- Improving communications on the benefits of rural amenities such as lower cost of living, tailored service infrastructure and closeness to nature in order to attract new population.
- Providing special teaching and leadership to young rural populations by improving synergies among education institutions and demands from local industry and creating focalised funding for young business.
- Developing targeted immigration programmes that help promote rural life to newcomers, connect them with employment opportunities and provide local support services to assist with their retention and integration into the community.
- Develop training for municipal departments (including teachers, social workers, and employment services) about their roles in fostering migrant integration.
- Create an enabling environment for Indigenous entrepreneurship and small business development while implementing a place-based approach to economic development that improves policy coherence and empowers Indigenous communities

Links to related publications

- (OECD, 2020), Rural Well-being: Geography of Opportunities
- (OECD, 2021), <u>Implications of Remote Working Adoption on Place Based Policies: A Focus on G7 Countries</u>

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