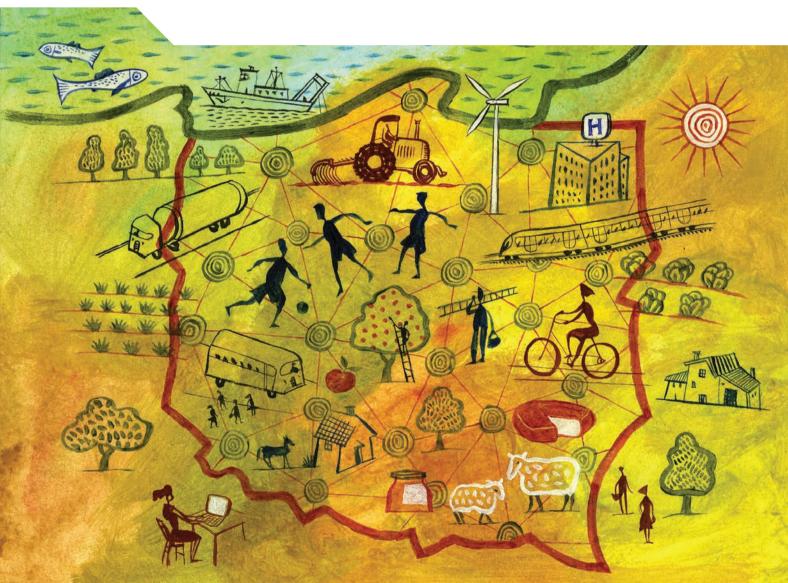


OECD Rural Policy Reviews

POLAND 2018





OECD Rural Policy Reviews: Poland 2018



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Foreword

Rural regions have increasingly diverse economies, depending on a wide range of economic engines for employment and economic growth. International trade, improved communications and reduced transportation costs have propelled economic and social change in rural areas. Given this diversity, traditional policies to subsidise farming have not been able to harness the potential of these economic engines. As such, the OECD has long advocated for a territorial approach to rural development that has positioned rural policy as an investment strategy to promote competitiveness and wellbeing in rural regions. Such an approach can help rural areas seize opportunities and build on their existing assets, such as location, natural resources, natural and cultural amenities and social capital.

Since 2006, the OECD's Rural Policy Review series has examined rural policies in depth, through both thematic studies and country-based reviews. This publication marks the 16th such review. It comes at an important time for rural policy in OECD countries. OECD research has found that the average productivity gap across regions within a country has widened over the past two decades as leading regions outpace other regions in their country. As a result, one in four persons in the OECD lives in a region that is falling further behind in comparative terms. Since the crisis (2008-12), remote rural regions have been the least able to bounce back in terms of employment and productivity. In contrast, rural regions that are close to cities have proven to be more dynamic and resilient.

In Poland, these dynamics are also at play, and they have challenged rural policies to be adaptive to different contexts and needs and to ensure wellbeing for all. Unlike many OECD countries, Poland continues to see a large share of employment in agriculture; however productivity in the sector is low and poverty rates among farming families are relatively high. A key challenge for Poland is to shift to higher productivity agriculture that can produce a good livelihood for farming families while at the same time broaden economic opportunities beyond agriculture in rural areas. Rural development is a major priority of Poland's new national development strategy which, recognises the importance of strengthening institutions at all levels of government. This report offers a number of recommendations on how Poland can achieve these important development goals.

Promoting rural development poses numerous policies and governance challenges and requires co-ordination across sectors, across levels of government and between public and private actors. The multi-disciplinary nature of rural development has contributed to the lack of comprehensive analytical frameworks to analyse and evaluate multi-sectoral, place-based approaches. In order to help fill this knowledge gap, the OECD co-operates with stakeholders worldwide. Its work on rural development was intensified with the creation of the Working Party on Rural Policy in 1999. The Working Party, served by the Centre for Entrepreneurship, SMEs, Regions and Cities, provides governments with a forum to discuss regional and rural development, track trends and emerging issues, and share policy lessons and expertise across a wide range of topics related to rural development.

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Acronyms and abbreviations

Agricultural Advisory Center AAC **ALMP** Active labour market policy **AMA** Agricultural Markets Agency **ANR** Agricultural Property Agency Agencja Nieruchomości Rolnych Agency for Restructuring and Modernisation of Agriculture **ARMA ASIF** Agricultural Social Insurance Fund **CAP** Common Agricultural Policy Community development finance institution **CDFI CF** Cohesion Fund **CLLD** Community-led local development **EAFRD** European Agricultural Fund for Rural Development **EAGF** European Agricultural Guarantee Fund European Agricultural Guidance and Guarantee Fund **EAGGF EDF** European Development Fund **EMFF** European Maritime and Fisheries Fund **ERDF** European Regional Development Fund **ESF** European Social Fund **ESI** European Structural and Investment Funds EU European Union **FUA** Functional urban area **GDP** Gross domestic product Gross value added **GVA** IN Intermediate ITI Integrated territorial investment **KOWR** National Center for Support of Agriculture Krajowy Ośrodek Wsparcia Rolnictwa **KRUS** Farmers Social Insurance

Kasa Rolniczego Ubezpieczenia Społecznego

LAG Local action group

LEADER Links between actions for the development of the rural economy

Liaison entre actions de développement de l'économie rurale

MARD Ministry of Agriculture and Rural Development

MIED Ministry of Investment and Economic Development

NCAE National Center for Agricultural Education

NGO Non-governmental organisation

NSDC National Spatial Development Concept 2030

PLN Polish zloty (currency)
PR Predominantly rural
PU Predominantly urban

RDA Regional development agency

RDP Regional development programme

ROP Regional operational programme

RPC Rural Policy Committee

SAPARD Support for Pre-accession Measures for Agriculture and Rural

Development

SME Small and medium-sized enterprise

SRD Strategy for Responsible Development

SZRWRiR Strategy for the Sustainable Development of Rural Areas, Agriculture

and Fisheries 2012-2020

Strategia zrównoważonego rozwoju wsi, rolnictwa i rybactwa na lata

2012-2020

TERYT National Official Register of Territorial Division of the Country

VET Vocational education and training

YEI Youth Employment Initiative (of the European Union)

ZUS Social Insurance

Zakład Ubezpieczeń Społecznych

Executive summary

Main findings

Poland has key strengths in agriculture, but has yet to transition to a fully modern form; labour productivity remains low and poverty rates are high. Poland's strengths in agriculture include a large arable land base that has production capacity that can be readily improved as well as a growing food-processing industry. However, Poland's agricultural sector is also the most labour intensive in the European Union; agriculture as a share of total employment stands at 11% while its total value added to the economy stands at only 2.4% (2015). This is in part due to limited land consolidation and the dominance of small farms, as well as hidden unemployment in agriculture. While agriculture is a key economic activity for rural dwellers, it is not highly remunerative and farm households face high poverty rates. In 2016, approximately one in four farmers lived in relative poverty, and 11% of farmers lived in extreme poverty.

The rural economy is under-diversified and higher value-added activities are needed. In many regions, Poland's rural economy remains under-diversified, with few jobs available outside the agricultural sector. Reducing the number of small farms through land consolidation and diversifying the rural economy are the two key measures that would enable a stronger economic performance of rural areas. Poland has a low innovation economy and Polish exports are generally dominated by goods with relatively low value added. Poland will need to move beyond its current reliance on low-wage workers and shift to higher value-added activities in order to raise standards of living. Ensuring that the enabling factors of growth are in place will help achieve these goals. Rural infrastructure (roads, sewage) remains limited in some rural regions. Despite major improvements in educational attainment rates, gaps remain. For example, tertiary educational attainment in rural areas lags behind urban ones by 16 percentage points. Persistent territorial disparities in social and economic development threaten prosperity and citizens' well-being.

Poland's dispersed settlement structure requires effective inter-municipal co-ordination. Rural areas in Poland are generally more densely inhabited than across other OECD rural areas (at 83 persons per square kilometre versus 11 in the OECD) and there are a large number of small and medium-sized cities. In almost all rural regions of Poland, at least half of the regional population can reach a regional centre with a population larger than 50 000 inhabitants in less than 45 minutes. This settlement structure presents a considerable opportunity to benefit from rural-urban linkages which can help pool resources, share services and lead to a more vibrant regional economy. It also has its drawbacks. For example, Poland has experienced rapid peri-urbanisation, which can lead to land-use conflicts, a loss of agricultural land and traffic congestion. Despite a number of institutional mechanisms for joint municipal co-ordination, their take-up has been slow.

The Strategy for Responsible Development places a renewed focus on rural development. Poland's recently adopted national development strategy – the Strategy for Responsible Development (SRD) - provides the foundation for constructing a more effective rural policy in Poland. Achieving the SRD's objectives will require:

- enhanced capacity at the regional and local levels in order to be meaningful partners in the development process
- greater flexibility and new accountability measures for subnational government
- improved co-ordination of EU financial support, including strategies to combine EU and national/regional funds for rural development.

The next step is to develop an implementation strategy that takes the values set out in the SRD and constructs a broad strategy for designing and implementing the programmes that will allow them to be achieved.

Main recommendations

Align incentives and enhance support for the modernisation of agriculture in order to improve productivity and reduce rural poverty.

- Provide a more balanced policy framework suited for both small and large commercial farms.
- Converge the farmers' social insurance plan with the regular social security system over time and expand support for non-farm employment and economic activities.
- Require small farms to file income tax returns and develop a more comprehensive set of farm financial statistics to improve agricultural policies.
- Ensure that agricultural advisory services emphasise business and financial management practices and enhance farm financial management curriculum in agricultural schools.
- Improve agricultural credit systems to help small farms with good agricultural potential to modernise and expand.
- Revisit overly restrictive rules for the purchase of farmland and reduce excessive farm fragmentation to improve agricultural productivity and the natural environment.

Enhance support for economic diversification and rural entrepreneurship.

- Increase support for rural development outside of agriculture.
- Strengthen the links between research institutions and rural enterprise.
- Enhance skills upgrading and training for businesses, including more flexible and targeted educational opportunities.
- Enhance the export capacity for small and medium-sized enterprises.
- Ensure a stable and high-quality regulatory environment for investment.

Establish stronger incentives and frameworks for inter-municipal co-operation and integrated planning.

- Encourage inter-municipal co-ordination enabled in law and consider more flexible arrangements.
- Strengthen incentives for rural-rural and rural-urban partnerships.

- Increase incentives for local spatial development plans; reduce reliance on ad hoc planning decisions.
- Capitalise on the existing network of national and regional territorial observatories to monitor spatial trends and lend technical expertise to municipalities (gminas).
- Strengthen mechanisms and incentives for integrated and functional planning.
- Strengthen regulations to protect high-quality agricultural land.

Implementing the Strategy for Responsible Development requires stronger decentralisation and improved multi-level governance.

- Strengthen subnational governance capacity and deepen decentralisation.
- Support local capacity building with enhanced data and territorial definitions.
- Enhance strategies to combine EU and national/regional funds for rural development.
- Choose appropriate targets to ensure that national objectives and standards are met.
- Provide a stable operating environment for subnational governments.
- Provide targeted interventions for distressed and marginalised areas within a multi-level governance framework.
- Construct policies and programmes that are open to non-government organisations as well as private enterprise.

Assessment and recommendations

Assessment

The ongoing transformation of rural Poland – Diagnosis of key trends

Poland has demonstrated impressive growth over the past three decades, but this growth has been uneven

Rural regions are important for Poland: they host about 35% of the national population, contribute around a quarter of the national gross domestic product (GDP), and produce more than half of the total gross value added (GVA) in the agriculture, forestry and fisheries industries. In a context of solid national growth, rural Poland has seen impressive development, with GDP per capita in rural regions increasing by 61% between 2000 and 2014. When compared to OECD rural regions, GDP per capita growth in Polish rural regions has been amongst the highest, driven partly by a catching-up process. Despite this remarkable growth performance, the majority of rural regions have not converged to national standards in GDP per capita. Notwithstanding this fact, a small group of rural regions registers relatively high incomes and are growing strongly. These regions are located in the regions (voivodeships) of Wielkopolskie, Mazowieckie and Łódzkie and clearly benefit from proximity to urban agglomerations.

Regional disparities in economic and social outcomes in Poland are large by OECD standards; the Gini index of territorial inequalities increased by one full point between 1995 and 2013. Although rural regions are converging to national standards in labour productivity, this convergence has been accompanied by negative employment growth, raising concerns for sustaining these trends over the medium term. Despite considerable agricultural modernisation in recent decades, it is a sector that continues to have a great deal of unused production potential due to the large number of small farms and low labour productivity. Rural households' income has increased strongly, particularly since EU accession, but overall living conditions in rural communities generally remain below those of urban communities. Furthermore, extreme poverty risk is much higher in rural areas than in cities, and highest among farmers' households and those relying on disability pensions.

These gaps can be partly explained by their lower key factors for growth. While rural infrastructure (roads, sewage) has improved in recent years, it remains limited, particularly in more peripheral areas. Despite major improvements in educational attainment rates, they also remain considerably below those in urban regions. The gap is the highest for tertiary educational attainment, with rural areas lagging behind urban ones by 16 percentage points, while the share of the population with a lower secondary and primary education in rural areas is 9 percentage points higher than in urban areas. Persistent territorial disparities in social and economic development pose a significant threat to Poland's future prosperity and citizens' well-being. In a context of fast socio-economic transformation, Poland's rural areas will need to mobilise a larger share of the working population into more productive non-farming activities; deal with adverse structural shocks such as population ageing in an inclusive manner; and canalise efforts into integrating rural regions with diverse profiles into the national economy.

Poland's rural areas have diverse development conditions

Rural areas in different parts of Poland face quite different development conditions. Historical legacies of development have led to structurally different socio-economic conditions across the Polish geography. For example, the agrarian structure of the western and northern territories annexed to Poland in 1945 is characterised by large commercial farms leading to relatively high labour productivity levels in agriculture compared to other regions of Poland – a legacy of the large state farms that operated during the communist era. The region of the former Russian partition (central and eastern Poland) also has a strong agricultural economy driven by family farming. In contrast, the region of the former Prussian partition (western Poland) is more advanced than others in terms of deagrarianisation. Finally, the region of the former Austro-Hungarian partition (southern Poland) is characterised by higher population density and small farms, with many below 3 hectares. The diversity of rural regions in Poland highlights the importance of territorial approaches to development.

Poland's dispersed settlement structure offers an opportunity for strong rural-rural and rural-urban linkages

Poland's settlement structure is relatively dispersed due to a large number of small and medium-sized cities. Rural regions in Poland are generally more densely inhabited than across other OECD rural regions (at 83 persons per square kilometre versus 11 in the OECD). There are important regional variations to this phenomenon in Poland; southern regions are more densely populated than northern ones. In virtually all the rural regions of Poland, at least half of the regional population, can reach a regional centre with a population larger than 50 000 inhabitants in less than 45 minutes. Poland has 15 medium-sizes cities with populations between 200 000 and 500 000 inhabitants (2014). The distribution of the urban population tends to follow the "rank-size" rule (or Zipf's Law), where the largest city is twice the size of the second largest, and so on. For Poland, the comparison between this regularity and the actual city-size distribution suggests that the largest city (Warsaw) is smaller than predicted, and that smaller cities still have growth potential.

Poland's dispersed settlement structure presents a considerable opportunity to benefit from rural-urban linkages. OECD research indeed confirms that more dynamic and resilient growth performance are present in rural regions close to cities than across other regions: before the crisis (2000-07) rural regions close to cities registered an average annual productivity growth of 2.15% – higher than any other type of region. Prosperous rural areas close to smaller urban centres also contribute to urban growth by creating a more vibrant regional economy. Rural-rural partnerships to pool resources and share services are also important.

While dispersed settlement patterns bring opportunities, they also bring challenges. Poland has experienced very strong peri-urbanisation, which can, for instance, lead to land-use conflicts, a loss of high-quality agricultural land and increasing traffic congestion. Urban centres in Poland are losing population as people move to intermediate and peri-urban regions. These peri-urbanisation processes are particularly strong in the largest urban agglomerations such as Warsaw, Kraków, Poznań and Łódź and around medium-

sized cities. The rate of increase in developed land in the commuting zone of functional urban areas has been more than twice the rate in the core zone, which indicates urban sprawl. Spatial planning is underdeveloped in many of these areas, and the effective management of rural landscape in the proximity of cities represents an ongoing challenge. Dispersed settlement patterns require co-ordinated approaches to spatial development, the provision of infrastructure and service delivery. Functional territorial definitions can help cities and communities identify opportunities for linkages.

Population decline and ageing challenge rural areas to adapt – Some much more than others

It is estimated that by 2050 the total population of Poland will decrease by approximately 12%, from 38.4 million in 2015 to 33.9 million. This decrease is larger than the estimated decrease of 3% for Europe, but smaller than the projected change for other Eastern Europe countries including Bulgaria and Ukraine. By 2050, projections envisage a 20% decrease in urban population compared to its 2015 levels due to a combination of lower birth rates and peri-urbanisation; in contrast, the rural population is expected to remain at a similar level. The more stable trend in the rural population is largely driven by periurbanisation, with individuals moving to the rural parts of mixed municipalities (gminas).

These demographic trends vary significantly across regions. For example, the rural region of Świętokrzyskie in south-central Poland is projected to experience a population decline of almost 20% by the year 2050 – the highest such decline among Polish regions (Eurostat). In such communities, there will be a smaller tax base through which to provide infrastructure and deliver services, particularly healthcare services, which will face growing demand. Furthermore, unless rates of immigration increase greatly, there will be labour market shortages and attendant knock-on effects. In other cases, rural communities are seeing some population growth, requiring them to expand services and infrastructure for schools, community centres, recreation and transportation.

Poland, like the majority of OECD countries, is experiencing population ageing due to a combination of high life expectancy, lower fertility rates and outmigration. The elderly dependency ratio – which gives an indication of the balance between the retired and the economically active population - is steadily growing. However, unlike the majority of OECD countries, rural regions in Poland have a lower elderly dependency ratio than urban ones (at 19.6% versus 25.5% respectively). This is in part due to periurbanisation and higher fertility rates for rural women. As noted above, there are significant regional variations in these trends. Some rural communities have much higher dependency ratios than others.

In sum, the demographic outlook for Poland is more favourable for rural regions than across the OECD average. However, there are significant regional differences in these trends. Those communities facing rapid population aging and shrinking will require targeted policies, such as policies to help individuals successfully age in place.

Poland's rural economy is under-diversified and higher value-added activities are needed

Poland's rural economy consists of agricultural and non-agricultural activities, with the former playing a considerable role. In Poland, agriculture absorbs a higher share of employment (11% in 2015) than the OECD average (5%), the third-largest in the EU after Romania and Greece. Poland's agriculture sector is the most labour-intensive among European Union countries. Albeit with considerable regional variation, it displays low levels of productivity overall due to very limited land consolidation and the dominance of small farms, as well as hidden unemployment in agriculture. While agriculture is a key economic activity for rural dwellers, it is not highly remunerative and is subject to volatility due to price fluctuations on international markets as well as output unpredictability. The large number of rural households needs to complement their farm-based revenue with sources of income other than from agricultural activities. In 2010, more than half of the households for which agriculture was a source of income declared that revenues from such activity represented less than 30% of their total household revenue. Only for one-fifth of the households engaged in agriculture did agricultural income make up more than 90% of total household revenue.

The main non-agricultural activities in rural areas include manufacturing, construction and services. In many regions Poland's rural economy remains under-diversified, with few jobs available outside the agricultural sector. As a consequence, family members are likely to remain employed on the family farm, even when their work effort is largely redundant, and farming activities are not sufficiently remunerative for most of the many small family-owned businesses. Reducing the number of small farms through land consolidation and diversifying the rural economy are the two key measures that would enable a stronger economic performance of rural areas.

Poland has a low innovation economy and Polish exports are dominated by goods with low value added, with some exceptions in the processed agri-food industry, automotive and transport sectors. In order to maintain its competitiveness, Poland will need to move beyond its current reliance on low-wage workers and shift its current production of low-technology goods to more advanced ones; generate more value in currently produced goods and services; and improve the enabling factors for growth, mainly skills, innovation, accessibility and connectivity, and governance. Rural policies are a key ingredient for this overarching strategy. They can help Poland to modernise its agricultural sector, capitalise on the potential benefits from rural and urban linkages, facilitate an endogenous bottom-up development process, and ensure that rural regions meet their growth potential.

Poland has key strengths in agriculture, but has yet to transition to a fully modern form

Poland's strengths in agriculture include a large arable land base that has a production capacity that can be readily improved with modern technology, such as irrigation, better pasture management and the adoption of precision agriculture techniques. A key advantage of Poland, for at least the medium run, is that labour costs are significantly below those of agricultural producers in most of the markets in western Europe. Wages in Poland are likely to rise in the future due to emigration and a shrinking of the domestic workforce. Poland has a strong food-processing industry that is becoming more international in focus. In addition, Poland has been able to attract global food processors. There is potential to increase the share of output that is processed domestically and thereby add significant value to its food exports.

A key issue in Poland is the high degree of farm fragmentation in many parts of the country such as Małopolskie. Not only are farms small, they are also highly fragmented, with multiple small fields. Field fragmentation may be as big a barrier to efficient farming as small farm sizes, making it difficult for farmers to conduct field operations efficiently. A further impediment is that too many of these small fields are cropped instead of being in pasture. While it may be possible to till a small field, even when it cannot be used as a

pasture, the spatial orientation of the field may require that cultivation leads to a high rate of soil erosion.

Poverty is the highest in rural areas, and the highest among farm households

There are geographic dimensions to poverty and inequality in Poland and a lack of economic diversification in rural areas and the persistence of a dual economic structure in agriculture has led to heightened inequalities among certain groups. Poverty rates are the highest in remote rural areas, where employment in agriculture is relatively high, the rural economy is poorly diversified and small farms prevail. Poverty rates in rural areas are on average twice as high as in large urban centres (those with a population of 500 000 and above). Extreme poverty risk is much higher in rural areas than in cities. In 2015, about 1 in 9 rural inhabitants lived in extreme poverty, compared to less than 1 of every 20 persons living in urban areas. The share of people living in extreme poverty has increased in recent years and more so in rural areas than in urban ones. It is important to address the root causes of poverty in order to help individuals reduce their reliance on cash transfers.

Rural regions have gaps in infrastructure and accessibility, but some of these gaps have narrowed in recent years

There has been a significant expansion of physical and technical infrastructure networks in Poland's rural regions in recent years. Rural households have recently gained more access to computers and the Internet than previously. The availability of computers in households in rural areas increased from 67.1% to 75% between 2011 and 2015; however, this remains below the rate of availability in urban areas (82.9%) and the national average (77.9%). The share of rural households with home Internet access increased from 18.8% to 72% between 2005 to 2015, which is only 5.7 percentage points below the urban average. The share of rural households with a broadband Internet connection rose from 5.2% in 2005 to 64.7% in 2015 and now stands at 9.4 percentage points below the urban average.

Water supply and sewage systems remain underdeveloped in some rural areas. The ratio of connection to the water supply network at the end of 2016 amounted to 82.5%. Worse still is the situation in terms of availability of sewerage network. The ratio of house connections to a sewage system amounted to 35.6% at the end of 2016. This makes it clear that further investments in improving this basic infrastructure in rural areas are still required. These include: new construction, and reconstruction, as well as modern sewer and water treatment technologies. Improvements in the availability of water and sewage infrastructure will raise living standards and improve the environment. External funding to accomplish these tasks are important for rural areas, where lower population densities and lower volumes of water and waste lead to higher fixed costs per household connection.

Rural Poland faces significant disparities in terms of access to people, transport infrastructure, education and higher services

Accessibility to people can be measured as the share of the national population a local inhabitant region can access within a given commuting time, taking into account the actual quality of the road network and the distribution of the population in space. Inequality indicators reveal that disparities in accessibility to people in Poland are large. There are significant gaps in accessibility between urban and other type of gminas: while 34% of the people in urban gminas are in the top accessibility quartile, this number drops to 11.3% for people living in rural or mixed gminas.

Access to transport infrastructure is also unequally distributed across the territory, although in this case the disparities are not as large as with respect to access to population. In the entire country, 38.2% of the population has access to a major highway and railway station within 30 minutes and to an airport within 60 minutes. A further 18.1% has access to rail and highway, but lacks access to airports, while 26.6% has access to only rail or highway. Lastly, 17.1% has no access to any of these transport modes within the 30-minute (or 60-minute for air) interval. This is a significant gap in access, as it indicates that people living in these areas are physically disconnected from the rest of the country. Access to transport is similar for rural and mixed *gminas*, but while mixed *gminas* have slightly more people with access to all three modes (27% mixed vs. 24% rural), rural *gminas* have a slightly higher share of people with no access at all (24% rural vs. 22% mixed).

Inequalities in access to basic education can have significant consequences for human capital formation in areas where low access adds to the relative immobility of children and young people. In Poland, 63.9% of the population has access to education over the range from kindergarten to high school within 15 minutes; 16% of the population lacks easy access to one of the three school levels (kindergarten, primary or high school); while 20.1% has no school at all within a 15-minute drive. In rural *gminas* 51% of the population has access to all levels of education, 22.4% misses at least one level and 26.6% has no access to schools within 15 minutes. Gaps in access to basic education can contribute to school attendance and performance gaps, and future lower returns for children and young people living in areas with low access to education.

Access to higher level services, such as universities and hospitals, is much lower for people in mixed and rural *gminas*. In the country as a whole, 44.9% of the population lives within a 30-minute commute from a hospital and a 60-minute commute from a university. Only 4% of people, living mostly in the periphery of big cities, has access only to universities, while 37.8% has access only to hospitals. The remaining 13.3% of people live in *gminas* without access to hospitals or universities. People living in urban *gminas* will almost certainly have access to a hospital, with only 5.3% lacking. Out of urban dwellers, 63.3% also have access to both a university and a hospital, a figure that drops to 34.8% when looking at mixed *gminas* and 32.1% in rural *gminas*.

Governance and policy frameworks for rural development in Poland

The process of integration with the European Union in the 2000s brought major changes to rural policy, including new economic programmes, institutions and policy approaches

Upon accession to the EU, Polish agricultural producers gained access to a large European market and to European funds for agriculture and rural development. The EU's Common Agricultural Policy (CAP), Structural Funds and other instruments have supported an increasingly multidimensional view of rural development. The focus of rural policy thus shifted towards a wide range of policies that are important to rural life – education policy, infrastructure, entrepreneurship, environmental protection, etc. – alongside the traditional focus on agricultural modernisation. The EU's rural policy is formatively shaped by both the CAP and Cohesion Policy, which aims to improve the economic well-being of regions in the EU and avoid regional disparities. Poland is one the greatest beneficiaries of the CAP and Cohesion Policy funds in the EU. The CAP's sectoral focus is complemented by a territorial perspective through the European Agricultural Fund for Rural Development (EAFRD) – sometimes referred to as the "second pillar" of

the CAP. There are priority areas under each funding perspective of the European Structural and Investment Funds.

National policies and institutions in Poland have evolved to work within the structure of European funding priorities and rules. In 2009, Poland adopted a new national management system and developed long- and medium-term national development strategies and nine accompanying sub-strategies to guide the country's development. The intention is for the national development strategy to connect European objectives under the Europe 2020 Strategy with national objectives. In doing so, the strategy draws on both joint EUnational funding and stand-alone national funding for some objectives.

Successive decentralisation reforms have increased the roles and responsibilities of subnational governments

The transition to a democratic parliamentary democracy in the late 1980s led to a series of decentralisation reforms. In whole, the reforms consolidated the number of provinces or regions and created an intermediate tier of government between the national and local levels. Decentralisation has increased the importance of voivodeships in the delivery of rural policy and gminas have become important actors in the delivery of services to rural citizens and in basic infrastructure provision. Each region in Poland elaborates a development strategy that presents a diagnosis of key challenges and opportunities for the region and sets medium-term development priorities. Local governments in many ways are lead actors for rural development, yet they are largely "policy takers" – their scope for action is highly shaped by rules, regulations and fiscal frameworks determined by the national government. The county (powiat) and gmina levels of local government provide infrastructure and services to citizens that support local economic development and the quality of life in communities.

Poland seeks to improve the quality of life for rural residents and to efficiently use the resources and potential of rural areas

The national government's long-term goal for sustainable rural development is focused on: improving the quality of human and social capital, employment and entrepreneurship in rural areas; improving living conditions in rural areas and their spatial accessibility; enhancing food security; increasing the productivity and competitiveness of the agri-food sector; and supporting environmental protection and adaptation to climate change in rural areas. These priorities for rural development align with that of the EU-Poland Partnership Agreement support for interventions in rural areas.

The Strategy for Responsible Development places a renewed focus on rural development

On 14 February 2017 the Polish Council of Ministers adopted a new short- and medium-term development strategy for the country. The Strategy for Responsible Development (SRD) endorses more balanced growth across the entire Polish territory. It sets out development policy guidance for the short term through 2020 and identifies objectives and approaches for the medium term through 2030. Rural policy in Poland should align with the SRD's objectives and become an important sub-element of the strategy that links the broader philosophy of the SRD to specific policy elements that are implemented by various government agencies, both national and subnational.

Achieving the SRD's objectives will require:

- enhanced capacity at the regional and local levels in order to be meaningful partners in the development process
- greater flexibility and new accountability measures for subnational government
- improved co-ordination of EU financial support, including strategies to combine EU and national/regional funds for rural development.

The SRD provides the foundation for constructing a more effective rural policy in Poland. It is compatible with OECD recommendations for effective rural and regional policy in that it recognises the differing capacities of various types of region, the importance of fostering growth in all regions, and the importance of evolving different places and segments of society from their current levels of development to more productive and rewarding conditions.

While the SRD sets out a clear picture of how Poland should evolve, it does not provide a roadmap for achieving these aspirations

The next step is to update the nine sectoral (horizontal) strategies for developing and implementing the goals and values set out in the SRD which lead to designing and implementing the programmes (on the basis of strategic projects) that will allow them to be achieved. The strategy has to identify all the relevant actors including various levels of government, non-government organisations and private firms. Each type of actor provides important resources and has different strengths, which makes it important to understand how each can contribute to a comprehensive development strategy. An implementation strategy is vital for identifying which programmes and projects are to be used to achieve the goals and the best sequencing of these programmes and projects.

Recommendations

Recommendation 1: Align incentives and enhance support for the modernisation of agriculture to improve productivity and reduce poverty among farmers

Polish agriculture has yet to transition to a fully modern form and in the last few years has faced serious short-term shocks from the loss of the Russian market, which was a long-standing major export destination. In addition, it could potentially be adversely affected by CAP reforms in the future. However, while farming and food processing in Poland may not remain as they currently are, there will be ample opportunity for evolution in a way that allows Poland to expand its role as a major producer within the European Union. Despite considerable agricultural modernisation in recent decades, it is a sector that continues to have a great deal of unused production potential due to its low labour productivity (the lowest in the EU). This challenge – the need for agricultural modernisation in order to increase productivity – is central to Poland's rural development programme (RDP), and yet, many policies serve to maintain uncompetitive and small-scale agriculture. One consequence of this is that many farm households face relatively high rates of poverty.

Poland has a combination of small and large farms that require very different policy responses from the national government. Distinct policy approaches are needed for the large number of inefficient, limited-resource small farms and separately, the relatively small number of commercial farms that account for the vast majority of production and

exports. Both types of farms are important in Poland but for different reasons. Small farms account for the vast majority of farm households and are a powerful political and social force. Large commercial farms will never be a major source of employment, but can make a disproportionate contribution to Polish GDP and exports if they can continue to match competing farms in other EU and OECD countries in terms of technological sophistication and productivity.

Poland should provide a more balanced policy framework that addresses the needs of both small and commercial farms

Poland has often interpreted common agricultural policies in ways that favour the smallest farms, rather than commercial agriculture. For example, a 2015 review of CAP Pillar I Implementation by the EU Directorate-General for Internal Policies found that Poland is one of the countries that has tailored the CAP the most in order to meet national priorities. Poland has capped payments at EUR 150 000, employs coupled support and has adopted the small farmer scheme. Compared to other EU countries, Poland along with Bulgaria has used to a higher degree the possibility of targeting the income support to small and medium-sized farms. Going forward, Poland should provide a more balanced policy framework.

Subsidies to Poland's separate Farmers Social Insurance (KRUS) should be reduced and eventually converge with the regular social security system: opportunities and support for non-farm employment and economic activities should be expanded

The high level of subsidies and other provisions in Poland's Farmer Social Insurance (KRUS) creates an incentive to remain or become a full-time operator of a small farm. Reducing this incentive would help accelerate the adjustment of many households out of unproductive farms. But it is important to recognise that KRUS is a popular programme and many farm households could not afford the current level of individual contributions to the regular social insurance programme. Moreover, many farm households are low-income and as such, an adjustment process is required to ensure that individuals are not marginalised. There are several options in this regard:

- Phasing out KRUS through eligibility requirements and rate premiums. KRUS polices could be maintained for individuals above a certain age bracket (e.g. allowing people older than 45 to remain in the KRUS system with no changes in rules). At the same time, the programme could be closed to new entrants. This reform would need to work in tandem with a transition mechanism for people now enrolled in KRUS who are younger than 45 to move them into the regular social insurance programme. This transition could involve premium assistance that phases out over time as income increases. This could help to reduce the potential burden of rate increases on low-income households. For those within a certain income threshold, rate premiums could be marginally increased year by year to bring the KRUS system closer to the regular insurance system payments.
- Create incentives to join the regular social security system. Such incentives could be structured in a variety of ways. For example, it could entail new forms of support to the current social insurance system for farmers in order to develop agricultural activities or undertake other professional activities. This could help stimulate a shift to the regular social insurance programme. Another option would

be to provide assistance to low-income farm households to cover premiums for enrolling in social insurance (*Zakład Ubezpieczeń Społecznych*, ZUS) in order to support the transition away from KRUS. This would require that farm households file income taxes so that benefit eligibility can be evaluated.

- Training and employment support for KRUS beneficiaries. The agricultural social insurance system could also be restructured in such a way as to create incentives for the vocational training and skills upgrading of farmers in order to either increase the profitability of their farms or to transition to a greater share of non-agricultural employment. Presently, registrants of KRUS are generally not able to obtain the benefits associated with unemployment status, including access to training opportunities and/or employment support through local and regional employment offices. Opening up these benefits to them would assist their transition and need not necessarily require that the status of unemployment persons be conferred on them.
- Increase incentives for non-agricultural employment and entrepreneurship. Eligibility penalties should be relaxed and the threshold for non-farm economic activity should be increased over a period of time in order to allow adjustments to higher rate premiums.
- Supporting job creation in rural areas. In addition to the above-mentioned actions, the successful transition out of the current KRUS setting is contingent on real progress in the diversification of the rural economy in order to increase employment in non-agricultural sectors.

The sequencing of any of the above options for reform are important to consider, as are the types of individuals within the system and their potential for employment and skills upgrading or retraining. It bears noting that some efforts have been made to improve the system of incentives related to KRUS. The government of Poland has recently introduced a special tax for small businesses that is linked to the reduced payment for the regular social insurance programme; this, in turn, creates an incentive for small-scale farmers to both establish a business and switch to the regular insurance system. Individuals who establish a business will be eligible for a lower business taxation rate and lower regular social insurance contributions for a period of 2.5 years. Another incentive for farmers to undertake non-agricultural activities is the provision adopted in January 2015 permitting individuals holding KRUS to be simultaneously insured by the regular social insurance programme if they earn no more than the minimum wage (PLN 2 000 in 2017). These are promising initiatives, but they need to be expanded and combined with other incentives, as noted above.

Small farms should also be required to file income tax returns

Currently small farms are exempt from reporting income and many do not appear to have basic financial records. Reporting farm income should be required of any farm that receives farm programme benefits as a condition of being in the programme. Without such basic data, the government does not have a sense of how its support fits into the farm business. Moreover, farm households would be able to take more informed lifestyle decisions if they kept basic financial records that allow them to understand their farm-related income and expenses. Requiring farm financial records is also consistent with the government's efforts to reduce the size and scope of the informal economy.

Agricultural advisory services should also emphasise business and financial management practices

If Poland is to increase the contribution of farming to the national economy and improve the earnings level of farms of all sizes, a stronger agricultural advisory service is required. The main goal of the advisory service should be to strengthen farm business planning and financial record keeping. Currently, many farm advisors act mainly as grant writers to help farmers obtain EU funds for equipment and other purposes. Not enough emphasis is placed on how new equipment fits into a broader plan for the development of the business or in examining the actual long-term benefits from the grant. There is a lack of mutual interaction among the many institutions and actors that provide advisory services and the creation of agricultural knowledge is too often done in isolation. Extension services are under-supported and the dissemination of knowledge generated by universities is proceeding too slowly, in contrast to research institutes under the Ministry of Agriculture and Rural Development, which are obliged to prepare reports for practice.

Agricultural schools should enhance farm financial management curriculum in order to help transform Polish agriculture

Farmers in Poland are required by law to demonstrate formal qualifications in farming in order to be eligible to operate a farm and to obtain subsidies. The Minister of Agriculture and Rural Development runs and supervises a system of schools to train farmers. In addition to these schools, there are also agricultural schools that are run mostly by powiat self-governments. This capacity offers a potentially powerful mechanism to provide technical education to young members of farm households and others interested in becoming farmers. Rather than just providing technical education in farming practice, there should be a concerted effort to introduce farm financial management concepts and budgeting methods. Further, students should be encouraged to explore career opportunities that include the benefits of off-farm employment as a way to increase and stabilise income. It may even be possible to encourage examination of alternative career paths in in farm-related fields which may broaden horizons beyond full-time farming.

Improved agricultural credit systems are needed for small farms to modernise and expand

Since commercial banks from Western Europe with expertise in agricultural credit have started to operate in Poland, larger Polish farms have obtained better access to loans. These banks have strong agricultural credit departments, but they focus on larger commercial farms with strong financial statements. Smaller farms continue to rely on retained earnings and grants for investments. Without access to stable flows of credit, it is extremely difficult for any small business to thrive, as farming requires annual operating credit in order to make the appropriate use of purchased inputs. Most OECD countries established government-supported credit agencies in the early 20th century as a way to stimulate agricultural productivity. A stable supply of credit allows farm households to invest in their enterprise and improve its operating conditions. While loan guarantees may be required for those with a weak credit history, there is a long set of effective programmes that Poland could emulate in developing such a programme. Enhanced access to credit for small farms should be adopted in tandem with business and financial management support to ensure that sound investments are made.

Poland should revisit overly restrictive rules for the purchase of farmland

Poland distinguishes between two types of farms: 1) those operated by a "natural person"; and 2) those operated by "legal persons", which are organisations such as corporations that exist as distinct entities. Polish legislation has increasingly favoured natural persons as farmers. The 2016 Land Law freezes the sale of state-owned farmland and restricts the purchase of farmland to individual farmers who are defined as persons: with agricultural skills who will operate the farm; who have lived in the municipality where the land is located for at least five years; who will not operate a farm of more than 300 hectares after the purchase. Larger farms may acquire agricultural properties by consent of the General Directorate of the National Center for Support of Agriculture. The new law may create a barrier to entry to farming for those who are not presently farmers. It also makes it more difficult for people to relocate from one part of Poland to another, which will fragment land markets and presents an impediment to expanding the size of a farm beyond 300 hectares. While 300 hectares is a relatively high threshold for a farm, this restriction could have a negative impact on land-intensive farming such as cereal production, which is driven by scale economies, and livestock pasture systems.

Poland should reduce excessive farm fragmentation in order to improve agricultural productivity and the natural environment

Poland has a large number of small farms with a high degree of field fragmentation. Farms with less than 5 hectares of land can have multiple fields, many of which are too small to farm effectively. These farms are inherently unproductive because too much time is wasted travelling between fields and in setting up and dismantling equipment. Fragmentation reduces the value of a farm to a potential buyer because they too will have to incur these costs. In turn, this low value makes it difficult for families to use their existing assets to transition out of unproductive farming. Finally, small fragmented fields can lead to poor farming practices, where fields are not cultivated in ways that maintain soil fertility and control erosion because of the way they are configured. Given the magnitude of the problem in Poland, it will not be easy to resolve. Creating markets for the exchange of fields among farmers in a community is potentially possible, but it is a complex process. Instead, it may be easier to find ways to facilitate long-term leases between parties that have land with adjoining borders as a first step in trying to assemble large contiguous parcels of land.

To improve agricultural policies, Poland should develop a more comprehensive set of farm financial statistics

Poland presently collects a large amount of agricultural data; however, these data mainly consist of records of physical production and agronomic conditions. Conversely, data on farm financial conditions, particularly for small farms, is scarce. Currently, the periodic Eurostat Farm Structure Survey and records from the Farm Accountancy Data Network (FADN) are the two basic sources of financial data on Polish agriculture. Neither of these are comprehensive. Neither dataset fully counts all Polish farms and both exclude most very small farms because they fall outside the interests of the CAP. The behaviour and condition of small farms is important for Poland's domestic rural policy. A better understanding of the relative role that farm income plays on these farms is required to construct the appropriate policies. Augmenting the Farm Structure Survey so that it more accurately captures the full range of financial conditions in Polish agriculture would be a useful first step to creating better data.

Recommendation 2: Enhance support for economic diversification and rural entrepreneurship

Agriculture alone is not enough to sustain rural areas. Poland's agricultural sector is labour-intensive; agriculture as a share of total employment stands at 11% while its total value added to the economy stands at 2.4% (2015). As Poland's agricultural sector continues to modernise, it is becoming less labour-intensive and this in turn increases the importance of strengthening the non-agricultural rural economy, including opportunities to combine farm income with non-agricultural businesses and employment. Doing so will help reduce persistent unemployment/underemployment and poverty. Poland's non-agricultural rural economy has grown in recent years, but the pace of this transformation has been slow.

A wide range of government actions at the central, regional and local levels support the non-agricultural rural economy. On the one hand, there are interventions that create an enabling environment to support businesses of all types (including agriculture), such as investments in transportation and digital infrastructure which facilitate access to markets and access to services such as healthcare and education and training programmes. There are also a range of supports that provide new and existing enterprises with access to knowledge, capital, market development, and support for producer or sectoral groups to make the most of joint efforts. In effect, while governments can create more attractive places, they cannot create the jobs and income that make a place viable.

Innovation and support for entrepreneurship is a prominent measure under Poland's Partnership Agreement with the EU (2014-20) and there a number of new measures to support this objective. The current partnership agreement places a particular focus on smart specialisation measures that are implemented under the Operational Programme for Innovative Development and Eastern Poland and regional operational programmes. Regions may freely choose an area for smart specialisation and 9 of 16 Polish regions have chosen support for high-quality food production. Regional smart specialisation frameworks and implementation measures tend to be focused on scientific research and innovation in Poland, which can neglect rural innovation.

Increase support for rural development outside of agriculture

Poland's support for rural entrepreneurship and economic diversification has not been adequate and more could be done to remove the barriers facing small and medium-sized enterprises. Despite the stimulation of non-agricultural employment being assessed as one of the key priorities for rural development, the current structure of the national government's rural development programme activities provide only limited support for creating employment opportunities outside agriculture. Under the current structure, government support for rural development is partly shifted to other EU operational programmes and on to domestic policies. Importantly, CAP Pillar II support for entrepreneurship in the RDP was nearly 10% of the budget in the previous programming period (2007-13) but was limited to 8% of the budget in the current period (2014-20). Within those amounts, support for non-agricultural activities was 53% in the previous period and has fallen to just 40% in the current one. The current structure of the RDP activities provides only limited support for creating employment opportunities outside agriculture.

In 2009, Poland adopted a new national management system in an effort to bring a cross-cutting approach to the organisation of development policy. Poland has long- and medium-term national development strategies and nine accompanying sub-strategies to guide the country's development, one of which focuses on regional development and the other on rural development and agriculture. Despite this integrated approach, there is a persistent sectoral divide and a lack of synergy between national policies for rural development within the framework of the Common Agricultural Policy and RDP. More could be done to better couple interventions within the rural development programme with that of Cohesion Policy and to increase support for rural development outside of agriculture. Italy and Sweden offer examples on how Poland might achieve this.

Strengthen the links between research institutions and rural enterprise

The main academic institutions for research and development in Poland are located far from rural areas for the most part and this can impact the relationship between rural enterprises and public research. The connections between private enterprises and universities could in many cases be strengthened. While Poland has a network of national research institutes that support and collaborate with specific industries (e.g. agriculture); however, the relationship between regular universities in the regions and business has not traditionally been strong and the culture of such collaboration outside of the academic research communities is quite new in many universities. Regional development funds provide support to enhance these connections. A single regional technology transfer office could help to identity opportunities.

Enhance skills upgrading and training for businesses, including more flexible and targeted educational opportunities

Rural areas in Poland have more limited access to professional training opportunities and it has been reported that the educational system is not adequately flexible in meeting labour market needs. Where professional training has been supported by post-secondary institutions in Poland, this support is not always in line with employers' expectations and as such, the need for retraining can disproportionately fall on business owners. There are several options for business training in Poland, such as on-the-job training offered through the formal system of vocational education, training provided by employers and training provided by private training institutions which tend to be located in regional cities. Employers can finance or co-finance training and education, including vocational education training; 15% of Polish employers use public funds for such purposes. Participation in continuing education in Poland is low and according to 2010 Eurostat data, only 22% of Polish firms provided continuing vocational education and training, compared to 66% in the EU-27 (2014).

Training in Poland tends to focus on supporting the "hard" skills of entrepreneurs, necessary to operate a business and more could be done to support management skills. There are a number of new instruments to support skills development in Poland such as the National Training Fund (operated by *powiat* labour offices), which supports in-house training in companies. Rural firms have a lower rate of technology adoption and as such, targeted training to support innovation diffusion is important. Active face-to-face support in terms of mentoring, training, advisory and counseling services are critically important – particularly for smaller firms looking to take the next step to expand their operations.

Enhance the export capacity for small and medium-sized enterprises

Poland is characterised by a large share of small rural firms, many of which are based on local markets. Increasing the scope the non-agricultural rural economy will rely in part on enhancing the export capacity of rural firms. Italy has adopted a unique approach to helping small and medium-sized enterprises (SMEs) overcome barriers to accessing foreign markers through a programme that supports the costs hiring a temporary export manager. The programme helps SMEs to hire a full-time or part-time temporary employee

to work in the small business in order to help them establish marketing, sales, accounting, information technology and other processes needed to export to a new market. Such approaches might help Polish SMEs increase their market share. Further, marketing assistance at the regional level, including territorial marketing, could be strengthened. At present, local action groups (LAGs) undertake such initiatives, but often around a narrow activity – e.g. culinary traditions and tourism.

Ensure a stable and high-quality regulatory environment for investment

One of the key issues raised by businesses in Poland, both urban and rural, is the desire for a stable regulatory environment. In some cases, new regulations have been imposed that have significant impact on businesses in a short timeframe which has made it very difficult to adjust. For example, in 2016 Poland passed energy legislation that favours coal over renewable energy. The law imposes onerous minimum distance requirements for new wind farms, and raises the property tax burden for all wind energy investments. In effect, it makes Poland a less attractive place to invest in wind power and will damage the profitability of existing investments.

Recommendation 3: Establish stronger incentives and frameworks for inter-municipal co-operation and integrated planning

Poland has a dispersed settlement structure. There are a large number of small and medium-sized cities that are broadly distributed across its territory. These cities provide essential services to surrounding rural regions and a large part of their prosperity hinges on the prosperity of the adjacent rural economies. Essentially these urban and rural places are engaged in a symbiotic relationship where collaboration can benefit both places. But conversely, competition between adjacent urban and rural places also tends to weaken both. This makes strong horizontal co-operation among levels of government at the municipal level very important. Beyond rural-urban partnerships, rural-rural partnerships also provide opportunities for, for example, co-delivery services or sharing infrastructure that can help enhance quality of life in rural communities.

Poland has a number of mechanisms for inter-municipal co-ordination, but more needs to be done to encourage these often nascent partnerships. Moreover, the capacity of rural areas to manage spatial trends is often undermined by low coverage of land-use development plans and a lack of integrated spatial planning whereby sectoral investments are co-ordinated. Upper-level governments have a critical role to play in developing incentives for such planning co-ordination and in ensuring that municipalities have the right mechanisms in place and the knowledge to act.

Encourage inter-municipal co-ordination enabled in law and consider more flexible arrangements

Poland presently has two main legal forms of co-operation between *gminas*, including rural gminas: inter-municipal agreements and inter-municipal unions. Inter-municipal unions, are corporations of public law created by local governments and the vast majority have been adopted to manage the sewage system. The other type, inter-municipal agreements, allow a gmina to entrust certain public tasks, rights and obligations to another gmina (usually for transport or sewage). Since 2016, local authorities can also create so-called shared service centres and the national government has also established a framework for inter-municipal collaboration through new Metropolitan Association Act in Śląskie voivodeship (2017). Finally, LAGs under the EU LEADER Programme are a form of inter-municipal partnership, but involve other actors as well (private sector and non-profit actors).

Despite the aforementioned institutional mechanisms, the take-up of inter-municipal co-operation has been slow in Poland. It is increasingly popular in such areas as water and waste management or broadband and road infrastructure, but remains limited in sectors such as education and housing. National and regional governments should actively promote and support inter-municipal co-ordination and demonstrate its benefits, particularly for new initiatives such as shared service centres. The slow uptake of such agreements may be in part due to a lack of adequate knowledge about how they work and the risks involved.

Finally, legal institutional arrangements to structure partnerships could be expanded. In some places, associations of communes have been developed despite a lack of legal regulations to govern their activities, e.g. an association of rural *gminas* and rural-urban *gminas* in Podlaskie. More flexible arrangements may be needed to spark municipal co-operation in order for it to evolve into a stronger partnership in the future. For example, France's "reciprocity contacts" structure dialogue between rural and urban municipalities, but do not rigidly fix the responsibilities of each party.

Strengthen incentives for rural-rural and rural-urban partnerships

Beyond the legal frameworks for inter-municipal co-operation, it is important that there are incentives to adopt such practices from the onset. One of the most important polices adopted recently to help strengthen rural-urban partnerships are the EU's integrated territorial investments, which can be used to pursue joint projects across functionally connected municipalities. The voluntary nature of this association leads to collaboration on projects that are mutually beneficial. This is on the whole positive, but it also leads to the risk that important issues where interests do not align with one another may not be undertaken. These funds target regional capitals and subregional centres, thus excluding partnerships based on rural communities and smaller market towns.

The national government has also adopted a new package for medium-sized cities loosing economic functions; this is an important initiative, but is by no means enough. It involves hard investments and parallel actions that provide support and advice. Post-2020, a second stage of the project is envisaged with a greater emphasis on using national funds. The idea is to promote local growth centres, i.e. small and medium-sized towns that are service centres. The regional and national government should create more financial incentives whereby *gminas* can access higher funding amounts for joint projects. With the right supports, these types of partnerships would be more common and likely more effective.

Closer collaboration among proximate local governments may take stronger action by senior governments. For example, Quebec Canada's Rural Pact (Pacte Rurale), established in 2002, provided several rounds of multi-year funding to support a broad variety of joint actions by local governments that was mainly intended to facilitate better collaboration in order to ultimately lead to the creation of a bottom-up regional development strategy. This Rural Pact had a regional focus, embraced a multi-sectoral approach, created a long-term framework for collaboration, empowered community actors and was adaptable to local contexts. Such initiatives are particularly important in areas where local governments have more limited institutional capacity and/or challenging development conditions.

Increase incentives for local spatial development plans; reduce reliance on ad hoc planning decisions

Local spatial development plans have very low coverage across Poland. Only 30% of the national territory falls within an applicable local spatial management plan, and in seven voivodeships this share of territory is below 20%. Some legal requirements embodied in the Spatial Planning and Development Act create a disincentive to the adoption of new plans, such as the requirement that compensation be paid to landowners if they are negatively affected by a local spatial development plan. Some limits should be introduced to mitigate this effect, such as reducing the timeframe in which owners can apply for compensation, which is currently unlimited. Further, the adoption of a land-use plan results in additional costs for gminas because they are obligated to purchase land for the provision of new local roads included in the plan. Planning fees can be collected for the costs of financing roads and the provision of technical infrastructure. However, these are often appealed by landowners and gminas report that they are not an effective tool to gain financing to provide infrastructure. One measure which could mitigate this is to extend the timeframe for the obligation for gminas to pay for the land dedicated to roads. The pace by which new land-use plans have been adopted in Poland has slowed and indicates that there is an urgent need for action on this front. Areas seeing population growth and/or with high investment needs are high priorities. For slow-growing rural areas, experiencing very minor changes in land use, some OECD countries have adopted separate and less detailed land-use plans; this is an option for Poland to consider.

Planning decisions – a special administrative procedure – are used to approve new developments in areas where there is no land-use plan. These "one-off" decisions are not required to be consistent with a local government's planning study, which sets out the conditions and directions for development. Reliance on the planning decision mechanism should be reduced in the short term, and eliminated in the longer term. Low local plan coverage together with the widespread use of the planning decision mechanism are the greatest challenges to coherent spatial development in Poland. These issues are particularly important in peri-urban areas which have seen strong growth in recent years, and which require effective land management.

Capitalise on the existing network of national and regional territorial observatories to monitor spatial trends and lend technical expertise to gminas

Rural gminas, as inherently small administrations, have more limited capacity to undertake the elaboration of both spatial and land-use plans. There is a need to strengthen the links among spatial, economic and sectoral plans at the local level both within and among municipalities. Joint indicators that assess and monitor actions over time can help to achieve this. Both the national and regional governments could play a stronger role in supporting rural planning efforts. There is a need for more effective tools for rural areas to monitor and analyse land-use changes for both their own communities and for surrounding ones and to provide the relevant information in an accessible format for both rural communities and residents to use. This is particularly important in areas that are seeing residential growth. There is also a need to include the management of cultural landscape alongside spatial planning practices – an area that has largely been neglected despite its prominence as a local development activity.

Many countries lack the structures to achieve the required co-ordination on spatial development between levels of government. Poland has recently established national and regional territorial observatories and forums to address this issue. The territorial observatories were created to evaluate and monitor regional policy and the forums convene public authorities, scientists and experts to improve spatial planning processes. They are a repository of data and information on spatial trends as well and could be used more effectively to support rural land-use planning. Rather than just reporting up, these observatories could serve to enhance the analytical capacities of local communities themselves, in order to promote, for example, urban-rural partnerships. This is particularly important for rural *gminas* that have limited internal capacity to undertake such functions. One key function in this regard could be to enhance local governments' understanding of spatial trends and emerging challenges. In order for the territorial observatories to effectively render such services, an expansion of their human, technical and financial resources would be needed.

Strengthen mechanisms and incentives for integrated and functional planning

Spatial management is connected to a broader range of considerations such as economic and social development and well-being and that sectoral policies have spatial dimensions that need to be co-ordinated – e.g. the location of services and transportation infrastructure. Regions have an appetite to play a greater role in integrated and functional planning; however, they have limited tools to undertake such a role. For example, the region of West Pomerania aims to establish functional areas where smaller *gminas* co-operate with each other and are supported by both the regional and national governments in a range of strategic areas (e.g. attracting investment, developing transport, enhancing vocational education). The Małopolskie region is interested in encouraging villages to develop a town centre in order to more efficiently deliver services to residents. It has established local contracts to incentivise such initiatives; they are, however, limited in scope and broader mechanisms for integrated planning between the regional and local levels remain weak in statutory law. This lack of tools – be they financial incentives or regulatory instruments – to link sectoral investments in a spatially co-ordinated manner is a missed opportunity.

Strengthen regulations to protect high-quality agricultural land

Poland has one of the highest rates of agricultural land conversion in Europe. Polish municipalities converted 545 000 hectares of agricultural land to non-agricultural uses between 2004 and 2012. The conversion of agricultural land is, however, problematic when high-quality agricultural land is converted to other uses or where land uses are incompatible (e.g. animal husbandry next to residential zones) or otherwise inefficient in their allocation. The scope of these issues are difficult to gauge, in part because there is poor co-ordination between the regional and local levels in terms of monitoring land-use change. There are, for instance, no data on planning appeals and the regional government does not assess the impact of land-use planning in communities. More effective legal regulations are required to protect high-quality soil from being used for non-agricultural purposes and monitoring should be enhanced. Further, a lack of multiannual zoning plans in many *gminas* results in *ad hoc* decisions about land management, which undermine soil quality protections.

Recommendation 4: To implement the Strategy for Responsible Development, deepen decentralisation and improve multi-level governance

Poland's Strategy for Responsible Development (SRD) recognises institutional weakness as a major challenge to realising the country's development potential. This includes: central government procedures that maintain rigid control over the actions of subsidiary

governments, thereby preventing innovative activities; excessive reliance on EU funds and EU programmes to define public policies for Poland; limited communication and co-ordination among state agencies that operate as policy silos; having multiple agencies charged with overlapping responsibility, which can lead to a lack of accountability and unclear outcomes; and weak social capital in some regions that inhibits the collective action needed for locally based development activity. Strengthening Poland's institutions at all levels will therefore require actions on multiple fronts.

Strengthen subnational governance capacity and deepen decentralisation

An appropriate balance of authority and resources among the national government, regions and lower levels of government is yet to be fully developed. Poland has multiple levels of government that have at times overlapping authority, and at some levels inadequate resources to fully accomplish their tasks. While the national government has shown an increased willingness to delegate authority, it has often not provided sufficient resources or autonomy in allocating them to lower levels of governments. This has at times led to weak results, which have been interpreted as evidence that the national government should retain oversight of lower levels of government. However, without sufficient independence and capacity, it is impossible for these lower level governments to create and carry out true "bottom-up" strategies, which are the key to better rural development outcomes. Clearly, the national government must also determine common goals within the multi-level governance framework, and set constraints, in order to ensure that the broad interests of Poland are maintained, but the constraints should be as minimal as possible.

Commitments to decentralisation cannot be piecemeal. While the SRD signals an intention for greater decentralisation in support for endogenous development, there is evidence of centralising tendencies that run in the opposite direction – and include both the centralisation of regional and local functions to the national government. For example, all national government and EU funding for non-governmental organisations (NGOs) has recently been centralised within the Prime Minister's Office; agricultural advisory centres have been transferred from voivodeships to the national government; and the Agricultural Markets Association has increased control over producers groups. Further, the organisation of schools which was formally approved on the local level is now influenced by the representatives of national authorities in the regions

Increasing the capacity of subnational governments together with the range of other actors engaged in local development (e.g. LAGs) is critical in light of the need to be more strategic with public investments in the next EU programming period (post-2020). Such an approach will address a significant problem in Poland of some regions focusing on maximising the flow of EU funds by tapping all possible programmes that they qualify for. In the short run this can inject a significant amount of money into a region where local governments and NGOs lack adequate financial support to carry out development efforts. In the longer run it can, however, lead to a relatively random set of investments that fail to provide an adequate platform for sustainable development and that may impose ongoing operating costs. As a general principle, an effective bottom-up development strategy requires thinking about rural investments in a systematic way to connect them to the broader objectives of the region. In the future programing period, there is the potential that that types of funds that have been available from EU instruments in the past may not continue, and as such, there is a need to be much more strategic in prioritising investments and in combining them from the perspective of both soft and hard instruments and in terms of funding from EU, national and own sources. Local actors will need to determine their investment needs first and finance accordingly.

Support local capacity building with enhanced data and territorial definitions

Rural definitions and typologies matter greatly in policy development and implementation because they bound geographies and the lenses through which issues are viewed and thus acted upon. The Polish TERYT typology usefully identifies three types of *gminas*; however, the typology also has several limitations. For example, the initial classification of *gminas* (LAU2) relies on qualitative criteria and there is no differentiation among different types of rural. Poland should consider revisiting its rural classification in order to help better understand the rural-urban continuum and functional relationships between territories. For example, a more nuanced understanding of mixed *gminas* in Poland's statistical typology (TERYT) could help improve the understanding of how these territories function with urban and rural counterparts.

Finland, Italy and Sweden offer but a few examples of how rural definitions can be adopted for different policy purposes which may have application in Poland. Finland launched a new definition in 2013 based on spatial data (250 m² grid cells). It analyses territories based on multiple variables which are organised into seven regional types. Italy has adopted territorial classifications that recognise its polycentric character. Within Italy's new policy for territorial cohesion – the "Inner Areas" policy – the national territory has been classified into six types of regions based on access to services in order to better address specific regional issues. Sweden's classification is based on population in grid cells of 1 km² in order to calculate the rural and non-rural population in a municipality and different threshold values in order to determine a municipality's classification.

Enhance strategies to combine EU and national/regional funds for rural development

Poland is interested drawing on EU, national and regional funds in a complementary manner in order to amplify their effects. One of the strategic projects in the SRD – the Pact for Rural Areas – articulates such an approach. It is a proposed document that aims to co-ordinate actions for rural development in order to better target support through the use of national and EU funds. Its development has been led by the Ministry of Agriculture and Rural Development in consultation with a various stakeholders (experts, central offices, *voivodeship* governments, NGOs, research institutes, agricultural organisations). With the formative input of these groups, a number of priority areas for rural development were proposed, such as business development, technical and social infrastructure, public services, environmental protection, and agricultural markets.

The governance framework that underpins this approach will be critical and is presently being determined. The Strategy for Responsible Development describes the Pact for Rural Areas as a document that will consolidate tasks in order to ensure the consistency between strategic tasks of the national government and subnational governments. However, in order to be effective, it needs to be more than just a document in order to mobilise actors and adjust along the way. Experiences from other OECD countries, for example Italy's Inner Areas Strategy, demonstrate that effective partnership building at all levels has been critical to the success of this approach.

Choose appropriate targets to ensure that national objectives and standards are met

Only the national government fully considers what is best for Poland as a whole. But when delegating authority, it gives up much of its central planning function to allow sufficient flexibility for lower level governments. In this environment, instead of controlling the specific actions that lower levels of government undertake, one appropriate way to monitor performance is through outcome evaluation, which focuses on the results they achieve. By choosing appropriate targets for various levels of government, the national government establishes the outcomes it desires, but leaves subnational governments considerable discretion in how they co-ordinate their objectives with national goals and flexibility in choosing specific policies and programmes.

When well-designed, outcomes indicators can provide regular, timely and unambiguous feedback to policy makers, foster learning and capacity building, create transparency and accountability, and help correct policies that are not working well or as intended. The European Commission has introduced a results-based imperative in its Cohesion Policy framework and requires that the outcomes of supported policies are monitored in the programming period 2014-20. For many EU member states, like Poland, this required a modification to the existing monitoring framework. This focus is important not just for programmes funded by the EU, but should be the underlying principle of every policy, regardless of whether it is funded nationally or by EU sources. The monitoring requirements of the European Commission could be used as an occasion to modernise and extend national performance monitoring frameworks. However, there is a word of caution: outcomes indicators should not impose overly onerous requirements on reporting authorities and, ideally, should rely on existing administrative or statistical data where possible.

Provide a stable operating environment for subnational governments

Local governments need consistency in their operating environments in order to adequately plan for the future. They need stability in laws and regulations. Local governments have been challenged in recent years by some policy changes that impose potentially significant costs. Most notably, a new national educational reform to the system of primary and secondary schools imposes significant infrastructure costs on rural gminas without additional funding. As of 1 September 2017, students will attend eight years of primary school and four years of secondary school (or five years of vocational school) and middle school enrolments will be phased out. It is anticipated that middle schools will stop enrolling new students in 2017 and will be phased out entirely in 2019. Local governments will need to bear the costs of new infrastructure requirements and there are concerns that these reforms will lead to job losses for teachers. The reform also replaces general vocational schools with a two-tier system closely linked to the national qualifications framework. It is important that assessments of the potential costs of legislative changes to other levels of government are considered in such decisions so that they can adequately plan and react.

As another example, rural municipalities report policy changes related to the structure of significance factors in education subventions as leading to unpredictable funding. Significance factors have changed in recent years from having larger funding allocations for small schools (of less than 70 students), while previous government policies favoured merging schools. A particular concern for rural gminas is the timeframe for determining educational subventions on a year-to-year basis. More upfront communications on these changes will help communities better plan.

Provide targeted interventions for distressed and marginalised areas within a multi-level governance framework

Some rural areas of Poland face extremely challenging development conditions and will require much more targeted supports delivered through a multi-level governance framework. Communities that are facing rapid population decline, that have marginalised populations, a weak economy and poor labour market, that face persistent poverty and/or that have poorer infrastructure and accessibility to transportation and services will require special support. Poland already has a number of territorially targeted supports. The most important is the programme for areas threatened by permanent marginalisation. Most of these areas are located in the northern and eastern parts of the country and include areas of former state collective farms.

Despite a significant volume of investments financed mainly from EU funds, conditions in marginalised areas continue to deteriorate. A new approach is needed. The SRD envisages these communities receiving a package of support to develop integrated investments. Such communities would benefit from dedicated co-ordinators at the national and regional levels that could help navigate programmes and deliver catered solutions. At the same time, specific support could be employed to promote community engagement in local development. Canada has adopted an approach that may be of interest to Poland through its community employment and innovation projects. In exchange for foregoing unemployment or social assistance benefits, project participants were offered wages to work on community projects for up to three years, giving them a significant period of stable income as well as an opportunity to support their community's development.

Construct policies and programmes that are open to non-governmental organisations and private enterprise as well

The vast majority of the Polish economy lies outside government and effective development policy will require the active participation of both civil society and private firms. Historically the national government has not found effective ways to collaborate with either firms or NGOs that have their own objectives. Moreover, the LAGs, which are meant to have balanced representation of public, private and civic interests, tend to be dominated by local governments. There is a clear need to enhance the quality of civic and private sector participation and engagement in local development processes. Because these groups cannot be compelled to act in ways that the government chooses, it is essential to develop an approach that aligns government objectives with those of firms and organisations.

Chapter 1.

Profile of rural Poland

This chapter provides a diagnosis of rural Poland, identifying major trends, strengths and bottlenecks to development. The chapter begins by describing the key issues facing rural Poland. The second section provides a profile of rural Poland, including territorial divisions, population dynamics, settlement patterns and labour markets. The third section describes the rural economy, noting the prominence of agriculture and the need for economic diversification. The fourth section describes the key enabling factors of growth and development, skills, innovation and infrastructure. The fifth section describes quality of life in rural Poland. The chapter ends with a discussion of how rural areas are defined, which is very important in terms of how policies are structured and targeted to rural locales.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

The ongoing transformation of rural Poland

Polish rural regions host over one-third of the total population, contribute around a quarter of the total gross domestic product (GDP) of the national economy, and produce half of the total gross value added (GVA) in the agriculture, forestry and fisheries sector. In the past three decades, rural Poland has seen impressive development in a context of solid national growth. Remarkably, rural regions increased their average GDP between 2000 and 2014 by over 60%. The growth in GDP per capita in Poland's rural regions has been amongst the highest of the OECD rural regions, driven partly by the growth of regions with initially low GDP levels. However, rural regions on average have not been catching up to intermediate and predominantly urban regions in terms of GDP per capita, despite high growth. Regional disparities in economic and social outcomes in Poland are large by OECD standards and, despite evidence of convergence in the labour productivity of rural areas to national standards, labour productivity growth has been accompanied by employment decline.

Rural areas in Poland face ongoing challenges that threaten the movement towards economic diversification and improved quality of life for rural residents. Poland's rural areas have gone through considerable transformation in the past few decades and continue to adjust to changing structural conditions. With the restoration of private property rights post-1988, the liquidation of state-owned agricultural holdings and the influx of investments spurred by accession to the European Union, rural areas have seen a great deal of change with diverse territorial impacts. While the majority of rural regions have low income levels and have failed to catch up to the average GDP per capita level of urban and intermediate regions, a small group of them registers relatively high incomes and are growing strongly. A divide exists between distinct historical legacies of development that have led to structurally different socio-economic conditions - i.e. the western and northern territories annexed to Poland in 1945, the former Russian partition (central and eastern Poland), the region of the former Prussian partition and the region of the former Austro-Hungarian partition (southern Poland). Given the prominence of rural areas to Poland's development, place-based policies play an important role in ensuring that investments are well-structured and targeted to diverse rural needs.

In a context of fast socio-economic transformation, Poland's rural areas will need to mobilise a larger share of the working population into more productive non-farming activities; deal with adverse structural shocks such as population aging in an inclusive manner; and canalise efforts into integrating rural regions with diverse profiles into the national economy. This chapter presents a diagnosis of the key trends and issues facing rural Poland, which in turn informs subsequent chapters that focus on policy and governance.

Poland has demonstrated impressive growth over the past three decades, but this growth has been uneven

Poland's economy has performed well over the past three decades, surpassing the growth rates in per capita GDP of OECD and European countries. The living conditions of rural communities have improved significantly, but are still below urban standards. Rural households' income has increased strongly since EU accession. At the same time, despite improvements between 2015 and 2016, poverty rates are still alarmingly high among people living in rural areas, and particularly among farmers. Among rural dwellers, children and women face the highest degree of economic and social marginalisation.

Rural infrastructure (roads, sewage) has improved in recent years, but more peripheral areas continue to have more limited capacity, which constrains the potential of already weak rural-urban linkages. Despite major improvements, rural regions continue to have considerably lower rates of educational attainment than urban regions.

Persistent territorial disparities in social and economic development pose a significant threat to Poland's future prosperity and citizens' well-being. The diversity of rural regions in Poland highlights the importance of territorial approaches to development. For example, distinct policies are needed for the rural regions that are experiencing rapid peri-urbanisation, versus remote rural regions that face population loss due to a combination of outmigration and population aging, or those areas of former collective farms, which tend to be located far from labour markets and services.

Poland's dispersed settlement structure offers an opportunity for strong rural-urban linkages

The settlement structure of Poland is relatively dispersed, with a large number of small and medium-sized cities, and rural areas are generally more densely inhabited than the OECD average. This presents a considerable opportunity to strengthen the relationship between rural and urban settlement structures. OECD research has found that rural regions close to cities are more dynamic than rural remote regions and are also more resilient, displaying an economic performance similar to urban regions. Across the OECD, rural regions close to cities registered an average annual productivity growth of 2.15% in the period 2000-07 - higher than any other type of region (OECD, 2016f). Prosperous rural areas close to smaller urban centres also contribute to urban growth by creating a more vibrant regional economy. However, some rural regions in Poland face urgent challenges linked to depopulation in the short and long terms, including the loss of ecosystem services and cultural heritage, and the underutilisation of local resources and amenities.

While dispersed settlement patterns bring opportunities, they also bring challenges. Poland has seen very strong patterns of peri-urbanisation, which can, for instance, lead to land-use conflicts, a loss of high-quality agricultural land and increasing traffic congestion. Urban centres in Poland, and to a lesser extent rural areas, are losing population as people move to intermediate and peri-urban regions. These peri-urbanisation processes are particularly strong on the periphery of the largest urban agglomerations, such as Warsaw, Kraków, Poznań and Łódź, and around medium-sized cities. Spatial planning is underdeveloped in many local areas, and the effective management of rural landscape in the proximity of cities represents an ongoing challenge. Dispersed settlement patterns require co-ordinated approaches to spatial development, the provision of infrastructure and service delivery.

Population aging and population decline challenge rural areas to adapt, some much more than others

Poland, like the majority of OECD countries, is experiencing population aging due to the combination of high life expectancy, lower fertility rates and outmigration. The elderly dependency rate, which gives an indication of the balance between the retired and the economically active population, is steadily growing. However, unlike the majority of OECD countries, rural regions in Poland have a lower elderly dependency rate than urban ones (at 19.6% versus 25.5% respectively) (OECD, 2016b). This is in part due to processes of peri-urbanisation and to higher fertility rates for rural women, which are, however, converging between rural and urban areas. The regional variations in expected population decline are significant. For example, the rural region of Świętokrzyskie in

south-central Poland is projected to experience a population decline of almost 20% by the year 2050; the highest such decline among Polish regions (Eurostat, 2016b).

Population aging is a major trend and rural regions in Poland will be impacted by it at different rates. The European Commission estimates that Poland's population will decrease from 38 million to 32.8 million by 2060, a decline of almost 16% (Eurostat, 2017). This will impact rural areas in a number of ways. There will be a smaller tax base through which to provide infrastructure and service delivery, particularly healthcare services which will face growing demand. Further, unless rates of immigration increase greatly, there will be labour market shortages and attendant knock-on effects. In the extreme cases where some more remotely located settlements will become uninhabited, there could be further negative effects related to service delivery and cultural heritage maintenance, among others. Poland will need to consider innovative approaches to service delivery, labour market engagement and helping maintain quality of life for seniors.

Poland's rural economy is under-diversified and higher value-added activities are needed

The rural economy is characterised by a strong but decreasing dependency on the agricultural sector, where average productivity is relatively low. Albeit with considerable regional variation, low levels of productivity are due to very limited land consolidation and the dominance of small farms, as well as hidden unemployment in agriculture. In many regions, Poland's rural economy is under-diversified, with few jobs available outside the agricultural sector. As a consequence, family members are likely to remain employed on the family farm, even when their work effort is largely redundant, and farming activities are not sufficiently remunerative for most of the many small family-owned businesses. Reducing the number of very small farms by improving land consolidation and diversifying the rural economy are the two key measures that would enable a stronger economic performance of rural areas.

Poland has a low innovation economy and Polish exports are dominated by goods with low value added, with some exceptions in the processed agri-food industry, automotive and transport sectors. The majority of Polish export products are classified as middle processed goods and the European Innovation Scoreboard describes Poland as a "moderate innovator". In order to maintain its competitiveness, Poland will need to move beyond its current reliance on low-wage workers and shift its current production of low-technology goods to more advanced ones; generate more value in currently produced goods and services; and improve the enabling factors for growth, mainly skills, innovation, accessibility and connectivity, and governance. Rural policies are a key ingredient for this overarching strategy. They can help Poland to modernise its agricultural sector, capitalise on the benefits from rural and urban linkages, facilitate an endogenous bottom-up development process, and ensure that the growth potential of the rural economy is mobilised.

The remainder of this chapter examines these issues in greater detail; it proceeds in four parts. The first section provides a profile of rural Poland's framework conditions, demographic characteristics, and migration and settlement patterns. Following this the rural economy is described, including regional growth and convergence dynamics, economic structure and labour market trends. The third section discusses the enabling factors of growth and development with a focus on infrastructure and accessibility; human capital development; and innovation, research and development. The chapter ends with a discussion of how rural areas are defined in Poland, statistically and otherwise, and how this impacts rural policy development.

Box 1.1. A note on territories and typologies

Poland has three tiers of subnational government: 16 voivodeships (regions), 314 powiats (counties and cities with country status) and 2 479 gminas (communes or municipalities). Throughout this report. Polish terminology is used for descriptions of subnational governments (as above).

This report draws on three major sources of statistics: 1) the OECD's regional territorial database; 2) data from Central Statistical Office of Poland; and 3) Eurostat data. Each of these sources has its own territorial delineations. Data from the Central Statistical Office of Poland defines territories on the basis of the municipal administrative division by the National Official Register of Territorial Division of the Country (TERYT). The classification individuates three types of gminas: urban (miasto), rural (wieś) and mixed. According to the subdivision, rural areas are defined as rural gminas and the rural parts of mixed gminas, and urban areas are defined as urban gminas and the urban part of mixed gminas (see Annex 1.A2 for an extended discussion of typologies).

The OECD regional typology facilitates regional data comparability across OECD countries. It classifies two levels of geographic units within each member country: 1) large regions (TL2), which generally represent the first administrative tier of subnational government; and 2) small regions (TL3). TL3 regions are classed as predominantly urban (PU), intermediate (IN) and predominantly rural (PR) on the basis of population density and size. Rural regions are further differentiated between those that are close to a city and those that are remote, depending on the driving distance to major regional centres. The NUTS classification (Nomenclature of Territorial Units for Statistics) used in the European Union's Eurostat data generally corresponds to the OECD regional typology at TL2 and TL3 levels.

Table 1.1. Territorial levels, Poland

Territorial level	Description	Types	Rural definition
Gmina	Municipality (local administrative unit level 2, LAU2)	Urban (<i>miasto</i>)Rural (<i>wieś</i>)Mixed (urban and rural)	Rural areas are defined as rural <i>gminas</i> and the rural parts of mixed <i>gminas</i> , and urban areas are defined as urban <i>gminas</i> and the urban part of mixed <i>gminas</i>
Large regions (OECD TL2 and NUTS 2)	First administrative tier of subnational government – i.e. voivoideships in Poland	Not applicable	Not applicable
Small regions (OECD TL3 and NUTS 3)	Small regions identified on the basis of density and size of the urban centres located within a region	Predominantly urban (PU)Intermediate (IN)Predominantly rural (PR)	In the OECD typology, predominantly rural areas are sub-classified as: - those that are close to a city - those that are remote

Profile of rural Poland

Framework conditions for rural development in Poland

Poland's strong economic performance after EU accession frames rural development

Poland's convergence process towards OECD average levels since EU accession has translated into significant economic and social improvements, but the country still lags behind in a number of areas. Compared to the OECD average, TL2 level Polish regions fare relatively well in terms of education, personal security and community indicators. Despite recent improvements in economic performance, most regions still fare lower than the OECD average in terms of housing and civic engagement, and a considerable number of TL2 regions lag behind in terms of health, life satisfaction, environment and jobs (Figure 1.1). Along these lines, key future challenges include: dealing with strong demographic pressures; improving the attractiveness of the labour market for workers; and transitioning towards producing and exporting goods and services with higher technological content. Recent surveys on subjective sense of well-being and life satisfaction carried out by the Central Statistical Office indicate that life satisfaction among the rural inhabitants is high (80.6%) and higher than the national average (78.4%) (CSO, 2015b).

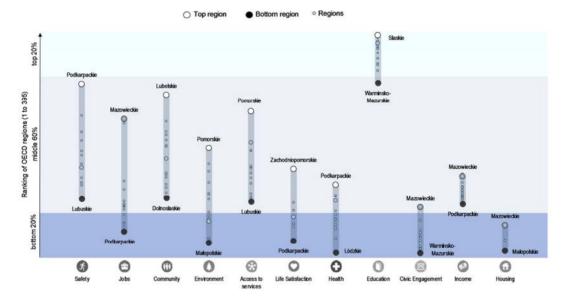


Figure 1.1. OECD Regional Well-Being Index, Poland, 2016

Source: OECD Regional Well-Being Database, www.oecdregionalwellbeing.org.

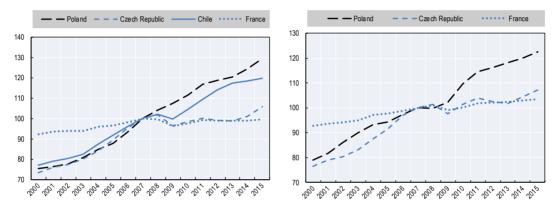
Poland's national economy shows a rather strong performance compared to other OECD countries. Poland records a robust growth in labour productivity, combined with a strong decline in unemployment and an increase in real incomes. GDP per capita growth rates have been remarkably higher than the averages for EU and OECD countries. In particular, EU accession in 2004 fostered GDP per capita growth. While it is common for lower income countries to record higher growth rates, Poland's economic performance after the 2008 crisis has been also stronger than that of OECD countries with a comparable level of

development (e.g. Chile), European countries with a similar GVA share in agriculture (e.g. the Czech Republic) and developed countries (e.g. France) (Figure 1.2). Remarkably, the economic and financial crisis in 2008-09 had a limited effect on Poland's economic growth. While GDP per capita growth rates decreased in 2009 and 2010, they did not move to negative values as they did in most other countries. Labour productivity, measured as GDP per hour worked in purchasing power parity (PPP), has steadily increased in the last 15 years, with a minor downward bend following EU accession in 2004 and a major upward trend in the aftermath of the economic crisis, between 2008 and 2011.

Figure 1.2. Real growth index of GDP per capita and labour productivity (2007=100), selected OECD countries

A. Real growth index of GDP per capita





Notes: Labour productivity is measured in gross value added over employment.

OECD (2016k), "Regional economy", **OECD** Regional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

Demographic and technological transitions pose future challenges for Poland

Despite steady labour productivity growth. Poland still has relatively low levels of labour productivity – as measured by USD per hour worked (PPPs) – compared to other OECD countries (Figure 1.3). Total employment and real wage growth started to pick up in 2013 following a strong decrease in the aftermath of the financial crisis of 2008, but by the end of 2014 they had not returned to pre-crisis levels (Figure 1.4). However, relatively low wages and the widespread use of extremely flexible temporary contracts lower the attractiveness of the Polish labour market for workers. The decline in long-term unemployment rates reflects the relative shortage of working-age population that will only be aggravated in the next decades. In fact, Poland is projected to have the largest decrease in the working-age population for the period 2015-60 among OECD countries (Figure 1.5). Moreover, migration of prime age workers to western Europe is projected to continue to have a negative impact on the working-age population, further adding to the effect of population aging on worker supply shortages.

The main economic sectors in terms of their contribution to value added are industry (including energy) and trade, repairs, transport, and accommodation and food services, with each contributing about a quarter of the total value added. Poland is a relatively open economy, with exports and imports representing 52.3% and 48.4% of GDP in 2016. The negative goods trade balance – measuring export minus imports – has been steadily decreasing since 2011, turning positive in 2015 and 2016. For the agri-food industry, the trade balance has been positive since 2003. Goods exports account for about three-quarters of all exports, of which 53% were of low and medium-low technological content. Although services account for only one-quarter of all exports, the country recorded a positive services trade balance in the period 2009-16. External competitiveness has partly relied on low unit labour costs, which have been contained despite significant economic growth.

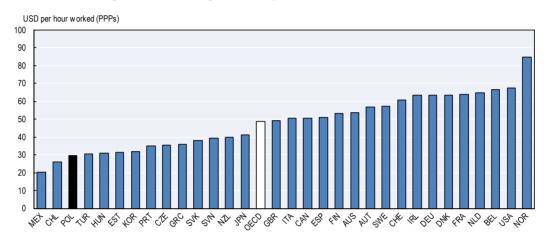


Figure 1.3. Labour productivity levels, OECD countries, 2014

Source: OECD (2016e), OECD Economic Surveys: Poland 2016, http://dx.doi.org/10.1787/eco_surveys-pol-2016-en.

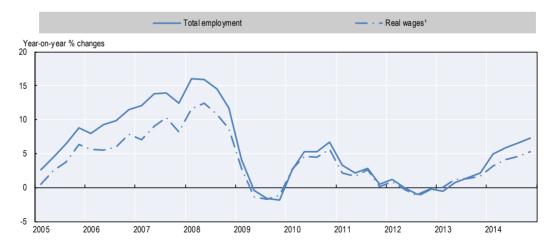


Figure 1.4. Real wages and employment growth, Poland

1. Deflated by Consumer Price Index.

Source: OECD (2016e), OECD Economic Surveys: Poland 2016, http://dx.doi.org/10.1787/eco_surveys-pol-2016-en.

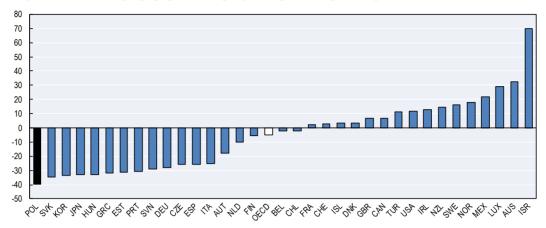


Figure 1.5. Working-age population, projected percentage change, OECD countries, 2015-60

Source: OECD (2016e), OECD Economic Surveys: Poland 2016, http://dx.doi.org/10.1787/eco_surveys-pol-2016-en.

Population characteristics

A considerable share of the Polish territory and population is rural

Rural Poland is important in terms of population and territory. According to national statistics, 40% of the national population lives in rural areas and 93% of the national land is rural. Further, the majority of gminas (municipalities) in the country are classed as rural. As of 31 December 2015, 63% of gminas in Poland are "rural", 25% are "mixed" and 12% are "urban". Rural areas in Poland are defined as the totality of rural gminas and the rural part of mixed gminas according to the municipal administrative division of the National Official Register of Territorial Division of the Country (TERYT).²

Rural definitions and typologies matter greatly in policy development and implementation because they bound geographies and the lenses through which issues are viewed and thus acted upon. The Polish TERYT typology usefully identifies three types of gminas; however, the typology also has several limitations (see Table 1.2 and the discussion in Annex 1.A2). For example, the initial classification of gminas (LAU2) relies on qualitative criteria and there is no differentiation among different types of rural. Poland should consider revisiting its rural classification in order to help better understand the rural-urban continuum and functional relationships between territories. Finland, Italy and Sweden offer but a few examples of how rural definitions can be adopted for different policy purposes which may have application in Poland (see Annex 1.A2).

The OECD regional typology classifies regions in all OECD countries into three categories: predominantly rural (PR), intermediate (IN) and predominantly urban (PU) (OECD TL3 classification)³ (see Table 1.1). This typology is useful for international comparison. It individuates 72 TL3 regions in Poland, out of which 31 are classified as predominantly rural, 26 as intermediate and 15 as predominantly urban (see Boxes 1.1 and 1.7 and Annex 1.A2 for more details on the OECD typology; and Figure 1.A1.1 and Table 1.A3.1 for a list and a map of TL3 regions in Poland).

Table 1.2. Different territorial classifications of rural areas in Poland

	TERYT territorial classification	OECD extended regional typology	OECD metropolitan classification	
Total number of categories	3	4	2	
Different types of rural	No	Yes (2)	No	
Criteria	Qualitative: economic and cultural functions (political decision)	Quantitative: population density, population size and accessibility	Quantitative: population density, population size and accessibility	
Territorial level of application	Gminas (LAU2)	TL3 regions	Functional urban areas	
Share of population in "rural" regions	40%	35%	30%	
Share of land in "rural" regions	93%	53%	?	

In 2015, predominantly rural regions accounted for 53% of the national land and hosted about 35% of the national population, a larger share than the OECD average of 25%. Comparatively, intermediate regions hosted a larger proportion of the population (38% versus 27%) and predominantly urban regions hosted a smaller share (28% versus 48%) (Figure 1.6). Poland has a larger share of its population living in predominantly rural regions than a number of similar sized countries such as Italy and Spain. Population density in Poland compared to the OECD average was higher in predominantly rural regions (83 versus 11 persons per square kilometer [km²]) and in predominantly urban regions (581 versus 291 persons/km²). According to the OECD metropolitan classification, 70% of Poland's population lives outside a metropolitan area, i.e. outside a functional urban area (FUA) with a population of 50 000 inhabitants or more. Throughout this chapter both the OECD and Polish TERYT classifications will be referenced (Table 1.2). The OECD's typology is useful for comparative analysis of OECD regions while Poland's national databases are used where comparable data are not available or to provide finer detail (e.g. at the level of municipal unit).

Poland's total population is declining due to low birth rates and outmigration

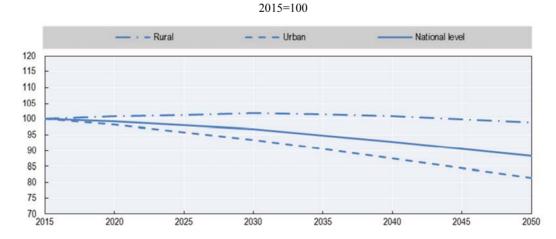
Population projections estimate that by 2050 the total population of Poland will decrease by about 12%, from 38.4 million in 2015 to 33.9 million (CSO, 2014). This decrease is larger than the estimated average decrease of 3% for Europe, but smaller than the projected change for other Eastern Europe countries such as Bulgaria and Ukraine. The estimation can be broken down into the rural and urban categories according to the TERYT (Polish) classification (Figure 1.7). While the population in rural areas slightly increases until 2030 and decreases afterwards, the urban population decreases steadily through the four decades. By 2050, projections envisage a total 20% decrease in urban population compared to its 2015 levels, while the rural population will remain at similar level. The positive trend in rural population is largely driven by peri-urbanisation, with individuals moving to the rural parts of mixed *gminas*. The city of Łódź offers a case in point – it is the third-largest city in Poland and is located about 120 kilometres west of Warsaw. Between 2006 and 2014, the population of the city of Łódź declined by 7.61%; meanwhile, its surrounding rural areas saw population increases over that period of as much as 8.61% (OECD, 2016c). These trends are expected to intensify in the future.⁴

Population Area ■ Predominantly urban □ Intermediate ■ Predominantly rural □ Predominantly urban □ Intermediate □ Predominantly rural NLD NLD BEL BEL GBR GBR KOR KOR AUS AUS DEU DEU CAN CAN JPN JPN PRT PRT ITA ITA TUR TUR CHL CHL ESP ESP OECD OECD MEX MEX NZL NZL USA USA CHE CHE GRC GRC FRA FRA DNK DNK FIN FIN IRL IRL AUT AUT POL POL SWE SWE HUN HUN EST EST NOR NOR CZE CZE SVK SVK ISL ISL SVN SVN 20 100 OECD OECD

Figure 1.6. Distribution of population and area by type of TL3 region, OECD countries, 2015

(2016j), "Regional demography", Regional Statistics (database), Source: http://dx.doi.org/10.1787/a8f15243-en.

Figure 1.7. Population projections to 2050, Poland



Source: CSO (2017a), Population statistics, https://bdl.stat.gov.pl/BDLS/metadane/podgrupy/557 (accessed in January 2017).

The composition of the non-economically active population differs significantly between urban and rural areas. The share of the elderly population, aged above 65, is larger in urban areas, while the share of the young population aged under 14 is proportionally larger in rural areas (Figure 1.8). This is due to higher birth rates in rural areas. In 2014, the birth rate per 1 000 population was 10.3 for rural *gminas*, 9.8 for mixed *gminas* and 9.4 for urban *gminas*. The population pyramid in urban areas indicates the effect of rural-urban migration linked to industrialisation by post-war baby boomers, which has not been compensated by high birth rates in the subsequent baby boom echoes. The aging process is clearly deeper in urban areas.

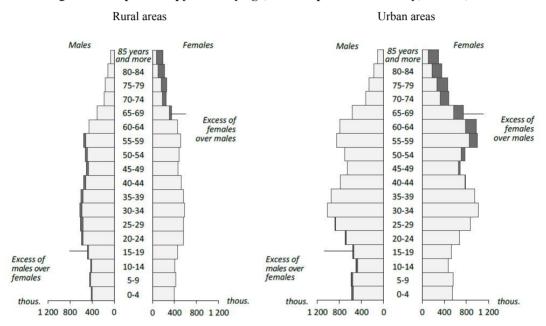


Figure 1.8. Population pyramid by age, sex and place of residency, Poland, 2014

Source: CSO (2014), Obszary wiejskie w Polsce w 2014 roku, https://stat.gov.pl/obszary-tematyczne/rolnictwo/lesnictwo/obszary-wiejskie-w-polsce-w-2014-roku,2,2.html

In a context of decreasing population, immigration to peri-urban regions has been increasing, adding to the depopulation challenges some rural remote areas will experience. These rural remote areas also have higher elderly demographic ratios than the national average, making them particularly vulnerable to demographic challenges (Table 1.3). In addition, higher rates of rural outmigration by young females than young males contribute to gender imbalances that adversely affect future population growth in rural areas.

The combination of population aging and international outmigration is one of the most crucial trends impacting Poland's development, particularly for rural areas. These trends reinforce each other and will weigh on the country's GDP growth and possibly impact its ability to finance adequate pension and healthcare spending in the longer term (OECD, 2016f). Certain policy decisions are at risk of exacerbating these impacts. For example, in 2016, Poland lowered the pension age to 60 for women and to 65 for men. This decision was a reversal from the 2012 reform to the retirement age in stages (to 67 by 2020 for men and by 2040 for women). The decision to lower the pensionable age is in contrast to trends in the majority of OECD countries, where increases in the retirement age are either planned or underway.

Table 1.3. Distribution of the elderly population by TL2 region and TL3 rural regions, Poland, 2016

TL2 regi	ons	TL3 rura	TL3 rural regions			
Łódzkie	17.73%	Piotrkowski	15.87%			
Mazowieckie	16.29%	Sieradzki	16.44%			
Małopolskie	15.42%	Skierniewicki	17.06%			
Śląskie	16.8%	Tarnowski	15.28%			
Lubelskie	16.5%	Nowosądecki	13.3%			
Podkarpackie	15.12%	Nowotarski	14.37%			
Świętokrzyskie	17.33%	Sandomiersko- Jędrzejowski	17.52%			
Podlaskie	16.39%	Nyski	16.58%			
Wielkopolskie	14.71%					
Zachodniopomorskie	15.61%					
Lubuskie	14.94%					
Dolnośląskie	16.39%					
Opolskie	16.93%					
Kujawsko-pomorskie	15.47%					
Warmińsko-mazurskie	14.27%					
Pomorskie	14.84%					
Average Poland	15.96%	•				

'Regional OECD (2016j), demography", OECDRegional **Statistics** (database), http://dx.doi.org/10.1787/a8f15243-en.

Population decline rates are much higher in some regions

Population decline will not affect all *voivodeships* equally (Figure 1.9). Population trends are negative in all 16 voivodships, but the strongest decrease in population is predicted for Opolskie and Świętokrzyskie, which by 2050 could lose between 25% and 22% of their population, respectively. Both regions, which are small both in terms of area and population, are proximate to metropolitan areas (Ślaskie's conurbation and Wrocław in the case of Opolskie, and Kraków in the case of Świętokrzyskie). On the other hand, the regions with the lowest population loss are Mazowieckie, the region of Warszawa, and Pomorskie, on the Baltic sea. The largest population loss in absolute terms is recorded by the southern region of Ślaskie, which could lose almost 900 000 persons before 2050. In the case of Opolskie, a region dominated by both agriculture and manufacturing industries, population decline has been driven by a combination of outmigration (particularly among the young and educated) and population aging (Wilczyński, 2016). These dynamics have also driven population decline in Świętokrzyskie voivodeship, where the population decline has been the strongest in peripheral areas dominated by low productivity agriculture (Kiniorska and Wronska-Kiczor, 2011).

Migration and population aging

Labour outmigration has increased since Poland's accession to the EU

In 2004, Polish citizens gained the right to free movement within the European Union, which increased the outflow of labour. However, official migration statistics in Poland possibly underestimate the total of number of migrants because outmigration is often declared as temporary even though it in many cases becomes permanent. It is recognised that a significant share of emigrants do not declare a formal change of residence

A. In percentage B. In thousands of persons Poland Poland Mazowieckie Mazowieckie Pomorskie Pomorskie Małonol skie Małopolskie Wielkopolskie Wielkopolskie Pod karp ackie Pod karpackie Kuja wsko-pomorski e Kujawsko-pomorskie Luhuskie Lubuskie Dolnoślaskie Dolnoślaskie Zach odniop omorskie Zach odniop omo rskie Warmińsko-Mazurskie Warmińsko-Mazurskie Podlaskie Podlaskie Ślaskie Ślaskie Łódzkie Łódzkie Lubelskie Lubelskie Świetokrzyskie Świetokrzyskie Opolskie Opolskie -4 000 -3 000 -1 000 -30 -20 -10 0 Percentage Thousands of persons

Figure 1.9. Population change projections by voivodeship, Poland, 2015-50

Source: CSO (2017a), Population statistics, https://bdl.stat.gov.pl/BDLS/metadane/podgrupy/557 (accessed in January 2017).

to the Polish authorities, so they can remain as nominal residents of Poland for an extended period of time. Additionally, the real number of migrants working abroad in the shadow economy before the EU accession remains unknown. While official accounts record that 28 080 people emigrated in 2014, the Central Statistical Office estimates that over 2 million Poles stayed temporarily in another European country in 2015, of which around 80% were likely to stay abroad for more than one year.

The available statistics indicate a relative stabilisation of the volume of labour outmigration, roughly balanced by the number of returning migrants. Pre-accession, the preferred migration destination for Poles was Germany, but shortly after 2004, the United Kingdom became the largest recipient of Polish emigrants. Currently, the United Kingdom, Germany, the Netherlands and Ireland are the most common destinations. With high levels of outmigration, Poland has benefited from remittances. In 2011, estimates show Poland received USD 8 billion of remittances, nearly 1.5% of GDP. The peak of remittances' flow was in 2006-07, when it amounted to 2.5% of GDP. Total net international migration was negative for the country as a whole in the period 1952-2010, and the deficit was larger for urban regions compared to rural ones (Figure 1.10).

The motives and destinations of international migrants vary across rural and urban areas. Migrants from rural areas, and to a lesser extent from towns, tend to cluster geographically by origin-destination, leading to the formation of local migrant networks (Wieruszewska, 2007). For example, most migrant women from the Suwalki region (Podlaskie *voivodeship*) choose Belgium as a destination, while most of those from Ostrowiec (Świętokrzyskie *voivodeship*) migrate to Naples. International migration from rural areas is mostly motivated by employment opportunities in the agricultural sector, and destination choices are largely based on kinship networks. In contrast, migration from urban areas is motivated by jobs in occupations requiring previously acquired skills, although urban migrants typically work in occupations below their skill levels. Better levels of education and training allow urban migrants a higher geographical mobility in the host nation.

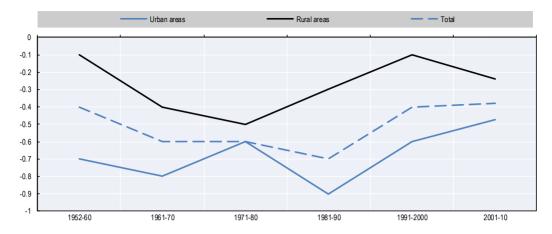


Figure 1.10. Net international migration in urban vs. rural gminas, Poland

Source: CSO (2017a), Population statistics (internal and foreign migration), http://stat.gov.pl/obszarytematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2017.3,11.html (accessed in October 2017).

International labour migration to rural areas has increased, particularly for lower skilled agricultural jobs

International labour migration fills labour market demand gaps in rural areas. These gaps arise because many rural parts of Poland face a certain paradox. On the one hand there is hidden and high unemployment in many rural regions and low rates of labour market attachment for women. On the other hand, rural employers often report the inability to find employees for both low- and high-skilled occupations. There are a number of reasons for this, including disincentives for individuals to take off-farm employment stemming from the social security system, a mismatch between skills and jobs, and a lack of interest in employment due to low wages.

International migration to Poland has increased significantly in the past decade – from approximately 38 500 in 2006 to 86 000 in 2016 (OECD, 2017). In rural areas, Ukraine has been a major source of labour migration to Poland. There are an estimated 1 million Ukrainians working in Poland, with the vast majority performing manual labour that does not require formal qualifications (70.7%), even though the vast majority of Ukrainian migrants hold a post-secondary education and training qualifications (91%) (Chmielewska, Dobroczek and Puzynkiewicz, 2015). About 20% of all Ukrainian migrants work in the agricultural sector (Chmielewska, Dobroczek and Puzynkiewicz, 2015). The number of Ukrainians working in Poland increased significantly post-2014 when the economic situation in Ukraine deteriorated in the wake of the conflict in the east. A feature of the contemporary wave of Ukrainian migration is that it tends to be short term and cyclical. The average Ukrainian migrant has already been to Poland nine times and stays approximately five months on each trip (Chmielewska, Dobroczek and Puzynkiewicz, 2015).⁵

Settlement patterns

Intermediate regions are growing fastest

Natural features divide Poland into five physiographic regions (Figure 1.11). In the north, the Pomerania (Pomorze) region comprises a variety of plains along the Baltic coast and hosts a number of urban agglomerations around ports in the Pomeranian (Pomorska) Bay and the Gulf of Gdańsk. The sparsely populated Lakeland region, with its shallow valley in the north, is split into the Pomeranian Lakeland (Pojezierze Pomorskie), the Masurian Lakeland (Pojezierze Mazurskie), and the Great Poland Lakeland (Pojezierze Wielkopolskie). The central lowlands are generally flat, and are divided by the basins of the main rivers into the Silesian Plain (Nizina Śląska), the southern Great Poland Plain (Nizina Wielkopolska), the Mazovian Plain (Nizina Mazowiecka) and the Podlasian Plain (Nizina Podlaska). Moving southwards to an area with lower and higher elevations are the regions of Poland's Uplands in Świętokrzyskie, the south of Lubelskie and Śląskie (centre). The latter two are the most densely populated regions in the country, due to historical reasons and the concentration of mineral resources and productive lands in these areas. The southern part, which comprises the highest elevations in the country and several valleys, is completed by the Sub-Carpathian region, Sudeten Mountain range (Lower Silesia) and the Tatra Mountains in Małopolskie.

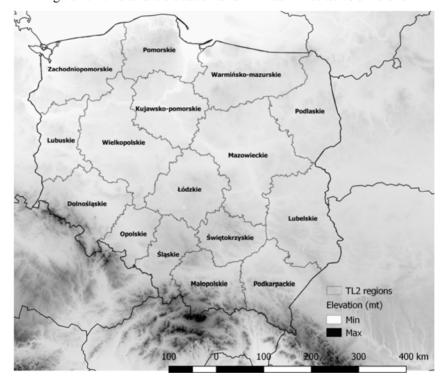


Figure 1.11. Poland's elevation and TL2 administrative divisions

Source: SRTM30 DATASER. CGIAR-SRTM data aggregated to 30 seconds.

For natural and historical reasons, population settlements in Poland are relatively dispersed and diverse. According to the OECD typology, there are a total of 58 FUAs in Poland with more than 50 000 inhabitants, of which 21 have more than 250 000 inhabitants (Figure 1.12). Rural regions continue to host an important share of the total population, despite the overall population decline trend. While urban agglomerations and their peri-urban areas continue to attract migrants, intermediate cities and secondary towns are becoming more relevant to the urban system.

Demographic changes in the last decade led to an increase in the share of population living in intermediate regions and a decrease in the share of population living in urban and rural regions. Between 2000 and 2014, the share of Polish population living in rural

regions close to a city decreased by 0.026%. This is also a consequence of the unattractiveness of rural areas for young people. Young people born in rural areas often move to an urban centre for their secondary and tertiary education, and the majority of them prefers not to return to the countryside afterwards. A decline in the share of the population living in rural regions is a rather common trend among OECD countries, with the exception of Ireland, Mexico, Switzerland and the United States (Figure 1.13). In Poland, the decrease was lower than in many other OECD countries. In general, changes in the share of population by type of region have been lower in Poland than in other OECD countries, indicating a relatively more stable population distribution across the country.

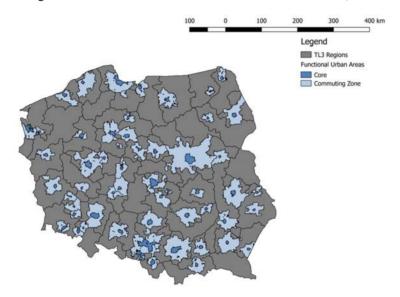


Figure 1.12. Location of Poland's functional urban areas, 2016

Source: Calculations based on OECD functional urban area boundaries for Poland.

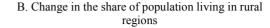
Poland has a relatively dispersed settlement pattern

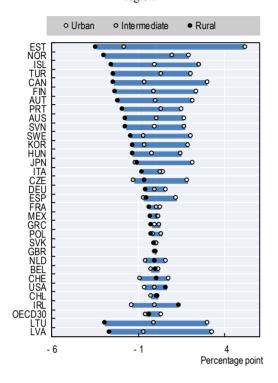
The majority of the Polish rural population lives within a 45-minute drive from a relatively large urban centre of more than 50 000 inhabitants. Rural regions are concentrated in the eastern part of the country and around the major urban agglomerations in the centre of Poland. In virtually all the TL3 rural regions of Poland, at least half of the regional population can reach a regional centre with a population larger than 50 000 inhabitants in less than 45 minutes. Such rural regions are classified as "predominantly rural regions close to a populated centre" (PRC) in the OECD regional typology. Only one of the TL3 rural regions of Poland does not satisfy this accessibility criterion, and it is therefore classified as predominantly rural remote (PRR). This is the TL3 region of Bialski, located in the far east of the country at the border with Ukraine and Belarus.

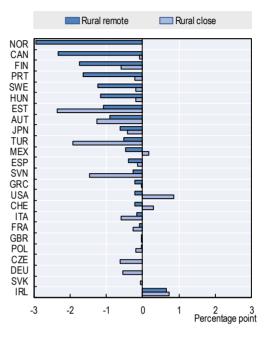
Besides the 9 metropolitan areas with populations in 2014 ranging from 671 410 (Lublin) to over 3 million (Warsaw), Poland has 15 medium-sized cities with populations between 200 000 and 500 000 inhabitants hosting a total population of 5 368 157 inhabitants in 2014. The distribution of the urban population around the world follows in many cases the rank-size rule (or Zipf's Law), where the largest city is twice the size of the second largest, and so on. For Poland, the comparison between this regularity and the actual city

Figure 1.13. Changes in the distribution of population, OECD countries, 2000-14

A. Change in the share of population by type of region







Notes: TL3 regions. First available year 2001 for Australia, Greece, Japan, Korea and Turkey; 2003 for the Netherlands. Denmark is not included for lack of regional data on comparable years. For Figure 1.13B, the extended OECD typology is applied only to North America, Europe and Japan.

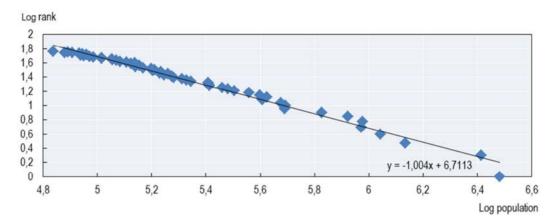
Source: OECD (2016g), OECD Regions at a Glance 2016, http://dx.doi.org/10.1787/reg_glance-2016-en.

size distribution suggests that the largest city (Warsaw) is smaller than predicted, and that smaller cities still have growth potential (Figure 1.14). Additionally, while the largest cities are no longer growing in terms of population, the current process of peri-urbanisation evidences the attractiveness of the areas surrounding established large urban agglomerations, and the subsequent increasing importance of intermediate cities and small urban centres in the proximity of established urban agglomerations in the urban system in Poland. Prosperous small urban centres can act as growth poles for rural hinterlands, contributing in this manner to rural development (Czarnecki, 2015).

Poland has a much lower index of geographic concentration of population⁶ calculated at the TL2 level compared to the OECD average (Figure 1.15). Remarkably, only 6.2% of the population lives in *gminas* of less than 5 000 inhabitants, but as a group they account for 25.2% of the total number of *gminas*. In contrast, 19% of the population lives in *gminas* with between 20 000 and 50 000 inhabitants, which make up only 9.9% of the total number of *gminas* (Table 1.4). The northern and western parts of the country are mostly defined as intermediate regions according to the OECD regional typology. This type of region includes both rural and urban areas. The southern border is the most diverse, with an alternation of intermediate and urban regions to the west, and a predominance of rural regions to the east. The population density threshold used for the OECD regional classification means that some TL3 regions in the southern region of Małopolskie are

classified as predominantly urban, despite their typical rural characteristics in terms of economic activity, history and traditions.

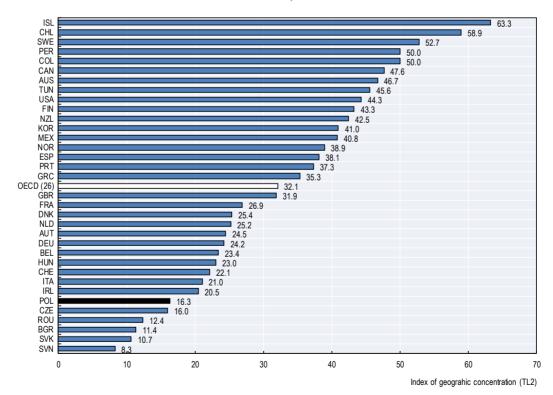
Figure 1.14. Zipf's Law: Log population versus log rank for 58 functional urban areas, Poland,



Note: Functional urban areas based on the OECD definition.

Source: Calculations based on OECD functional urban areas data for Poland.

Figure 1.15. Geographic concentration of population index, OECD and select non-OECD countries, 2016



OECD (2016j),"Regional demography", OECDRegional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

500 000 +

Population	Share number of gminas	Share total population
<5 000	25.2%	6.2%
5 000<10 000	39.14%	17.9%
10 000<15 000	14.9%	11.7%
15 000 <20 000	7.14%	8.0%
20 000 <50 000	9.9%	19.0
50 000 <100 000	2.1%	9.1
100 000<500 000	1.4%	16.8%

Table 1.4. Share in total number of gminas and total population, Poland, 2015

Source: CSO Local Data Bank, https://bdl.stat.gov.pl/BDLS/metadane/grupy/3 (accessed in January 2017).

0.2%

Strong peri-urbanisation surrounds large and medium-sized cities

Medium-sized and large cities across the country register clear peri-urbanisation. Over the years urbanisation around cities has intensified. A greater degree of urbanisation requires larger land areas in order to satisfy the residential or service-production needs of inhabitants. People also move from cities to rural *gminas* located in close proximity, from where it is possible to commute to the city. As a consequence, agricultural areas surrounding large urban agglomerations located in rural *gminas* are gradually transformed to areas of residential or service-production buildings, causing the loss of agricultural lands. Rural areas around cities cease to perform mainly agricultural functions and become the dormitory for urban areas. Overall, peri-urban areas remain the most attractive location for the active population, which is also reflected in the lower demographic dependency ratios for the regional category of TL3 intermediate regions compared to predominantly rural and predominantly urban regions.

Internal migration data show a strong movement of people to peri-urban areas, notably around the cities of Poznań, Łódź, Warsaw, Wrocław, Kraków and Gdańsk/Gdynia/Sopot (Figure 1.16). In all of these cases, in 2014 net migration was larger at the cities' outskirts than in their inner core. In the conglomerations of Poznań and Łódź, and to a lesser extent of Gdańsk/Gdynia, net migration in the core area was negative. The peri-urbanisation trend is not a recent one. Internal migration to the outer regions of Poznań and Warszawa was already strong in 2001. Overall, the trend seems to have intensified over time. A comparison between the year 2001 and the year 2014 shows an increase in migration gains for a number of locations, such as in the proximity of the Wrocław, Łódź and Kraków urban agglomerations. Many rural and intermediate regions farther located from the main urban centres experience negative net migration, particularly along the eastern border.

The rate of increase in developed land in the commuting zone of FUAs has been more than twice the rate in the core zone, which indicates urban sprawl. Rapid land development in the commuting zone did not keep up with the pace of population increase, suggesting that a large number of urban residents moved to peri-urban areas. For this reason, the amount of developed land per capita in the commuting zone of FUAs has decreased, while it has increased in the urban cores (Figure 1.17). Intermediate regions register the largest difference between growth rate in developed land and developed land per capita and overall the lowest rate of increase in developed land per capita across the regional typologies. This is a consequence of population growth in intermediate regions, including large peri-urban areas. Urban sprawl results mainly from the lack of a rational spatial policy, as current spatial policies are characterised by too few local spatial plans for development areas, which are also often of low quality, and a high degree of land fragmentation.

11.4%

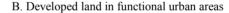
Percentage net flows over population 2001 2014 rate (% net flow -0.36% - -0.26% -0.26% - 0.07% -0.26% - -0.07% 0.07% - 0.29% -0.07% - 0.29% 0.29% - 0.85%

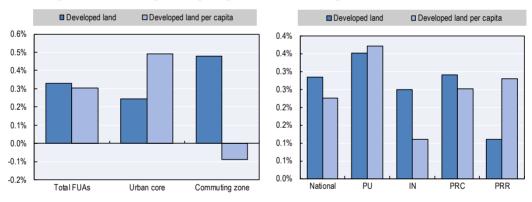
Figure 1.16. Inter-regional net flows migration rate by TL3 region, Poland

"Regional demography" **OECD** (2016j),**OECD** Regional (database), Source: Statistics http://dx.doi.org/10.1787/a8f15243-en.

Figure 1.17. Annual change in developed land by OECD TL3 region type, Poland, 2000-12

A. Developed land and developed land per capita





Notes: Values for urban cores and commuting zones refer only to functional urban areas (FUAs) with more than 500 000 inhabitants. PU: predominantly urban; IN intermediate; PRC: predominantly rural close to a city; PRR: predominantly remote rural.

Source: OECD calculations based on European Environment Agency (2012), Corine Land Cover (CLC) 2012, Version 18.5.1 (database).

In summary, adverse demographic trends are one of the most significant challenges for Poland's development. Although rural regions in Poland host a larger share of the total population than the OECD average, they too are likely to experience population decline due to low birth rates and outmigration. This trend has been exacerbated with accession to the EU, but has impacted regions differently. The consequences of adverse demographic trends for rural areas, besides smaller tax bases, include possible labour shortages, and increasing healthcare, assisted living and long-term care consumption demands. The analysis of the settlement structure reveals a relatively dispersed pattern, characterised by a strong peri-urbanisation process similar to the one taking place in many other OECD countries. Intermediate regions and areas surrounding large and medium-sized cities have attracted a larger inflow of population. Although peri-urban areas are currently a magnet for the active population, strong peri-urban population growth not met by land development can lead to the loss of productive agricultural lands and problems associated with urban sprawl, such as increasing traffic congestion.

The rural economy across regions

Performance, growth and disparities in the rural economy across regions

Rural regions contribute significantly to a growing national economy

In 2014, the GDP produced by predominantly rural regions was about one-fourth of the national GDP, i.e. USD 228 billion. The share of the rural economy in the total economy reached its maximum in 2000 (26.3%) and its minimum in 2009 (25.5%), around the time of the global financial crisis, which hit predominantly rural regions in Poland particularly hard (see Zawalińska [2012] for a discussion). The share of the rural economy then stayed around the same level up to 2014. Overall, the rural contribution has slightly diminished over the years, in favour of urban areas' contribution. Between 2000 and 2014, the total rural GDP increased by 60% (constant PPP), which is 0.6 percentage points below the GDP increase in intermediate and urban regions (Figure 1.18).

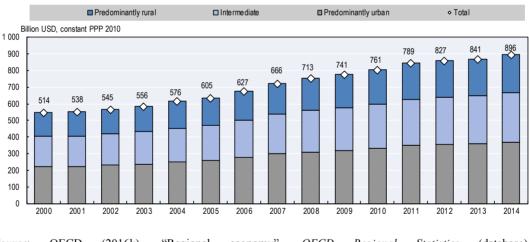


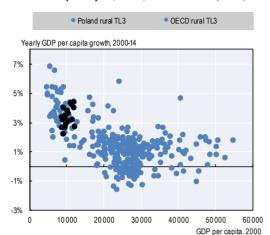
Figure 1.18. GDP by OECD TL3 region type, Poland

Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en

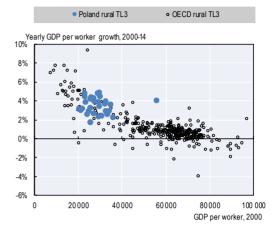
Poland's predominantly rural regions are high-performing compared to other predominantly rural regions in the OECD (Figure 1.19). Their growth in GDP per capita and in labour productivity has been amongst the highest of the OECD predominantly rural regions. Low initial levels are one of the reasons behind such strong growth rates of Poland's rural regions, as less-developed regions tend to grow faster. This is clearly the case of Polish predominantly rural regions, which experienced a strong convergence trend with respect to the totality of OECD rural regions. GDP per capita and GDP per worker growth rates in the period 2000-14 in rural Poland were impressively high, on average 3.5% and 3.6% per annum respectively for the group of predominantly rural regions.

Figure 1.19. Performance of TL3 rural regions in Poland and other OECD TL3 rural regions, 2000-14

A. GDP per capita, USD, constant PPP (2010)



B. Labour productivity, USD, constant PPP (2010)



Note: Labour productivity is measured as GDP per worker (employment at place of work).

Source. (2016k), "Regional economy". **OECD** Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Regions have not benefited equally from growth

However, robust national growth has not brought equal benefits across the territory. In Poland, disparities in GDP per capita among TL3 regions are higher than the OECD average and increased between 2000 and 2014, unlike other OECD countries like Chile, Estonia and Turkey. This is largely explained by strong inequalities between urban and rural regions, and between the capital region and the rest of the country. For example, in the year 2000 the average GDP per capita in Warszawa was USD 39 584, which was 4.6 times the lowest regional value, which was recorded by the TL3 region of Krakowski. Fourteen years later, the proportion became 1:5.4, as GDP per capita in the Warszawa region was USD 63 537, compared to an average of USD 12 686 for the TL3 region of Przemyski, which recorded the lowest regional value in that year.⁷

A similar geography of inequality between urban and rural regions, and the capital and the rest of the territory, are found in many OECD countries. In addition, regional disparities in Poland are also large across rural regions. Poland's strong regional heterogeneity is in part attributable to the historical legacies (Box 1.2). One of the most evident is the difference between the eastern and the western part of Poland, broadly delimited by the Wisła River. Overall, standards of living are higher and economic performance is stronger in the western part of Poland, which in earlier periods received major influence from western Europe and Germany; in contrast, eastern regions, which have been historically influenced by Imperial Russia, face lower standards of living. Disparities exist not only from an economic point of view but also as regards cultural aspects, which reflect in different levels of social capital and trust. Four macro-regions can be individuated following from Poland's partitioning in the three neighbouring empires (the Russian Empire, the Kingdom of Prussia and the Austro-Hungarian Empire) and the territory annexed to Poland after World War II.

Box 1.2. Poland's historical regional divisions

Poland's regions are marked by significant disparities in economic, social and settlement structures which stem in part from their unique historical development (Rosner and Stanny, 2014; Stanny, 2013). The country is often described from the vantage of three empires that have left a mark on its territories. These are the three partitions respectively annexed to the Russian Empire, the Kingdom of Prussia and the Austro-Hungarian Empire in the 18th century and the transfer of borders after World War II where some former German territories were incorporated into Poland, while a part of Polish territories east of the Curzon line were incorporated into the USSR. Such historical diversification has led some researchers to refer to Poland as "Wielo-Polska" ("Multi-Poland") (Jalowiecki and Szczepanski, 2007). Here, regions across the four types are profiled in order to illustrate these differences.

The region of **Zachodniopomorskie** is part of the *western and northern territories* annexed to Poland in 1945. Zachodniopomorskie's agrarian structure is characterised by large commercial farms and high labour productivity levels in agriculture compared to other regions of Poland. Such farm structure is a legacy of the large state farms that operated during the communist era. In the early 1990s, formerly state-owned land was sold to private farms. The resulting large-scale private farms employed only approximately half of the workers of the former state-owned farms. The remaining former state employees, when not covered by pension or disability allocations, became unemployed. Social capital in Zachodniopomorskie is among the lowest in Poland. This is in part because post-World War II the regional population changed; German settlers were forcefully displaced and families from eastern Poland were settled in their stead. The incoming flow consisted of three main waves of settlers: soldiers returning from the front, repatriates from the territories incorporated into the USSR, and people coming from the agriculturally overpopulated regions of central Poland. Therefore, while the other three macro-regions are inhabited by long-term original residents, the territories incorporated into Poland after World War II had both new settlers and a new economic structure.

The Podlaskie region, in the area of *the former Russian partition (central and eastern Poland)* has a strong agricultural economy with family farming (traditional) being predominant. The deagrarianisation of the economic structure is below the average for rural Poland. Many *gminas* in the region have low accessibility, disadvantageous demographic structure of the population, poor living conditions and a weak non-agricultural sector. Under the Russian power, the enfranchisement of peasants took place in 1864, and peasants were given the ownership rights to the land they had formerly cultivated, released from the obligation of serfdom and given the right to move independently.

Wielkopolskie, in the *region of the former Prussian partition*, has an advanced deagrarianisation process, exceeding the country's average. The enfranchisement of peasants under the Prussian power was a process the beginning of which goes as back as approximately 1810 and the end of which goes back to the mid-century. During that time, there were several legal acts issued that were designed not only to gradually remove the economic dependency of peasants on the court, but also to shape the structure of peasants' farms. An example may be the process by which larger farms (more than 7 hectares) possessing their own staff gained independence relatively early and under quite favourable conditions. As a result of the selective treatment of different groups of peasants' farms, a territorial structure of agriculture emerged that comprised court and peasants' farms (both relatively economically strong, and economically much weaker). The economically weaker ones simultaneously became a reservoir of labour for court farms, in particular during periods of urgent field works, and some non-agricultural people employed as servants on the manor or performing works not directly linked with the agricultural production.

Box 1.2. **Poland's historical regional divisions** (continued)

Małopolskie, in the region of the former Austro-Hungarian partition (southern Poland) is characterised by small farms, with many farms less than 3 hectares. Such farm structure is unfavourable to labour productivity. The region is quite densely populated, as Kraków was the centre of the statehood and the seat of central authorities – the royal court – for several centuries. The corrugation of the territory made it possible to found villages in valleys and along them. Over time, villages had become quite large and separated from neighbouring ones by agricultural and mountainous areas. Large villages also meant that there was relatively little land to be used for agricultural purposes and falling per one household, which triggered agricultural fragmentation. Under the Austro-Hungarian power, the enfranchisement of peasants was introduced by a single act in 1848 while being imposed by a successful uprising of peasants against the nobility, known in history as the uprising of Jakub Szela, or the "Galician slaughter". Peasants were given the ownership right to the land they had formerly cultivated, were released from the obligation of serfdom with quite high taxes being imposed on them at the same time, the aim of which was to provide compensation to the court for the diminution in its ownership. In general, it is concluded that the situation of peasants in Galicia was subject to limited changes, while the small size of farms made them further dependent on providing (hired) labour in court farms or on non-agricultural incomes. A relatively dense network of small towns and very large villages (partly serving as local centres) made permanent migrations to towns much smaller in Galicia than in other regions of the country, with a pattern of daily commuting to work in a town becoming more popular (the so-called circular migration). Furthermore, contrary to the remaining regions of the country where the farm was usually inherited by the eldest son (sometimes the eldest child), there was a custom of inheriting in Galicia under which the farm was divided between all children, which led to further fragmentation of farms. It is worth adding that the system of inheriting the farm by one successor and repaying its siblings (in the remaining partitions), as well as the custom of dividing the farm (in Galicia), were constituted on the grounds of inheritance law, so it can be concluded that they were a component of the agricultural policy.

1. For details see Dzialek (2009).

Source: Based on OECD questionnaire.

Inter-regional inequalities in Poland are higher than the OECD average (Figure 1.20). The Gini index of territorial inequalities, which measures inter-regional inequality in GDP per capita, among Polish regions increased by one full point between 1995 and 2013, against a reduction in interpersonal inequalities in ten OECD countries (Austria, Belgium, Finland, Greece, Italy, Japan, Mexico, the Netherlands, Portugal and Spain). However, territorial disparities increased by a larger proportion in other converging countries in the area, such as Czech Republic, Hungary and the Slovak Republic. Disparities across regions are positively correlated with disparities between people (Figure 1.21), which in the case of Poland may still be largely driven by urban and rural income disparities.

Poland's rural regions lag behind their urban and intermediate counterparts and there is a strong east-west divide

Rural regions typically have lower GDP per capita and labour productivity levels than other types of regions in Poland. When ranking all Polish TL3 regions by level of GDP per capita and GDP per worker, rural regions are overrepresented in the far tail of the distribution. A remarkable exception is Ciechanowsko-Płocki, a predominantly rural region located in the Mazowieckie voivodeship. In 2014 this rural region had the third-highest

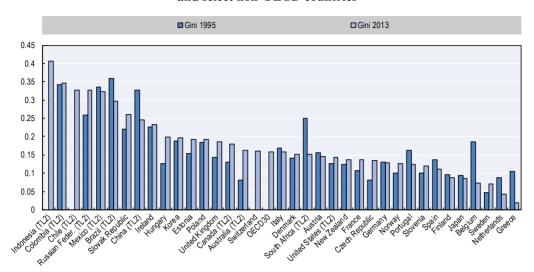


Figure 1.20. Territorial inequalities among TL3 regions in GDP per capita, OECD and select non-OECD countries

Source: OECD (2016g), OECD Regions at a Glance 2016, http://dx.doi.org/10.1787/reg_glance-2016-graph45-en; OECD (2013a), OECD Regions at a Glance 2013, http://dx.doi.org/10.1787/888932913665.

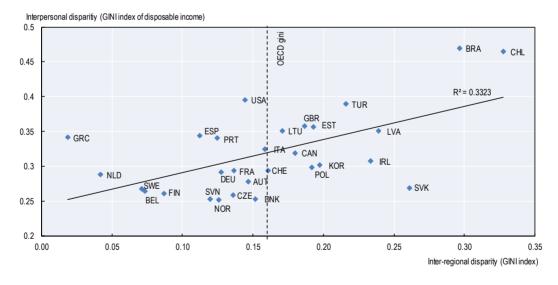


Figure 1.21. Interpersonal versus inter-regional disparities, OECD and select non-OECD countries, 2013

Note: 2010 Inter-regional disparity Gini index for the Netherlands; 2011 for Brazil and Turkey; 2012 for Austria, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Norway, Poland, Spain, Sweden and Switzerland.

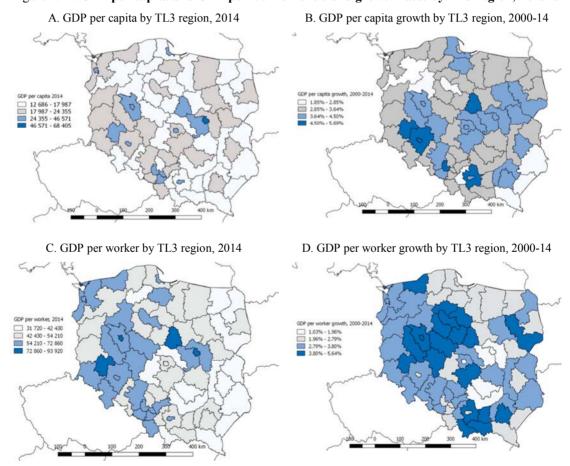
Source: OECD (2016g), OECD Regions at Glance 2016; OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

level of labour productivity among the 72 TL3 regions of Poland, and the sixth-highest level of per capita income. While the regions' typology is an important determinant of income levels, this is not the case for income growth rates: predominantly rural regions can be as dynamic as intermediate and predominantly urban regions. Between 2000

and 2014, annual GDP per capita growth rates averaged between 1.8% and 5.7% in predominantly rural regions, between 2.1% and 5.3% in intermediate regions, and between 2.7% and 5.1% in predominantly urban regions. This shows that performance differed also within the three types of regions.

The highest performing rural regions are centrally located, whilst the worst conditions in terms of per capita income and labour productivity are found in the east and south-east parts of the country (Figure 1.22). The worst performing TL3 rural regions are found in the *voivodeships* of Świętokrzyskie, Podkarpackie and Lubelskie, in central and southeast Poland at the border with Ukraine and the Slovak Republic. In these TL3 regions not only are income and productivity low, but they also increased over time at a slower pace than in other rural regions, which meant that their levels are far from converging to Poland's rural region average. At the same time, a number of rural regions record high levels of income and productivity, and high growth rates. These are found in the voivodeships of Wielkopolskie, ¹¹ Mazowieckie ¹² and Łódzkie, ¹³ all clearly benefiting from being in the vicinity of, respectively, Poznań, Warsaw and Łódź.

Figure 1.22. GDP per capita and GDP per worker levels and growth rates by TL3 region, Poland



Note: based on GDP figures expressed in USD, constant PPP (2010).

OECD "Regional economy", OECDSource: (2016k),Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en

Trends towards regional convergence

Increased regional disparities in a context of national convergence in economic performance

The average level of GDP per capita in rural regions, which stood at USD 10 556 in 2000, had increased by 61% in 2014 to USD 17 035. This is a remarkable increase, all the more considering that rural regions in Poland have outperformed OECD rural regions. Despite this improvement, rural regions as a group have not been catching up over the past years in terms of average GDP per capita, in spite of their high growth (Figure 1.23). Unlike the case of intermediate and urban regions, the correlation between initial GDP per capita levels and GDP per capita growth in 2000-14 is significantly positive ¹⁴ (0.522), indicating that rural regions with initially high levels of GDP per capita grew faster. The rural gap in GDP per capita, calculated as the sum of GDP over the sum of population in predominantly rural regions relative to national GDP over national population, stood at 73% in 2014, below the OECD average of 77% (Figure 1.24). The gap in rural GDP per capita has not changed significantly since 2000, where it stood at 74%.

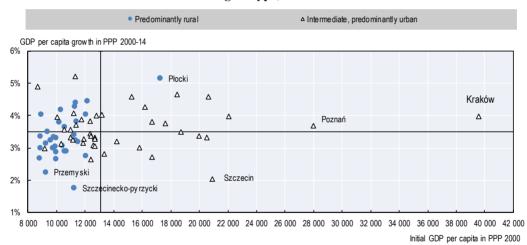


Figure 1.23. GDP per capita initial levels versus growth rates by OECD TL3 region type, Poland

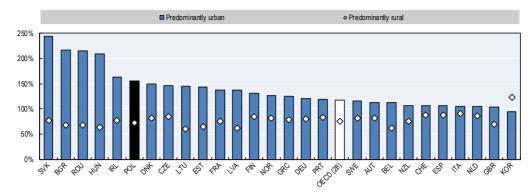
Note: Vertical and horizontal lines represent national averages.

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Despite lack of convergence as a group, one-third of rural regions (10 out of 31) converged to the national average over the period 2000-14. Płocki was the fastest growing region in this period, displaying a growth rate of over 5.2% and a difference of 1.5 points above the national growth rate (Table 1.5).

Many rural regions with a low level of GDP per capita did not register any catching-up trend, meaning they did not improve their position relative to the national average (Figure 1.25). As many as 21 out of the 31 predominantly rural regions registered average GDP per capita growth rates lower than the national average between 2000 and 2014. This is reflected in increased regional inequalities. Among the ten predominantly rural regions that have been catching up to the national average, seven are located in the *voivodeships* of Łódzkie, Mazowieckie and Wielkopolskie, i.e. in the central area of the country and in proximity to the large cities of Warsaw, Łódź and Poznań.

Figure 1.24. GDP per capita gap between predominantly urban and rural regions, selected countries, 2014



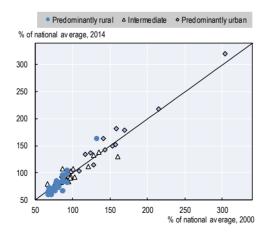
"Regional economy", Source: OECD (2016k), **OECD** Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Table 1.5. GDP per capita as a ratio of national average, fastest growing rural regions, Poland

Predominantly	GDP per capita ratio to national average		GDP per capita growth	Difference national growth	
rural region	2000	2014	2000-14	2000-14	
Płocki	132.02	163.32	5.17%	1.59%	
Piotrkowski	92.91	104.73	4.47%	0.89%	
Rzeszowski	86.55	96.77	4.41%	0.83%	
Kaliski	86.45	95.08	4.29%	0.71%	
Ostrołęcki	78.54	85.42	4.21%	0.62%	
Łomżyński	68.09	72.60	4.06%	0.48%	
Leszczyński	92.07	98.06	4.05%	0.47%	
Siedlecki	87.22	90.17	3.83%	0.25%	
Skierniewicki	77.80	80.36	3.82%	0.24%	
Tarnobrzeski	80.97	82.00	3.68%	0.09%	

OECD (2016k), "Regional economy", OECDSource: Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Figure 1.25. GDP per capita as a share of national average by type of region, Poland, 2000 vs. 2014



Note: Regions above (below) the 45° line registered growth rates higher (lower) than the national average between 2000 and 2014.

OECD (2016k), "Regional (database), Source: economy", OECDRegional **Statistics** http://dx.doi.org/10.1787/6b288ab8-en.

Unlocking growth potential in rural regions

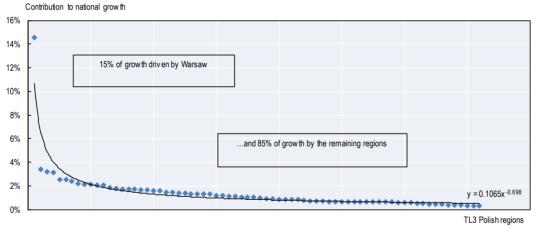
In terms of GDP growth, rural regions recorded the lowest rate of GDP growth over the period 2000-14, with 3.3% against 3.5% and 3.6% of urban and intermediate regions, respectively. However, rural regions recorded faster average growth rates than urban and intermediate regions in the crisis and post-crisis periods, respectively (Table 1.6). Contributions to growth in Poland resemble a power law functional relationship (Figure 1.26), with Warszawa making the largest contribution with over 14% of national growth, adding to the total contribution of 42% of all urban regions. In comparison, the contribution of rural regions (as a group) to growth stood at one-quarter (25%) of national growth. This share was smaller than their population share (35%) in 2014.

Table 1.6. Contributions to national growth by type of region, Poland

Type of region	Growth contribution	GDP growth				
Type of region -	2000-14	2000-14	2000-03	2004-07	2008-11	2011-14
Predominantly urban	42%	3.53%	2.49%	5.62%	3.91%	1.28%
Intermediate	34%	3.60%	2.36%	5.52%	3.36%	2.73%
Predominantly rural	25%	3.30%	2.17%	5.00%	3.45%	2.38%
National	100%	3.46%	2.31%	5.32%	3.51%	2.28%

Source: Own calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Figure 1.26. Contribution to national GDP growth by TL3 region, Poland, 2000-14



Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Rural regions need to achieve higher growth rates in order to boost their contribution to national growth and to converge. Assuming rural regions grew in GDP (over 2000-14) at a minimum rate that was the same as the national average (3.46%), then the national growth rate would increase from 3.46% to 3.59% and GDP per capita in rural regions would be USD 17 861. This would represent a convergence (from the actual GDP per capita of 79.6% of the national average to 82.2%). In a more optimistic scenario, assuming rural regions grew in GDP (over 2000-14) at a minimum rate that was the same as experienced by intermediate regions (3.60%), then the national growth rate would increase from 3.46% to 3.82% while GDP per capita in rural regions would be USD 18 142. This would

represent an increase in the rate of convergence (from the actual GDP per capita at 79.6% of the national average to 83%) (Table 1.7).

Table 1.7. GDP per capita growth simulations, Poland

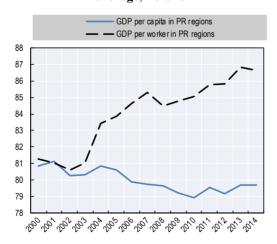
Type of region	Contribution (%)	GDP growth (%)	GDP per capita (USD)	GDP per capita (100)					
Predominantly urban	42%	3.53%	32 250						
Intermediate	34%	3.60%	20 272						
Predominantly rural	25%	3.30%	17 019	79.65					
National	100%	3.46%	21 367						
Scenario 1: GDP grows at national average									
Predominantly urban		3.53%							
Intermediate		3.60%							
Predominantly rural		3.70%	17 861	82.20					
National		3.59%	21 367						
Scenario 2: GDP grows at intermediate regions' rate									
Predominantly urban		3.53%							
Intermediate		3.60%							
Predominantly rural		3.82%	18 142	83.03					
National		3.64%	21 851						

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Labour productivity in rural areas has converged to national standards, but productivity gains have been driven by employment losses

Unlike GDP per capita, labour productivity (GDP per worker) in rural regions in Poland converged to national standards over the period 2000-14 by 7 full percentage points, from standing 81% below the national average to 87% (Figure 1.27). Around 65% of rural regions (20 out of 31) outperformed the national average in labour productivity growth over 2000-14 (Figure 1.28).

Figure 1.27. Ratio of GDP per capita and labour productivity of rural regions to the national average, Poland



Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Figure 1.28. Regional labour productivity level as a share of national average by OECD TL3 region, Poland, 2000 vs. 2014

Note: Regions above (below) the 45° line registered growth rates higher (lower) than the national average between 2000 and 2014.

Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Productivity growth rates range relatively wildly within the group of predominantly rural regions (between 1.8% and 5%) (Figure 1.29), which generally show lower labour productivity levels than predominantly urban and intermediate regions. For the group of predominantly rural regions, the correlation between initial labour productivity levels and labour productivity growth rates in 2000-14 is virtually zero and not significant. In other words, rural regions with initially low levels of labour productivity did not grow faster. The best performing region in terms of labour productivity growth in the period was Leszczyński, displaying a remarkable increase in the ratio with the national average from 84 to 109 over the period (Table 1.A1.1).

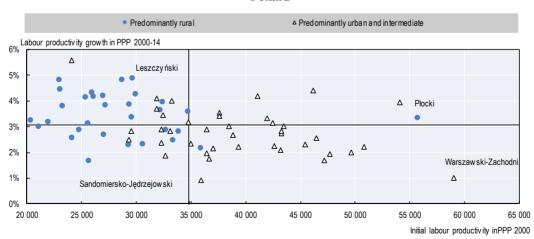


Figure 1.29. Labour productivity initial levels versus growth rates by OECD TL3 region,
Poland

Note: Vertical and horizontal lines represent national averages.

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

However, the remarkable increase in labour productivity has been associated with stagnant or declining employment creation in many rural regions. As a whole, urban and intermediate regions contributed to the bulk of national employment creation in the period 2000-14 (Figure 1.30). Warszawa was the largest contributor to employment creation with 27.1%, followed by the intermediate regions of Warszawa-West and Kielecki, which contributed 39% and 29% relative to Warszawa's contribution, respectively. Unlike urban and intermediate regions, the majority of rural regions did not experience employment growth, as 42% of rural regions increased employment over 2000-14, against 73% and 65% in urban and intermediate regions, respectively. Nevertheless, 12 out of the 31 rural regions did contribute to national employment creation, with Rzeszowski and Płocki registering the largest contributions. On the other hand, the largest employment losses in the period 2000-14 occurred in two urban regions, Bydgosko-Toruński and Poznań, where employment decreased by 5% and 4.4%, respectively (Figure 1.31). The rural regions experiencing the largest employment losses were Chełmsko-Zamojski (-3% employment loss), Włocławski (-2.4%) and Inowrocławski (-2%).

☐ Predominantly urban ■ Intermediate ■ Predominantly rural % relative contribution 40% 35% 30% 25% 20% 15% 10% 5%

Figure 1.30. Contribution to employment creation relative to largest contributor by region type, Poland, 2000-14

Note: The largest contributor to employment creation is the urban region Warszawa (set as 100%).

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Regions converging to national standards in terms of GDP per capita and/or labour productivity did not grow in terms of employment and/or population over the period 2000-14. In terms of the ten rural regions converging in GDP per capita, one (Rzeszowski) grew both in terms of employment and population, six others grew only in terms of employment, while the remaining two only grew in terms of population (Table 1.8). In one region (Łomżyński), convergence in GDP per capita was accompanied by population and employment decline in 2000-14. Amongst the 20 regions converging in labour productivity, employment declined in 15 of them (or 75%) over the same period, and only in Rzeszowski, Piotrkowski, Płocki, Tarnobrzeski and Suwalski did employment increase (Table 1.A1.1).

Rural areas in Poland, as in many other rural regions in the OECD, are experiencing the so-called "rural paradox", whereby labour productivity increases are associated with employment losses. Under these circumstances, labour productivity increases are not accompanied by the expansion of local labour markets, creating challenges for inclusive and sustainable development (OECD, 2016f). High productivity growth combined with improved conditions in the labour market is, however, possible. For OECD regions, there is no evidence of a generalised "rural paradox", as 69% of regions that are close to cities and 64% of remote rural regions displayed both high labour productivity and high employment creation in the period 2000-12. Increased market shares resulting from the displacement of uncompetitive firms by more productive ones, and the positive effects of increased demand on quality are ways in which output increases can be accompanied by employment creation.

% contribution

Figure 1.31. Contribution to employment loss by region type, Poland, 2000-14

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Table 1.8. GDP per capita levels and growth, population and employment growth in TL3 regions converging in GDP per capita, Poland, 2000-14

Region	GDP per capita national	levels relative to average	Convergence	GDP per capita growth	Population growth	Employment growth
_	2000	2014		2000	-14	
Plocki	132.02	163.32	31.30	5.17%	-0.10%	1.65%
Piotrkowski	92.91	104.73	11.83	4.47%	-0.20%	0.41%
Rzeszowski	86.55	96.77	10.22	4.41%	0.23%	0.75%
Kaliski	86.45	95.08	8.64	4.29%	0.02%	-0.50%
Ostrołęcki	78.54	85.42	6.88	4.21%	-0.01%	1.26%
Leszczyńsk	92.07	98.06	5.99	4.05%	0.23%	-0.57%
Łomżyński	68.09	72.60	4.51	4.06%	-0.55%	-0.31%
Siedlecki	87.22	90.17	2.95	3.83%	-0.16%	1.14%
Skierniewicki	77.80	80.36	2.56	3.82%	-0.39%	0.51%
Tarnobrzeski	80.97	82.00	1.03	3.68%	-0.15%	0.12%

Source: Calculations based on OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

The dual economic structure of rural Poland and the need for diversification

A fragmented economy of agricultural and non-agricultural activities

The structure of the rural economy in Poland consists of two parallel, but somewhat disconnected, dimensions: agricultural and non-agricultural activities. Farming activities represent a considerable section of the rural economy. The agricultural production, or the so-called primary activity, is executed through different forms and types of farms. The main non-agricultural activities present in rural areas, or secondary and tertiary activities, are manufacturing, building and a range of services, which are conducted through business entities. This reflects, as well, two distinct segments of rural labour markets; the agrarian and the non-agrarian parts. The two have distinguishing features and are relatively unconnected (Witkowski, 2004).

The primary sector in Poland, composed of a large share of agricultural activities on top of a small share of forestry and fishing activities, absorbs a relatively large share of employment. In 2015, the share of employment in the primary sector was 11%, well above the OECD average of 5% and the third-largest in the EU after Romania and Greece. In terms of value added, the primary sector contributed 2.4% in 2015, a smaller contribution than other countries in the region with smaller shares of employment such as Hungary, the Slovak Republic and the Czech Republic (Figure 1.32).

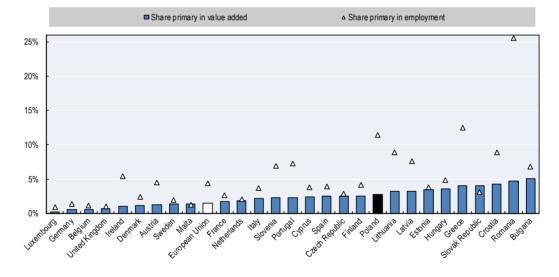


Figure 1.32. Contribution of the primary sector to the economy, EU countries, 2015

Notes: The primary sector is composed of agriculture, forestry and fishing.

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue". Note by all the European Union member states of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: European Commission (2016), "CAP context indicators 2016 update", Agriculture and Rural Development, https://ec.europa.eu/agriculture/sites/agriculture/files/cap-indicators/context/2016/indicatortable en.pdf (accessed 30 August 2017).

Poland's agriculture sector is the most labour-intensive among European Union members. In the same year, the total number of persons employed in agriculture amounted in Poland to 1 768 700, the second-largest in the EU after Romania. Compared to other countries in Eastern Europe such as the Czech Republic, Hungary and the Slovak Republic, Poland is characterised by a significantly larger share of employment in primary activities and a smaller share of employment in the service sector (Figure 1.33). In 2015, the total farm labour force in annual working units amounted to 1 866 450, the largest in the EU. This is largely due to the prevalence of small family farms. After Slovenia, Poland has the largest share of farms employing only family workers in the EU, with 96.4% of the total farm labour force in annual working units made up by family labour force.

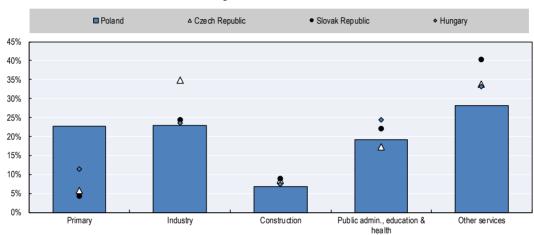


Figure 1.33. Share of employment by sector in predominantly rural regions, selected Eastern European countries, 2014

Notes: Primary includes agriculture, forestry and fishing; "other services" includes: distributive trade, repairs, transport, accommodation, food service activities, financial and insurance activities, information and communication; professional, scientific and technical activities, administrative, support service activities, and other services.

Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

A stronger diversification of the rural economy can improve employment outcomes and earning levels

During the last years, under the framework of policy of multifunctional rural development, Poland underwent a dynamic development of non-agricultural functions of rural areas. The biggest changes can be observed in the areas that are influenced by metropolitan areas and by subregional centres, where agriculture is being replaced by other functions such as residential, recreational, productive and services.

The diversification process of rural economies reflects the desirability of increasing earned income from non-farm sources as a way to improve incomes on small farms (Box 1.3). While agriculture is a key economic activity for rural dwellers, it is not highly remunerative and is subject to volatility due to the fluctuation of prices on international markets as well as output unpredictability. The large number of rural households needs to complement their farm-based revenue with sources of income other than from agricultural activities. In 2010, more than half of the households for which agriculture was a source of income

declared that revenues from such activity represented less than 30% of their total household revenue. Only for one-fifth of the households engaged in agriculture did agricultural income make up more than 90% of total household revenue. The importance of agricultural income to total household income is particularly low in Podkarpackie, Ślaskie and Malopolskie, three voivodeships located in south and south-east Poland that have a very high degree of land fragmentation and a large number of very small farms (Figure 1.34).

Box 1.3. The impacts of economic diversification on poverty reduction in rural Poland

It is generally believed that the economic diversification of rural areas may contribute to more efficient resource allocation and thus help reduce poverty. This belief provides the rationale for encouraging farm households to diversify outside agriculture. While this has resulted in a considerable share of public funds devoted to rural areas being spent to promote off-farm employment and the establishment of non-agricultural enterprises, the incentives for farm households to combine farming with some non-agricultural activities remains limited. One of the main questions, obviously, is how remuneration coming from combining farm and off-farm incomes compares to other attainable strategies.

A 2014 study by Fałkowski, Jakubowski and Strawiński examines this relationship spanning the period 1998-2008 in rural Poland. The study focuses on rural households with two income sources, one of which is farming, and compares them to households with a single income source and households having two income sources but that are not involved in agriculture. In theory, diversification could provide an attractive alternative to other income strategies, as rural households may still use their agricultural assets while also undertaking profitable off-farm employment. The results of the analysis indicate that diversification is preferable to relying on unearned income (social allowances) and, especially after Poland joined the EU in 2004, comparable or preferable to specialising in hired off-farm employment. Similarly, starting from 2005/06, the incomes of rural households relying on combined farm and off-farm activities were comparable to the incomes of households combining two off-farm activities. That said, a detailed analysis shows that important differences occur between various types of diversified households. For instance, households combining farming and unearned income were relatively worse off than those combining farming and hired off-farm employment. In fact, households pursuing strategies based, at least to some extent, on unearned income performed worse than those relying on other strategies.

Overall, the results cautiously suggest that over the period 1998-2008 farmers may have lacked financial incentives to even partly quit agriculture. This is because households relying solely on farming performed better than otherwise similar households combining farm and off-farm incomes. The data do not observe a given household shifting from one income strategy to the other. In effect, comparisons are made between similar but not the same households. The relative improvement in the performance of households partly or fully involved in agriculture observed around the year 2004, that is, the time Poland joined the EU, is also in line with the arguments stating that in rural areas, these were mainly farmers who benefited from the accession through access to CAP funds.

Source: Fałkowski, J., M. Jakubowski and P. Strawiński (2014), "Returns from income strategies in rural Poland", http://dx.doi.org/10.1111/ecot.12032.

For individuals, moving from agricultural to non-agricultural activities can be challenging. While young people below 35 and people of retirement age are the most likely to leave the agricultural sector, they often have difficulties in finding a new job in the non-farming economy. It is among people aged 35-44 that the likelihood of successfully switching sectors is the greatest (Tocco, Bailey and Davidova, 2013). Moreover, higher levels of education improve the likelihood of successfully changing employment compared to lower levels of education. As regards gender, males are more likely than females to relocate from the agricultural to the non-agricultural sector. This

occurs in part because of the proportionally larger demand for male manual workers in rural areas (Wiest, 2016). In addition, the disincentives encountered by women intending to move to the non-agricultural sector further increase with children, while the opposite has been found to hold for men, where being married and having children increases their likelihood of switching sectors (Tocco, Bailey and Davidova, 2013). Overall, the already limited non-agricultural labour market is less accessible for women (Wiest, 2016). Pull factors that can attract agricultural workers into the non-farming economy are higher employment in the non-agricultural sector and higher non-farm wages. However, the necessary conditions are often not present, discouraging the sectoral switch.

Technologies begins being bein

Figure 1.34. Share of agricultural income in total revenue of households with agricultural income, Poland, 2010

Note: Households with no agricultural income are not included.

Source: CSO, Census of Agriculture 2010, https://bdl.stat.gov.pl/BDLS/metadane/podgrupy/321.

Agriculture is a key economic activity for Polish rural regions, but labour productivity in this sector is relatively low

The agricultural sector is undergoing a structural transformation from less labour to more capital-intensive labour. Poland's primary sector (which includes agriculture, forestry and fishery) experienced a 2.6% drop in employment share in the period 2007-12, a full percentage point over the EU-27 average. The absolute decrease in primary employment over this period was by far the largest in the EU, amounting to -271 000 workers, a decrease 2.8 times larger than that of Spain, which recorded the second-largest decrease. The recent wave of outmigration of Polish labour to other European counties can partly explain this decline, which has in turn been partly offset by an immigration surge of Ukrainian workers into Poland in recent years. It is estimated that there are around 1.3 million Ukrainians working in Poland, with a large share in agriculture.

Two major events had an important effect on Poland's agricultural economy in recent years: joining the EU market and, more recently the Russian embargo on food imports. After the process of accession to the EU, in 2004 total GVA in the primary sector gained 7 percentage points with respect to 2003. In this period, Poland's trade balance benefited from a strong increase in food exports. From a primary sector net importer, Poland became a major exporter. Afterwards, the economic crisis acted as a destabiliser. The GVA in the primary sector dropped by 3% in 2008, rebounded quickly in 2009 (+12%) and decreased again by 7% in 2010, and by a further 10% in 2012, to return to 2010 levels in 2014. Finally, the Russian embargo that followed Ukraine crisis of 2014 significantly limited

the demand for food products. Notably, the apple market witnessed a strong shock due to both the lower demand and a larger than usual production in that year.

The growth in GVA in the primary sector over 2000-14 was led by predominantly rural regions. Their share in total primary sector GVA between 2000 and 2014 increased by 1.7%. In 2014, rural regions in Poland produced 58% of the national GVA in agriculture, forestry and fishery. The share of the rural contribution to this sector's GVA has fluctuated over time, with a minimum of 55% in 2000 and a maximum of 59% in 2008 (Figure 1.35).

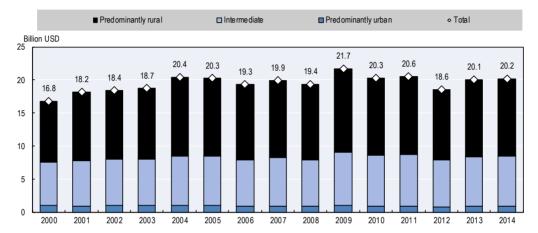


Figure 1.35. GVA in agriculture, forestry and fishery by OECD TL3 region type, Poland

Note: Levels are expressed in billion USD, constant PPP (2010).

economy", **OECD** OECD (2016k), "Regional Regional Statistics (database). http://dx.doi.org/10.1787/6b288ab8-en.

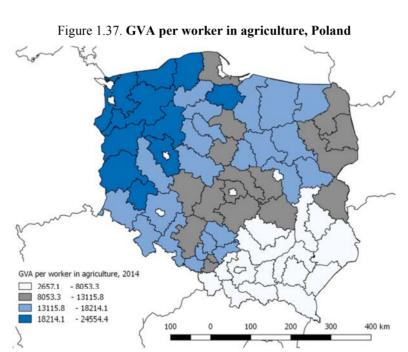
Labour productivity in agriculture, forestry and fishing in Polish rural regions is lower than in intermediate and predominantly urban regions (Figure 1.36). In 2000-14, productivity in primary activities in intermediate regions is the highest when compared across types of regions in Poland. Furthermore, labour productivity in rural areas, measured as GVA over registered employees, is likely to be over-estimated because of the presence of hidden unemployment.¹⁷ According to the Institute of Agricultural and Food Economics, hidden unemployment is estimated at approximately 490 000, with considerable variation across regions. Other estimates set the figure as high as 600 000 (Kowalski, 2013).

Agricultural labour productivity is highest in the north-west and lowest in the southeast (Figure 1.37). The range in agricultural productivity levels within regional typology is large. While productivity levels and productivity growth are not strongly correlated with the type of region, they are broadly correlated with land fragmentation, which varies across the geographical space. The most productive regions in agricultural labour productivity are located in the former German territories, where average land parcels are bigger. These are important preconditions for raising labour productivity. Among Polish TL3 predominantly rural regions, Pilski, located in the north-west, records the highest labour productivity in this sector with USD 24 554 per worker in 2014. In contrast, the least productive Polish rural regions in agricultural activities are in the former Austro-Hungarian and Russian partitions, located in the south-east, where agricultural land is more fragmented. These include the *voivodeships* of Podkarpackie and Małopolskie, which record a high level of land fragmentation. Podkarpackie is also the *voivodeship* with the largest share of agricultural land with poor soil (2.3% against the national average of 0.9%). Amongst TL3 regions they include Rzeszowski, located in the southeast, with the lowest labour productivity in Poland, more than seven times lower than in Pilski, which is located the central-west (USD 3 320 per worker).

- Predominantly urban - - Intermediate Predominantly rural GVA per worker, constant PPP, USD (2010) 14 000 13 000 12 000 11 000 10 000 9 000 8 000 7 000 6 000 5 000 4 000 2014 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Figure 1.36. Labour productivity trend in agriculture, forestry and fishing, by OECD TL3 region type, Poland

Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.



Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Despite the gap in labour productivity levels from regions in the north-west, a number of regions from the eastern and southern regions have been catching up, increasing their average productivity in agriculture by more than 8% between 2000 and 2014 (Figure 1.38). In most of the TL3 regions, labour productivity in agriculture has increased thanks to labour shrinking (Figure 1.39). This trend indicates that structural change is needed to move towards a more efficient management of agricultural land; however, it does raise the issue of how to smoothly reallocate labour to other sectors.

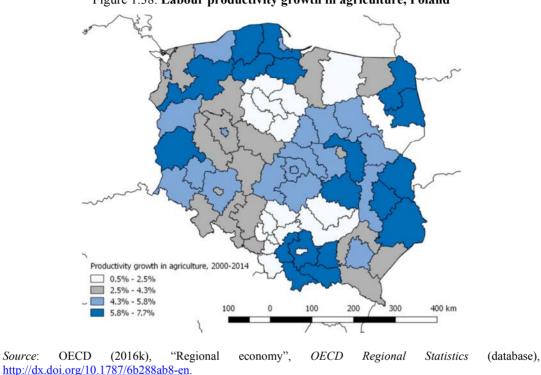
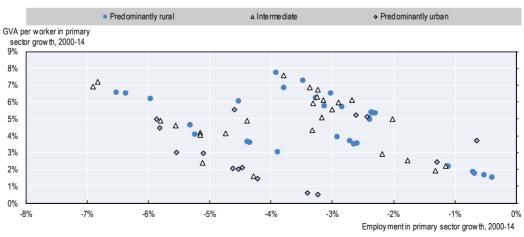


Figure 1.38. Labour productivity growth in agriculture, Poland

Figure 1.39. Labour productivity growth versus employment growth in primary sector by



OECD TL3 region type, Poland, 2000-14

Source: **OECD** (2016k), "Regional economy". **OECD** Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Source:

While a relatively small share of farm households engage in formal non-agricultural economic activities, these activities can contribute significantly to the total farm income. The number of farms reporting economic activity other than agriculture is low compared to the total number of farms in Poland, and between 2010 and 2013 the share of farm involved in such activities declined (3.9% in 2010 versus 2.6% in 2013) (Mickiewicz and Mickiewicz, 2016). Off-farm economic activities tend to differ by the size of farms, e.g. larger farms focus on renewable energy while smaller farms tend to produce handicrafts (Mickiewicz and Mickiewicz, 2016). Figures from 2013 indicate that the total farm revenues from non-agricultural activities do not exceed 10% on 42.2% of Polish farms. On a further 26.9% of farms, non-agricultural economic activities account for 11-50% of total farm revenue, while on the remaining 30.9% of farms non-agricultural economic activities accounted for over 50% of total farm revenue (Mickiewicz and Mickiewicz, 2016). Evidence suggests that there is a negative correlation between the size of farm and off-farm employment (Adam, 2015).

Land consolidation is correlated with higher labour productivity in the agricultural sector

Poland's farm structure is quite different than that of other Central and Eastern European countries, such as Bulgaria, the Czech Republic, Hungary, Latvia, Lithuania and the Slovak Republic. While the other countries went through an extensive process of land collectivization during the socialist period, in Poland private small-scale farms existed alongside state farms and production co-operatives. Following the end of the socialist system, the transition to a market economy produced a problematic dual farm structure in most Central and Eastern European countries, with most of the land still belonging to very large holdings, but at the same time a great number of very small farms were created. Many of the large farms inherited the inefficiencies of the previous state-owned farm system while the small farms were too small and lacked resources to develop (Swinney and Roselle, 2006). Along with Slovenia, Poland was one of the few Central and Eastern European countries to avoid the farm transition process, but Poland has not escaped the problem of having too many unproductive small farms.

In addition to having a large number of small farms, most of these farms have highly fragmented land holdings. Land fragmentation in Poland has been determined by: topographic characteristics, inheritance traditions, and historical agricultural reforms implemented during the partition period (1775-1918) and again during the socialist era (1944-89) (Gasiorowskia and Bielecka, 2014). Mountain terrain and locations with highly variable soil quality, particularly in lowlands, represent a main geographical obstacle to land consolidation. The practice of dividing farm plots among family members, combined with rural overpopulation, has further accentuated the fragmentation in the southern regions of Poland. Moreover, during the period of partition, consolidation acts were introduced at different points in time in each of the three partitions, laying the bases for strong regional differences in farm structure. Finally, following the end of World War II, agricultural reform was implemented in order to achieve farm collectivisation. However, a large part of the land remained in private ownership during this period. This reform focused on eliminating large and medium-sized private holdings, but left small holdings under the control of the families that lived on them.¹⁸

Land fragmentation is more pronounced in some *voivodeships*, particularly in Małopolskie and Podkarpackie, where the land owned by small farms (less than 10 ha) represents more than 60% of the total farms' land (Figure 1.40). On the other hand, in Zachodniopomorskie and Warmińsko-Mazurskie, the share of land belonging to small

farms is only about 10%. In these regions, more than one-third of total farmland belongs to farms whose size is larger than 100 ha. This area of Poland is also the one in which state-owned farms were most concentrated during the communist period, which made it easier to assemble a commercial size farm after 1989.

■ More than 100 ha ■ 30-100 ha □10-30 ha Less than 10 ha 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% Madopolskie niekoolskie Zahahingana di e Opolakie Podlaskie

Figure 1.40. Share of total farmland by farm size, Poland, 2015

Note: Private and public ownership, including farmland below 1 ha.

Source: CSO (2016a), Statistical Yearbook of Agriculture 2016, https://stat.gov.pl/en/topics/statisticalyearbooks/statistical-yearbooks/statistical-yearbook-of-agriculture-2016,6,11.html.

Poland has a large number of very small farms. In 6 voivodeships out of 16, the average farm size is less than 10 ha, and it is as low as 4.8 ha for Małopolskie, which is also the region with the highest degree of land fragmentation (Table 1.9). The average size of farms is increasing. While in 2003 there were more than 2 million agricultural holdings, the figure dropped to 1.4 million in 2014. This translated into an increase of the average farm size, as the total utilised agricultural land area remained fairly stable over time.

2005 2013 % increase Małopolskie 2.7 4.8 78% Podkarpackie 3.0 5.2 70% 6.3 Świętokrzyskie 4.7 36% Slaskie 2.8 7.4 163% Lódzkie 6.6 8.6 30% Lubelskie 6.1 8.9 46% Mazowieckie 7.4 10.3 38% Wielkopolskie 10.5 15.5 47% Podlaskie 11.7 15.7 34% Dolnoslaskie 8.9 16.5 85% Kujawsko-Pomorskie 11.2 17.4 56% 14.1 21.3 Pomorskie 52% 21.5 Opolskie 9.1 135% Lubuskie 11.3 22.0 95% Warminsko-Mazurskie 27.9 62% 17.2

Table 1.9. Average farm size (ha) by voidvodeship, Poland

7.0 *Note:* Average size is calculated as total farm area divided by total number of farms.

17.6

Source: Eurostat (2016a), Farm Structure Database, http://ec.europa.eu/eurostat/web/agriculture/data/database (accessed in December 2016).

31.1

11.5

76%

64%

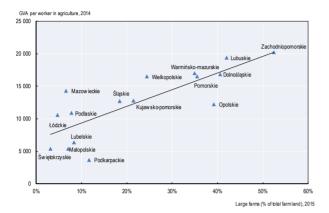
Zachodniopomorskie

Poland

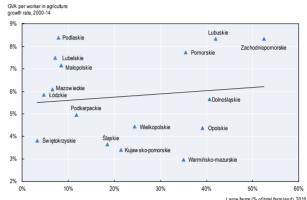
Larger farms are the dominant contributors to productivity growth. Labour productivity levels in agriculture are positively correlated with larger farm size (over 100 ha), and negatively correlated with small farm size (1-2 ha). The correlation between farm size and productivity growth is weaker (Figure 1.41).

Figure 1.41. Labour productivity in small and large farms by TL2 region, Poland, 2000-14

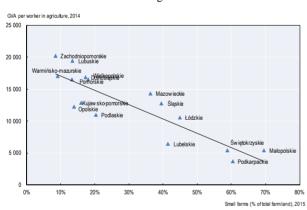
A. Share of large farms and level of labour productivity in agriculture, TL2 regions



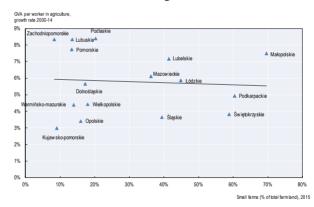
B. Large farms and labour productivity growth in agriculture, TL2 regions



C. Small farms and level of labour productivity in agriculture, TL2 regions



D. Small farms and labour productivity growth in agriculture, TL2 regions



Notes: Large farms = 100 ha and more; small farms = less than 10 ha (data for the year 2014). Productivity is measured as GVA per worker in the agricultural sector.

Source: CSO (2015), Statistical Yearbook of Agriculture 2015, <a href="https://stat.gov.pl/en/topics/statistical-yearbooks/statistic

The state continues to own a significant share of farmland, which varies widely across TL2 regions from 1% (in Świętokrzyskie) to 26% of agricultural land (in Opolskie) (Figure 1.42). Overall, about 9% of farmland is still owned by the state in Poland, part of which is being leased to farmers.

30 25 20 15 10 5 ٥ Zahahiqana dis

Figure 1.42. Share of state-owned agricultural land by voivodeship, Poland, 2014

Source: CSO (2015), Statistical Yearbook of Agriculture 2015, https://stat.gov.pl/en/topics/statisticalvearbooks/statistical-vearbooks/statistical-vearbook-of-agriculture-2015.6,10.html.

Rural labour markets

Regional differences in unemployment are related to structural factors

There is large variability in regional labour market outcomes across voivodeships. In O2 2017, the highest employment rate was found in the Wielkopolskie voivodeship (58.8%), while the lowest unemployment rates were recorded in Wielkopolskie (2.4%), Lubuskie (3.4%), Małopolskie and Śląskie (both 4.0%). On the other hand, the highest unemployment rate was recorded in Podkarpackie (8.4%), followed by Warmińsko-Mazurskie (6.8%) – which had also the lowest employment rate (50.5%) – and Lubelskie (6.5%). The large differences in unemployment rates across the country are not directly linked to demand factors such as GDP or investment trends, but rather connected with structural factors, including demography, education and sectoral composition (Ciżkowicz, Kowalczuk and Rzońca, 2014). In rural regions, the highest unemployment rates are registered in the areas in which former state-owned farms previously dominated, i.e. the northern and western parts of the country. While overall labour market outcomes have improved in Poland, rural areas still register high hidden unemployment and the female participation in the labour force is low. The activity rate (the share of population aged over 15), which stood at approximately 56.7%, is very similar in urban and rural regions.

Improvements in unemployment rates between 2004 and 2008 can be linked to the massive outmigration of unemployed people that followed EU accession (Fihel and Kaczmarczyk, 2013). The post-accession migration was characterised by a phenomenon of "brain drain" as highly educated people were overly represented among the Polish migrants, while at the same a very high proportion of the Polish migrants employed abroad were conducting very simple and unskilled jobs. The migrants originating from rural areas constituted the largest group with respect to categories of settlement, followed by migrants from big cities (with more than 100 000 inhabitants). Germany, Italy and the Netherlands receive relatively more people originating from the countryside, who are older and have lower levels of education. Conversely, Ireland and the United Kingdom are more common destinations for younger and more highly educated urban migrants (Okólski and Topińska, 2012). As a further consequence of EU accession, the gap between rural and urban employment and unemployment rates has declined. The rural labour market outperformed the urban one until the global crisis in 2008, but since accession to the EU the gap between the two types of regions has decreased. Employment and unemployment rates reached basically the same values in rural and urban regions after the economic crisis and the trend even reversed in 2013, with urban regions outperforming rural regions.

Hidden unemployment on Polish farms is substantial

Compared to the urban labour market, the rural labour market exhibits peculiar distortions that are not accounted for in official statistics. The most prominent issue concerns the large number of farm owners that employ household members (spouse, children and others), even though this labour is largely surplus to needs of the farm and does not increase the level of production (Witkowski, 2004). This labour market feature, widespread in Poland's rural areas, is often referred to as "hidden unemployment". This type of hidden unemployment is difficult to catch in official statistics; estimates of hidden unemployment range from 490 000 according to the National Research Institute, to as much as 600 000 in a study by Kowalski (2013). This represents an improvement compared to the 1996 level of estimated 900 000 persons (Witkowski, 2004), but it still indicates that an important amount of rural areas' labour force could be better utilised elsewhere. Hidden unemployment in agriculture is in place in particular among small farms, older persons, people with a lower education and women (Wiest, 2016). There is also evidence to suggest that Poland has a relatively large informal economy; however, this is very difficult to estimate (Box 1.4).

While in rural areas women are rarely the owners of the farm, there is an important female contribution to the operation of the farm, which counts as paid employment in the Labour Force Survey. Female labour force is a significant untapped resource that could considerably improve the development dynamic of rural areas. Other forms of hidden unemployment include: employees working in a position that does not fully exploit their skills (skills underutilisation); employees working part-time but willing to work full-time; and discouraged workers who give up job seeking and exit the labour force, but are actually willing to work. Among these, the latter is particularly relevant in Poland: among inactive people in Poland, more than 500 000 declared as reason for their inactivity "tried every known method of job search" or "convinced of impossibility to find work" (Labour Force Survey data).

Key statistics suggest a dire picture regarding the non-agrarian section of the rural labour market. The rural non-farm population – also called "landless population" – has both low activity rate and employment rate indicators. Moreover, the unemployment rate for these individuals is more than twice that of farm households: 6.6% to 2.7% in Q2 2017 (CSO, 2017c). The especially low level of employment of the landless population in rural areas is linked to a limited availability of workplaces outside the agricultural sector, as well as to low levels of education of the rural population, which increases the difficulty in getting employment outside agriculture. At the same time, these lower unemployment rates for farm-based individuals are a reflection of the presence of hidden unemployment in the agricultural sector.

Productivity has been bolstered by labour shedding

In many Polish regions, productivity growth has been boosted by labour shedding as workers with low productivity are replaced by more efficient machinery. Overall, average annual employment growth was negative between 2000 and 2014 in 29 out of 72 TL3 regions (more than 40%) (Figure 1.43). While this issue is present in other OECD

Box 1.4. The scale of Poland's informal economy

According to research and estimates by the Research Institute of Market Economy, in 2015, the shadow economy (including illegal activities, hidden operations – mostly by understating turnover in legal enterprises and informal operations, mostly unregistered work) made up 19.2% of Polish GDP (Łapiński, Peterlik and Wyżnikiewicz, 2015). Poland has been identified as one of the OECD countries where informal employment poses the most serious challenges (OECD, 2008; 2014). According to the broadest study (Schneider, Bühn and Montenegro, 2010, updated by Schneider, 2013), the shadow economy represents about 24% of Polish gross domestic product, behind only Estonia, Turkey and Mexico among OECD countries, However, the methodology used in these widely referenced papers is subject to serious limitations, potentially leading to upward biases (Andrews, Caldera Sánchez and Johansson, 2011). In contrast, according to estimates by the Central Statistical Office, the shadow economy was about 13% in 2010, while the number of people admitting to informal work decreased from 9.6% of total employment in 2004 to 4.6% in 2010. Nevertheless, according to Andrews, Caldera Sánchez and Johansson (2011), based on various proxies, the size of the informal economy is probably high relative to other OECD countries.

Under-declaration of income is widespread in Poland (although tax compliance has improved), and a large number of employees working on small firms do not have a written employment contract (OECD, 2008). But it is particularly prevalent in the countryside (Schneider and Williams, 2013). This is in part due to the importance of having strong confidence between players. Studies of this phenomena have noted that seeing "close ties to neighbours, friends and family members often play a role in the existence of informal work activities" (Losby et al., 2002: 15). Informal employment tends to be triggered by the lack of job opportunities in the formal sector, but also by the potential for greater disposable income (Mroz, 2010; Walewski, 2011), owing to the avoidance of income tax and social security contributions, and possibility of income support from the social protection system and the favourable treatment of the self-employed. Informal employment is a significant labour-market problem for a number of reasons. People working in the shadow economy typically have limited social protection and tend to face a high level of income insecurity; they are therefore more exposed to poverty risks. The shadow economy represents a shortfall in terms of tax revenues, limiting the quality of public services and putting greater tax pressure on the formal sector. It therefore induces distortions, as informal firms benefit from unfair competition advantages. The shadow economy also comprises non-registered transactions between individuals and companies.

Policies and institutions can shape the incidence and scope of informal employment. The OECD (2014) has noted that authorities could act in the following dimensions to curb its costs: 1) simplify tax regulations in order to reduce compliance costs, reduce the potential to exploit loopholes, and reduce collection and monitoring costs; 2) enhance the monitoring and enforcement of the tax system to limit tax avoidance and evasion; 3) remove significant barriers to market entry and costly administrative procedures; 4) better link unemployment benefits to contributions in order to encourage formal employment; 5) reform the Farmers Social Insurance (KRUS) system which presently encourages underground employment; 6) strengthen the rule of law. There is a significant crosscountry correlation between the size of the informal sector and the effectiveness of institutions securing property rights, establishing an impartial judiciary and limiting corruption (Andrews, Caldera Sánchez and Johansson, 2011). Also, hours in undeclared work tend to be higher in countries where there is a perception that few citizens play fair, a proxy for the degree of trust between citizens and public authorities. Improving government effectiveness and fighting corruption by improving trust in government can raise the willingness to pay taxes and more generally play an important role in reducing informality.

Adapted from: OECD (2014), OECD Economic Surveys: Poland 2014, http://dx.doi.org/10.1787/eco_surveys-pol-2014-en.

Sources: OECD (2008), "Declaring work or staying underground: Informal employment in seven OECD countries", http://dx.doi.org/10.1787/empl_outlook-2008-4-en; Schneider, F., A. Bühn and C.E. Montenegro (2010), "New estimates for the shadow economies all over the world", https://doi.org/10.1080/10168737.2010.525974; Andrews, D., A. Caldera Sánchez and Å. Johansson (2011), "Towards a better understanding of the informal economy", http://dx.doi.org/10.1787/5kgb1mf88x28-en; Mroz, B. (2010), "Migration into the shadow: Unregistered work in Poland"; Walewski, M. (2011), "An attempt to measure the trends in shadow employment in Poland"; Łapiński, K., M. Peterlik and B. Wyżnikiewicz (2015), Szara strefa w polskiej gospodarce w 2015 roku; Schneider, F. and C.C. Williams (2013), The Shadow Economy, https://iea.org.uk/wpcontent/uploads/2016/07/IEA%20Shadow%20Economy%20web%20rev%207.6.13.pdf, Losby, J.L. et al. (2002), "Informal economy literature review", www.kingslow-assoc.com/images/Informal Economy Lit Review.pdf.

countries, for all types of TL3 regions, it is especially pronounced in Polish rural regions. In 18 out of 31 Polish rural regions, i.e. 58% of rural regions, labour productivity growth was boosted by negative employment growth in the period 2000-14. The trend was in place in intermediate and urban regions of Poland only to a lesser extent. Over the same period, productivity growth was associated with labour shrinking in one-fifth of the urban regions (3 out of 15) and about one-third of intermediate regions (8 out of 25).

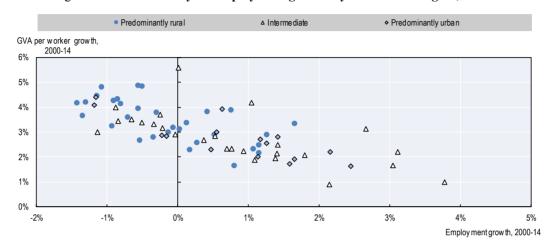


Figure 1.43. Productivity vs. employment growth by OECD TL3 region, Poland

Source: OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Labour shedding is particularly pronounced in the north-west and the south-east of Poland (Figure 1.44). The regions in which employment increased are geographically concentrated around the Warszawa region, in the northern territories annexed to Poland after World War II and in parts of the southern *voivodeships*. Regions with a decrease in employment are located along the country borders on the east and on the west, in the south (Małopolskie *voivodeship*), and in a large central area corresponding to the *voivodeships* of Kujawsko-Pomorskie, Wielkopolskie and Łódzkie. Among the regions that recorded the largest reduction between 2000 and 2014, of between 0.7% and 1.4% per annum, seven are located in Kujawsko-Pomorskie and Zachodniopomorskie *voivodeships*.

Only 12 out of 31 predominantly rural regions had positive employment growth in 2000-14. The majority of these regions are located in the Mazowieckie (4 out of 12) and the Łódzkie (3 out of 12) *voivodeships*. A simple sectoral analysis of employment in 2014 shows that, compared to the average of all Polish rural regions, the two regions with the highest employment growth in the period (Płocki and Rzeszowski) register a larger share of employment in the public sector and in construction, and a lower share of employment in the primary sector (Table 1.10).

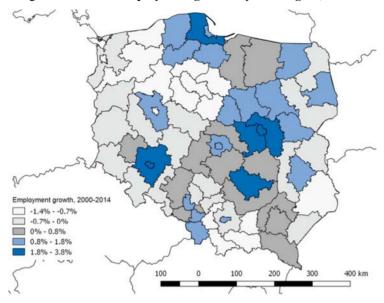


Figure 1.44. Total employment growth by TL3 region, Poland

economy". OECD (2016k), "Regional **OECD** Regional Statistics (database), Source: http://dx.doi.org/10.1787/6b288ab8-en

Table 1.10. Sectoral employment shares in rural regions with employment growth, Poland, 2014

		Share of employment in sector relative to average share in rural regions									
TL3 region	Voivodeship	Agriculture, forestry and fishing	Industry, including energy	Construction	Public admin., compulsor social security, education human health						
Plocki	Mazowieckie	0.86 0.90 1.38		1.38	1.11						
Rzeszowski	Podkarpackie	0.58	0.89	1.13	1.14						
Sandomiersko- Jedrzejowski	Świętokrzyskie	1.71	0.74	0.85	0.87						
Ostrołęcki	Mazowieckie	1.39	0.80	0.94	1.00						
Siedlecki	Mazowieckie	1.34	0.81	0.81	1.02						
Ciechanowski	Mazowieckie	1.36	0.89	0.82	1.04						
Piotrkowski	Łódzkie	0.69	1.27	0.97	0.87						
Skierniewicki	Łódzkie	1.14	0.92	0.84	0.87						
Chojnicki	Pomorskie	0.71	1.20	1.15	1.03						
Sieradzki	Łódzkie	1.05	1.18	0.83	0.88						
Tarnobrzeski	Podkarpackie	0.67	.67 1.44		0.90						
Krakowski Małopolskie		0.80	1.05	1.26	0.77						
ource: OEC	CD (2016k), \$\text{10.1787/6b288}\$		onomy", OECL) Regional	Statistics (databas						

Poverty, unemployment and underemployment

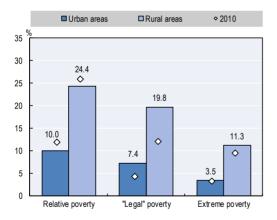
Poverty is the highest in rural areas, and the highest among farm households

The highest rural unemployment rates are found in the areas of former state farms, where individuals have had great difficulty in finding new forms of employment (e.g. parts of Warminsko-Mazurskie, and Zachodniopomorskie regions) and in regions where large state-owned manufacturing companies collapsed (e.g. Świętokrzyskie region). Unemployment trends provide a picture of where labour markets are less dynamic and where there may also be higher incidences of poverty. However, the relationship between unemployment and poverty in rural areas is not solely due to the prevalence of hidden unemployment in farm households. There are geographic dimensions to poverty and inequality in Poland and a lack of economic diversification in rural areas and the persistence of a dual economic structure in agriculture has led to heightened inequalities among certain groups. Poverty rates are the highest in remote rural areas, where employment in agriculture is relatively high, the rural economy poorly diversified and small farms prevail. Poverty rates in rural areas are on average twice as high as in large urban centres (those with a population of 500 000 or more) (FDPA, 2016). These phenomena have led research to describe a so-called "Eastern wall", with poverty concentrated in the eastern regions and unemployment the most concentrated in the areas of former state farms (European Commission, 2008a).²⁰

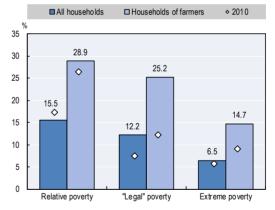
Extreme poverty risk is much higher in rural areas than in cities. In 2015, about 1 in 9 rural inhabitants lived in extreme poverty, compared to less than 1 of every 20 persons living in urban areas (Figure 1.45). Inhabitants of rural areas constitute nearly 60% of all people in Poland living below the extreme poverty line, while only 40% of the Polish society lives in rural areas, showing a concentration of poverty outside cities. The share of people living in extreme poverty increased from 5.6% in 2008 to 7.4% 2014, and sharply decreased from 6.5% in 2015 to 4.9% in 2016. The share of population threatened by poverty or social exclusion in rural areas averaged at 33% between 2011 and 2013, 4 percentage points higher than in urban areas and 8 percentage points higher than in the European Union overall.

Figure 1.45. At risk of poverty rates, Poland, 2015

A. Urban and rural areas



B. All households and households of farmers



Notes: At risk of poverty rates are calculated on the base of Household Budget Survey. At risk of relative poverty: percentage of persons in households where the level of expenditures (including a value of free-of-charge articles as well as natural consumption) was lower than the relative poverty threshold, adopted at 50% mean monthly expenditures at the level of all households estimated with the use of the so-called original OECD equivalence scale. At risk of legal poverty: percentage of persons in households where the level of expenditures (including a value of free-of-charge articles as well as natural consumption) was lower than the so-called "legal" poverty threshold, i.e. the amount which, according to the Law on Social Assistance, provides eligibility for a monetary benefit from social assistance. At risk of extreme poverty: percentage of persons in households where the level of expenditures (including a value of free-of-charge articles as well as natural consumption) was lower than the adopted extreme poverty threshold (subsistence minimum, setting the level of satisfaction of needs below which occurs a biological threat to life and psychophysical human development.

Source: CSO Local Data Bank, http://swaid.stat.gov.pl/EN/SitePagesDBW/WarunkiZyciaLudnosci.aspx.

According to the national poverty risk index, poverty is the highest among households relying on unearned sources of income, such as disability pensions, and secondly, among farmers. Members of households connected with agriculture constitute nearly half of all the poor population of rural areas. In 2016, approximately one in four farmers lived in relative poverty, and 11% of farmers lived in extreme poverty. Among farmers, owning a small amount of arable land is positively correlated with higher poverty. On the other hand, the poverty risk of non-farm households is lower than the average for rural areas. In particular, among the self-employed, the percentage of persons living in poverty, both extreme and relative, is the lowest (Zmija, 2015). Higher rates of poverty are also experienced by individuals with limited mobility, such as persons with disabilities (European Commission, 2008b), Furthermore, there is a gender dimension to poverty, with poverty rates being higher among women, in part because women have fewer job opportunities in rural areas (Tarkowska and Korzeniewska, 2002; Karwacki, 2006; Tarkowska, 2006). Younger age cohorts and families with a large number of children are particularly vulnerable to poverty (European Commission, 2008b). Recent analysis from Poland's Central Statistical Office shows a considerable improvement in rural poverty; this has been partially attributed to the government's new Family 500+ Programme which provides financial support for families with two or more children or with one child and income below a predetermined threshold (CSO, 2016b).

Poverty and lack of opportunity for former workers of state farms and their families

Prior to 1989, Poland had approximately 1 600 state farms employing approximately 500 000 workers. Together with their families, this population numbered around 2 million (European Commission, 2008a). These state farms had a very particular morphology. They developed their own housing estates with low-level apartment blocks to house workers on the farm apart from other settlements (Feltynowski et al., 2015). When the state farm sector was liquidated in 1991, many of these workers had difficulty transitioning to new forms of employment because they had only specialised rudimentary skills that were not readily transferrable to other occupations and because they had lived in an autonomous community that had little contact with other parts of society. For example, between 1991 and 1993, approximately 100 000 former state workers became unemployed, although this number has decreased over time (European Commission, 2008a). The remnants of this population, including their now adult children, have few skills and lack access to employment opportunities, educational facilities and labour markets due to the isolation of these settlements. This has led to structural unemployment and multi-generational poverty (see Milczarek [2002]).

In summary, the rural economy in Poland as a whole faces challenges related to structural change and productivity growth. As the already large territorial inequalities in the country accentuate, low-performing regions have to find ways to move away from unproductive agricultural activities to higher productivity non-agricultural activities. At the same time, the general path of labour productivity gains via employment losses is not conducive to sustainable growth and development. Substantial levels of unemployment and hidden unemployment in some areas highlight the need for a shift to activities that broaden the range of opportunities available, especially to those at high risk of social exclusion in rural areas.

The enabling factors of growth and development

This section discusses the key enablers of development and better economic performance for Poland's rural regions. Lifting the economic performance of rural Poland requires an integrated approach by national and regional governments to invest in the enabling factors for productivity growth: infrastructure, skills and innovation. The modern world and the global economy confront farmers with new challenges. It is not enough just to simply produce goods; farmers must also take care of assuring high-quality products at competitive prices, as well as finding customers, while taking into account more stringent environmental requirements. Moreover, successful rural development in Poland will require a significant redistribution of the rural labour force from farming activities with low productivity to non-farming activities.

Since the socio-economic transition, rural areas in Poland have experienced a number of positive developments. These include: an increase in the level of education of residents, recent increases in the amount of non-agricultural economic activity, significant expansion of physical and technical infrastructure networks, and stronger collaborative activities at the local community level. However, rural regions still lag behind urban ones in many regards, and a large part of the rural population is still unable to economically sustain itself, with a high reliance on European and national subsidies and social benefits.

Infrastructure and accessibility

Rural households have recently gained more access to computers and the Internet than previously. The availability of computers in households in rural areas increased from 67.1% to 75% between 2011 and 2015 (Figure 1.46); however, this remains below the rate of availability in urban areas (82.9%) and the national average (77.9%). The share of rural households with home Internet access increased from 18.8% to 72% between 2005 to 2015, which is only 5.7 percentage points below the urban average. The share of rural households with a broadband Internet connection rose from 5.2% in 2005 to 64.7% in 2015, 9.4 percentage points below the urban average (Figure 1.47). Regional differentiation with regards to broadband connection is large, from 43.3% of households in Świętokrzyskie to 71.3% in Podkarpackie.

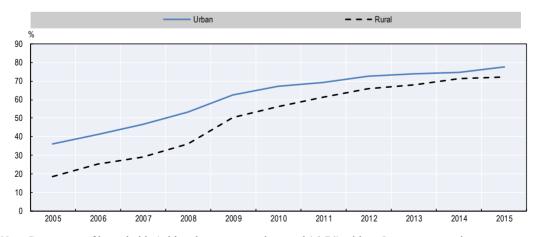


Figure 1.46. Percentage of households with an Internet connection, Poland

Note: Percentage of households (with at least one member aged 16-74) with an Internet connection.

Source: CSO (2017b), "Use of information and communication technologies in enterprises and households database", goo.gl/jgiFpy.

While Internet access for rural residents has significantly improved in recent years due to investments in digital infrastructure, high-speed Internet is not always available. Despite increasing Internet availability, the uptake of e-services by rural residents is relatively low compared to their urban counterparts. The effective uptake of e-services in Poland requires public education and training programmes to promote their use. Doing this, however, is time-intensive and costly, since the activities have to be tailored to the needs of individuals and social groups (Jaska, 2015).

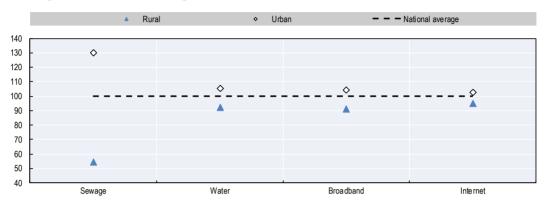


Figure 1.47. Benchmarking households' infrastructure in rural areas, Poland, 2016

Source: CSO (2017), Local Data Bank, Housing economy and municipal infrastructure.

Water supply and sewage systems remain underdeveloped in some rural areas, as there are still rural areas that are not connected, and areas where individual wells do not ensure uninterrupted water supply to holdings. The ratio of connection to the water supply network²¹ at the end of 2016 amounted to 82.5%. Worse still is the situation in terms of availability of sewerage network. The ratio of house connections to a sewage system amounted to 35.6% at the end of 2016.²² This makes it clear that further investments in improving this basic infrastructure in rural areas are still required. These include: new construction, and reconstruction, as well as modern sewer and water treatment technology. Improvement in the availability of water and sewage infrastructure will raise living standards and improve the environment. In rural areas, the importance of external funding to accomplish this reflects considerably high cost per household due to low population density, a dispersed settlement pattern, and lower volumes of water and waste that require high fixed costs to be spread over a small and relatively poor set of users.

Disparities in accessibility are large and can result in increasing economic disparities

Generally speaking, accessibility refers to the capacity of people in a certain region to physically get different types of opportunities and services in a given time threshold. Accessibility to people, for instance, is related to more opportunities for social connections, market transactions and knowledge sharing. It is measured as the share of the national population a local inhabitant region can access within a given commuting time, taking into account the actual quality of the road network and the distribution of the population in space. A highly unequal distribution of accessibility across a territory means that a sub-group of the population faces costly and difficult access, while another sub-group enjoys a relatively easy reach to opportunities and services. If these disparities in accessibility are persistent over time, the disparities in economic well-being among people are likely to increase. Disparities in access are partly explained by natural barriers and the historical formation of human settlements, but they can persist if transport provision disparities across the territory are not appropriately bridged. Rural areas have inherently higher costs for all public and private services, due to the challenges associated with low population density, large physical distances that have to be covered and low total levels of utilisation by a small population. Poland has significant disparities in terms of access to people, transport infrastructure, education and higher services. Access to people can be used as a proxy for social activities and business opportunities, while access to higher services such as education and health services signals possible under-provision issues across the territory.

Inequality indicators reveal that disparities in accessibility to people in Poland are large. The Lorenz curves show how different the actual distribution of opportunities is with respect to a perfectly equal distribution. The further away the curve is with respect to this distribution, the larger the inequality. The respective Gini coefficients summarise the level of inequality in the distribution, with 1 being the most unequal distribution. For a 30-minute car commute, the level of inequality is extremely high (Figure 1.48). This is the direct result of urban concentration, as after a relatively short car commute people in urban cores have access to a relatively large proportion of the total population. Strikingly, however, inequalities remain high even for a 2-hour drive, indicating that for this commute length, people living in highly accessible *gminas* would reach a significantly large portion of the total population, while those living in low accessible *gminas* would reach only a limited portion. There are significant gaps in accessibility between urban and other types of *gminas*: while 34% of the people in urban *gminas* are in the top accessibility quartile, this number drops to 11.3% for people living in rural or mixed *gminas* (Figure 1.49).

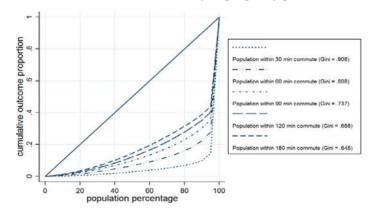


Figure 1.48. Lorenz curve of accessibility to people by gminas, Poland, 2015

Source: Calculations based on Open Street Maps, official Polish roads (PKP) and ITF air model.

The best connected *voivodeship* is Śląskie, where 70% of inhabitants can access 21-28% of the total Polish population within a 2-hour drive, followed by Łódzkie (52%) and Małopolskie (51.9%). The higher accessibility of these *voivodeships* is explained by their proximity to a number of urban areas and the highway network. In contrast, most of the *voivodeships* in the north-western and eastern parts of the country can access a significantly smaller part of the population. The most extreme of these is Zachodniopomorskie, where the entire *voivodeship* is able to reach only less than 9% of the total Polish population in a 2-hour drive.

Access to people Percent of the total population reachable within 120 min Less than 9% 9-14% 14-21% 21-27%

Figure 1.49. Access to people, Poland, 2015

Source: Calculations based on Global Human Settlements (GHS).

Accessibility to people and economic performance are positively correlated for TL3 regions in Poland. Most metropolitan regions with high levels of accessibility to people grew at a faster pace than the national average between 2000 and 2014. Some of the TL3 regions displaying both labour productivity convergence and employment growth such as Płocki, Piotrkowski and Rzeszowski have relatively high levels of accessibility to people. Meanwhile, most TL3 regions that performed below the national average in terms of GDP per capita growth have relatively low levels of accessibility (Figure 1.50).

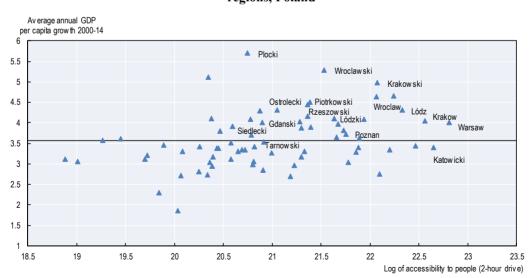


Figure 1.50. Accessibility to people (2-hour drive) vs. GDP per capita growth across TL3 regions, Poland

Note: The horizontal line represents the national average.

Source: Calculations based on Global Human Settlements (GHS) and OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

As large cities concentrate the widest range of people, firms and services, they usually offer relatively higher access to employment and business opportunities, and educational and health services. In addition, those in surrounding areas may have good access to opportunities, depending on the existing transport connection to the largest urban agglomerations. In Poland, the share of people living within a 30-minute drive from one of the 58 FUAs is nearly 30%, 20% of which live near the FUA with a population greater than 250 000. For a 60-minute drive, the corresponding shares are 44.2% and 37% (Figure 1.51).

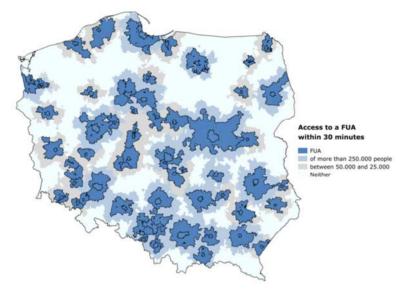


Figure 1.51. Access to a functional urban area within a 30-minute drive, Poland, 2015

Note: Functional urban areas based on the OECD definition.

Source: Calculations based on Global Human Settlements dataset.

Unequal access to transport infrastructure, with rural areas exhibiting the lowest levels

Access to transport infrastructure is also unequally distributed across the territory, although in this case the disparities are not as large with respect to access to population. In the entire country, 38.2% of the population has access to a major highway and railway station within 30 minutes and to an airport within 60 minutes. A further 18.1% has access to rail and highway, but lacks access to airports, while 26.6% has access to only rail or highway. Lastly, 17.1% has no access to any of these transport modes within the 30-minute (or 60-minute for air) interval. This is a significant gap in access, as it indicates that people living in these areas are physically disconnected from the rest of the country.

Accessibility to transport infrastructure also varies across zone types and regions (Figures 1.52 and 1.53). Almost 59% of people living in urban *gminas* have access to all three transport modes, while only 7% lack access to all modes. Access is similar for rural and mixed *gminas*, but while mixed *gminas* have slightly more people with access to all three modes (27% mixed vs. 24% rural), rural *gminas* have a slightly higher share of people with no access at all (24% rural vs. 22% mixed). The *voivodeships* with the highest percentage of people with access to all three modes are Pomorskie and Śląskie, with about 63%. On the other hand, in three *voivodeships* (Dolnośląskie, Podlaskie and

Warmińsko-Mazurskie), none of the population has access to all three transport modes within the given time limits. The *voivodeships* of Ślaskie, Pomorskie and Wielkopolskie also have the lowest share of people that completely lack access to transport modes, at 2-8%. Zachodniopomorskie is the *voivodeship* where the highest share of the population (61%) has access to either rail or highway, but less than 2% has access to both.

cumulative outcome proportion

Figure 1.52. Lorenz curve of accessibility to transport infrastructure by gminas, Poland, 2017

Source: Calculations based on Open Street Maps, official Polish roads (PKP) and ITF air model.

population percentage

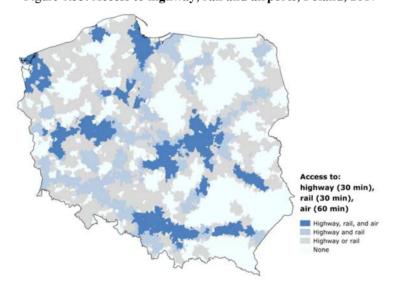


Figure 1.53. Access to highway, rail and airports, Poland, 2017

100

Source: Calculations based on Open Street maps, official polish railroads (PKP), ITF air model.

Relatively good access to education and health services in urban areas but limited in some regions

Although inequalities in access to basic education are the lowest of the ones analysed, they can have significant consequences for human capital formation in areas where low access adds to the relative immobility of children and young people. In Poland, 63.9% of the population has access to education over the range from kindergarten to high school

within 15 minutes; 16% of the population lacks easy access to one of the three school levels (kindergarten, primary or high school); while 20.1% has no school at all within a 15-minute driving range (Figures 1.54 and 1.55).

There are significant differences in access to education between urban *gminas* and the others. While almost 91% of urban dwellers have access to all three levels of education, in mixed *gminas* 40% of people have access to all levels and 38% have access to none. In rural *gminas*, 51% have access to all levels, 22.4% are missing at least one level and 26.6% have no access to schools within 15 minutes (Figure 1.54). These accessibility gaps are remarkable given that access to basic education is expected to be higher than access to other services. This is because children and young people are relatively immobile, in the sense that in many cases they depend on others for their commutes, and do not have independent access to faster transportation modes such as the car. Inequalities in access to education in Poland can be also related to coverage of local government schemes to ensure school access. Gaps in access to basic education can contribute to school attendance and performance gaps, and future lower returns for children and young people living in areas with low access to education.

At the *voivodeship* level, Śląskie has the highest share of people with access to all levels of education (88%) while Zachodniopomorskie (24%) and Lubuskie (36%) have the lowest. Regarding *voivodeships* with limited access to education, Zachodniopomorskien, Warmińsko-Mazurskie and Lubuskie have the highest share of no access to schools within 15 minutes (47%, 43.5% and 43.4%, respectively). On the other hand, Śląskie has the lowest share of people without any access to education, at 3.4%.

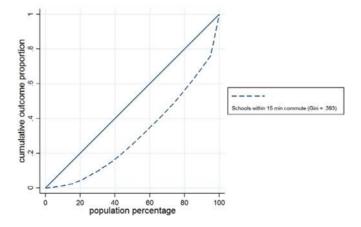


Figure 1.54. Lorenz curve of accessibility to schools by gminas, 2017

Note: Schools include the following categories: preschool, primary school, high school, art school, special needs school, other.

Source: Calculations based on data from the Educational Information Center.

Access to higher level services, such as universities and hospitals, is also the highest for people living in urban *gminas*, and it is much lower for people in mixed and rural *gminas*. In the country as a whole, 44.9% of the population lives within a 30-minute commute from a hospital and a 60-minute commute from a university (Figures 1.56 and 1.57). Only 4% of the people, mostly in the periphery of big cities, have access only to universities, while 37.8% have access only to hospitals. The remaining 13.3% of people live in *gminas* without access to hospitals or universities. People living in urban

gminas will almost certainly have access to a hospital, with only 5.3% lacking. Of urban dwellers, 63.3% also have access to both a university and a hospital, a figure that drops to 34.8% when looking at mixed gminas and 32.1% in rural gminas. Regarding voivodeships, once again Ślaskie has the highest share of people with access to both, with 86.1%, whereas in Podkarpackie, Pomorskie and Małopolskie noone has access to both a hospital and a university, with Małopolskie having the highest share of people (39.1%) with no access to either.

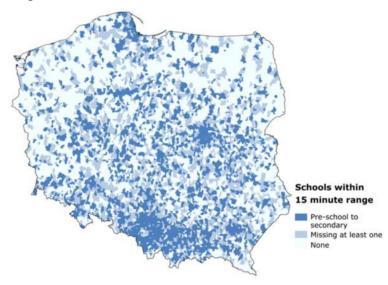


Figure 1.55. Access to schools within 15 minutes, Poland, 2017

Note: Schools were split in the following categories: preschool, primary school, high school, art school, special needs school, other.

Source: Calculations based on data from the Educational Information Center.

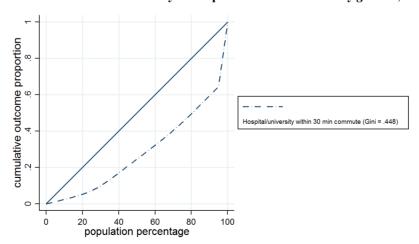


Figure 1.56. Lorenz curve of accessibility to hospitals and universities by gminas, Poland, 2017

Source: Calculations based on Open Street Maps classifications of hospitals and clinics.

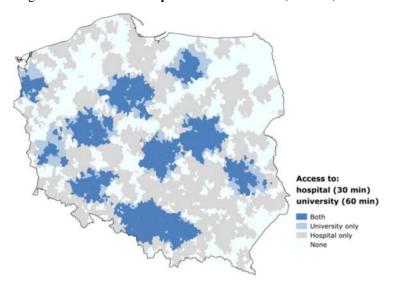


Figure 1.57. Access to hospitals and universities, Poland, 2017

Source: Calculations based on Open Street Map classifications of hospitals and clinics.

Human capital development

A rapid increase in educational attainments, but slow progress in improving quality in learning outcomes

Educational attainment levels in Poland are among the highest in the OECD. To date, 62% of the population aged 25-64 has completed at least an upper-secondary education, compared to the OECD average of 48%. Educational attainment in Poland has significantly improved in the last 15 years, in part reflecting an expansion of the tertiary education system. Between 2000 and 2014, the share of the labour force with a tertiary education almost tripled, increasing from 12.3% to 31%, thereby matching the EU-28 average (31.1%). In the same period, the share of the labour force with only an elementary education has more than halved, dropping from 15.8% to 6.6%, which is lower than the EU-28 average of 20.5%.

Poland is quite remarkable in that 30% of youth of rural origin who graduate from universities return to the countryside (Szafraniec and Szymborski, 2016). There is also a phenomenon of youth with no rural roots moving to rural areas (Wasielewski, 2013). Consequently, the educational structure of young rural residents (aged 25-29) has improved in recent decades (Szafraniec and Szymborski, 2016).

The performance of Polish students has improved, as reflected in the 2003-12 PISA performances of 15-year-olds. Poland currently performs better than the OECD average in PISA, but from 2006 onwards improvements in the quality of education have been slower. Since 2006, notable improvements in learning outcomes have only been visible in mathematics while performances in reading and science have remained stable (OECD, 2015).

Likewise, the rapid expansion in higher education graduates may have come with quality weaknesses in some higher education institutions. Findings from the OECD Survey of Adult Skills (PIAAC) highlight that, while the younger cohorts are doing better

than the older generations, in terms of the average level of skills proficiency, the level of skills and the intensity of use of such skills are among the lowest of all participating countries (OECD, 2013). More precisely, the skill levels of Polish tertiary graduates is lower on average than in other OECD countries, and the share of graduates with weak basic skills is high (OECD, 2016e). The quality and content of education and training programmes in Poland may thus need to be revised in order to ensure that young people are equipped with relevant, high-level skills to meet labour market needs.

Skills mismatch may also be an important issue in Poland as a sizeable share of young Poles with a tertiary education work in professions that do not require such high educational attainment (15%) (OECD, 2016e). While an alternative system to better match skills supply with skills demand, the responsiveness of the vocational education and training system (VET) to labour market demand in Poland may also need improving. According to PIAAC 2012 data, only about 5% of all VET students reported being in apprenticeship or receiving training with employers, which is well below the OECD average of 17% (OECD, 2016e). A new reform for 2017 has recently been launched by the national government to continue previous efforts to improve VET quality and increase private sector involvement in order to further ensure that young people are well prepared for their entry into the labour market.

Regional disparities in education outcomes are high and the urban-rural divide remains to be addressed

Significant differences in educational attainment exist among the different Polish voivodeships. The Warmińsko-Mazurskie region records the highest levels of those with only a primary education (11.1%), while Ślaskie has the lowest share (4.1%). In contrast, the capital-region, Mazowieckie, which includes Warsaw, registers the highest share of those with a tertiary education in Poland (40.6%), thereby exceeding the Polish and EU-28 averages.

In Poland, tertiary education has a strong impact on labour markets. While employment rates across the OECD for tertiary educated adults aged 25-34 decreased from 84% to 83% between 2005 and 2015, employment rates in Poland for the same age group increased from 83% to 87% (OECD, 2016a). Furthermore, the unemployment rate for Polish adults with a tertiary degree in 2015 was more than 12 percentage points lower than the rate for those with less than an upper-secondary education as their highest level of attainment (OECD, 2016a).

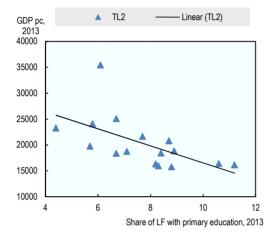
Among Polish voivodeships, higher levels of educational attainment are positively correlated with higher incomes (Figure 1.58). Primary educational attainment in these TL2 regions is negatively correlated with regional GDP per capita, while the opposite is true for higher levels of tertiary educational attainment (Figure 1.59).

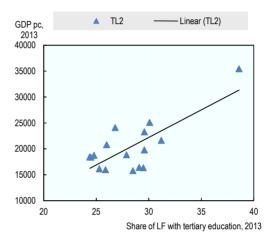
Regional disparities in Poland vary by type of region, with urban regions recording better educational outcomes than rural regions (Figure 1.60). The gap is the highest in tertiary education attainment, with rural areas lagging behind urban areas by 16 percentage points, while the share of the population with a lower secondary and a primary education in rural areas is 9 percentage points higher than in urban areas.

The performance of rural areas has improved significantly in the past decade, even though they have a lower stock of skills. The share of working-age population with a tertiary education has increased, from 3.1% 1998 to 14.2% in 2014, and the share of those with a lower secondary and a primary education decreased from 39.4% to 20.9%. Likewise, over the years, access to early childhood education for children from rural areas has increased. In the early 2000s, only 18% of rural children were enrolled at this level of education, but the numbers had gone up to 61% in 2014. Despite the strong progress achieved, early childhood education attendance in rural areas continues to be lower than in urban areas, where 93% of children benefit from this service.

Figure 1.58. Share of labour force with an elementary education and GDP per capita in TL2 regions, Poland, 2013

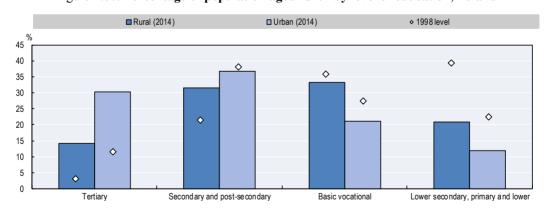
Figure 1.59. Share of labour force with a tertiary education and GDP per capita in TL2 regions. Poland, 2013





Source: OECD (2016l), "Regional innovation", OECD Regional Statistics (database), http://dx.doi.org/10.1787/d8c3473a-en; OECD (2016k), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

Figure 1.60. Percentage of population aged 15-64 by level of education, Poland



Source: CSO Local Data Bank, Labour Market, https://bdl.stat.gov.pl/BDL/dane/podgrup/temat (accessed in January 2017).

These results may be explained by a lower accessibility to public services in rural areas and a tradition of home schooling. Yet, increasing access to early childhood education in rural areas may be a highly beneficial human capital investment strategy, for "skills beget skills", meaning that the skills achieved in the early years of life constitute a

building block for further learning and competence acquisition (OECD, 2016i; Carneiro and Heckman, 2003). Moreover, PISA results suggest that attendance at this level decreases the likelihood of low educational performance at age 15 (OECD, 2016a), and yields high returns, particularly in the case of disadvantaged children who tend to benefit more from early rather than later educational investments (Woessmann, 2008).

Innovation and R&D

Rural areas are characterised by low innovative activities

Innovation is often captured by investments in formal science that rely on research institutions, such as universities and national government and corporate laboratories, and success is typically measured in terms of patents. However, many rural areas lack innovation by this standard because they are not the home to the major research institutions or corporate headquarters that undertake and register the results of patentproducing science. Thus, it is not surprising that at the TL3 level, the top five regions by average patent intensity in the period 2000-11 are Kraków, Wrocław, Warszawa, Poznań and Lódz, which are all metropolitan areas (OECD, 2016h). The next best performing regions in terms of patent intensity are Trojmiejski, Warszawa-West, Radomski, Łódzki and Bielski, which are urban and intermediate regions located in the vicinity of a metropolitan area. Interestingly, some predominantly rural areas which had no patents in 2000, such as Bialski and Włocławski, exhibit relatively large increases in patent intensity between 2000-11 (an increase of 14.3% and 5.9% respectively) (OECD, 2016h). A broader understanding of innovation – one that includes not just new practices or behaviours but also improvements to existing practices and technologies – can provide a better representation of how rural innovation occurs and its importance to rural economies. Unfortunately, there is limited data to capture such dynamics (see Box 1.5 for some examples of rural innovation).

In general, innovation activities in Polish rural areas tend to be weak. Investments in research and development are related to innovation activities. Agricultural activities predominate but opportunities for conducting related R&D activities are limited, contributing to the low economic strength of agricultural activities. Larger farms are much more likely than smaller ones to engage in R&D and innovation activities. R&D expenditure in the food industry, which is important for rural Poland, provide another example. R&D expenditure in the food industry decreased in absolute terms between 2009 and 2011, with some increases thereafter. In 2014, spending on innovative activities in the food industry amounted to 8% of total industry expenditures, which is lower than in 2009, when it was at its highest (Table 1.11). R&D expenditure is subject to fluctuations over time and is conditioned by various factors, such as access to financing.

Improving connectivity through ICT is fundamental to boosting innovation in Poland's rural areas. In 2006, the Internet was used by 35% of the rural population aged 16-74 while in 2014 this share increased to 64.2%, at a pace faster than in the cities. However, ICT access and use in rural areas continues to be low and can be a major bottleneck to business activity.

Table 1.11. Expenditure on innovative activities in the food industry and their share
of the total expenditure for industry innovative activity, Poland

	2009		2010		2011		2012		2013		2014	
	PLN mln	%										
Expenditures on innovation activities in the food industry, of which:	2 034.5	8.4	1 238.6	5.5	1 168.1	6.0	1 461.2	7.2	1 511.4	7.7	1 815.3	8.1
– R&D1	74.6	3.7	4.2	1.3	53.0	2	176.4	5.0	79.8	2.1	401.8	9.1
 Purchase of knowledge and software² 	58.1	9.2	49.3	3.6	24.2	3.5	32.2	3.1	-	-	57.3	9.4
- Investments ³	1 159.4	8.4	811.2	6.9	736.2	6.5	866.4	7.3	978.3	9.3	973.2	7.5

Notes: 1. Internal expenditure (value of research and development work carried out by own research facilities regardless of the financing resources) and external expenditure (value of research and development work in a given unit purchased from other domestic or foreign operators. 2. From external sources. 3. For machines, technical equipment, tools and means of transport.

Source: FDPA (2016), "Polska wieś 2016, Raport o stanie wsi. FDPA", www.fdpa.org.pl/uploads/polska wieś 2016 synteza.docx (background report).

Box 1.5. Examples of rural innovation, Poland

Given that innovation in rural areas can look quite different than that which is common in urban ones, examples are helpful to illustrate these practices. Examples of rural innovation encountered in Poland over the course of this research have included:

- a small family business which constructs metal fences as a side activity (in addition to agriculture) that invented a machine to allow them to construct the fences with greater speed and precision
- an entrepreneur who had captured a large share of the German market for flower displays by developing an assembly line and using preassembled components to increase productivity and reduce cost
- a vegetable co-operative that constructed a novel business organisation that provided internal consulting to growers and advanced marketing techniques to sell their products
- a family-owned rural business that captured a huge share of the UK market for pickled onions by creating highly efficient growing and processing operations.

These types of innovative practices are very difficult to measure and capture, and yet, they are fundamental to business development and growth in rural areas. The literature on rural innovation has pointed out the importance of local knowledge (often tacit and implicit), expert knowledge (often more explicit and formalised) and the support of networks to rural innovation (Esparcia, 2014). Public policy plays a role in supporting the latter two elements – both expert knowledge and networks.

Source: Esparcia, J. (2014), "Innovation and networks in rural areas: An analysis from European innovative projects", https://doi.org/10.1016/j.jrurstud.2013.12.004.

Notes

- Rural regions are classified according the OECD extended typology definition of 1. "predominantly rural region". Throughout the text the terms "predominantly rural" and "rural" are used interchangeably. For more information on the OECD typology,
 - https://www.oecd.org/cfe/regional-policy/OECD regional typology Nov2012.pdf.
- 2. Established under the Regulation of the Council of Ministers of 15 December 1998 on the detailed principles of conducting, application and dissemination of the public register of the territorial division and related obligations of government administration bodies and local government units, Journal of Laws of 1998, No. 157, Item 1031.
- The OECD TL classification is based on population density and size of the urban 3. centres located within a region. See Box 1.2A.2 for details.
- 4. Population projections suggest that by 2025 Łódź could lose 10% of its current population through a combination of natural decrease and outmigration (OECD, 2016d).
- 5. It should be noted that the legal stay in Poland is no longer than six months, and some work visas only allow staying for six months maximum.
- The Geographic Concentration index of population, which is comparable across 6. countries, is calculated as: $\sum_{i=1}^{N} (|p_i - a_i|/2) * 100$, where p_i is the population share of region i, a_i is the area share of region i.
- 7. All values are expressed in constant PPP, USD (2010).
- 8. Sandomiersko-jedrzejowski (PL332).
- 9. Krośnieński (PL323), Przemyski (PL324).
- 10. Chełmsko-Zamojski (PL312).
- 11 Leszczyński (PL417), Kaliski (PL416).
- 12 Ciechanowsko-Płocki (PL121).
- 13. Piotrkowski (PL115).
- 14. Significance is established based on a two-tailed statistical significance test on Person correlation coefficient with p=0.05.
- 15. Based on European Commission (2014).
- Based on European Commission (2014). 16.
- 17. According to the Labour Force Survey, unpaid family members who contribute to the operation of a farm are not treated as paid workers and as such are not included in official unemployment figures.
- 18. See Milczarek (2002) for a detailed description of the process of privatisation of the farms in post-social economy within the context of the overall structural and institutional change.
- 19. Data for the year 2014.
- 20. See also Michalska (2009).
- 21. Calculated as a relation of residential buildings connected to the water supply network to the total number of residential buildings in rural areas.

22. Calculated as a relation of the number of residential buildings connected to the sewerage system to the total number of residential buildings.

References

- Adam, W. (2015), "Rola małych gospodarstw rolniczych w procesie przemian strukturalnych polskiego rolnictwa", *Roczniki Ekonomicze Kujawsko-Pomorskiej Szkoły Wyższej Bydgoszczy* ["The role of small farms in the process of structural transformation of Polish agriculture", *Roczniki Ekonomicze Kujawsko-Pomorska Higher School of Bydgoszcz*], Vol. 8, pp. 364-382.
- Andrews, D., A. Caldera Sánchez and Å Johansson (2011), "Towards a better understanding of the informal economy", *OECD Economics Department Working Papers*, No. 873, OECD Publishing, Paris, http://dx.doi.org/10.1787/5kgb1mf88x28-en.
- Carneiro, P. and J. Heckman (2003), "Human capital policy", in: Heckman, J. and A. Krueger (eds.), *Inequality in America: What Role for Human Capital Policy?*, MIT Press, Cambridge, Massachusetts.
- Chmielewska, I., G. Dobroczek and J. Puzynkiewicz (2015), "Obywatele Ukrainy pracujący w Polsce raport z badania", Badanie zrealizowane w 2015 r., https://www.nbp.pl/aktualnosci/wiadomosci_2016/20161212_obywatele_ukrainy_pracujacy_wpolsce %E2%80%93 raport z badania.pdf.
- Ciżkowicz P., M. Kowalczuk and A. Rzońca (2014), "Heterogeneous determinants of local unemployment in Poland", *Post-Communist Economies*, Vol. 28/4, pp. 487-519, https://doi.org/10.1080/14631377.2016.1226784.
- CSO (2017a), Population statistics, *Local Data Bank*, https://bdl.stat.gov.pl/BDLS/metadane/podgrupy/557.
- CSO (2017b), "Use of information and communication technologies in enterprises and households database", goo.gl/jgiFpy.
- CSO (2017c) Aktywność ekonomiczna ludności Polski. II kwartał 2017 roku [Labour Force Survey in Poland in 2nd quarter 2017], Central Statistical Office, http://stat.gov.pl/obszary-tematyczne/rynek-pracy/pracujacy-bezrobotni-bierni-zawodowo-wg-bael/aktywnosc-ekonomiczna-ludnosci-polski-ii-kwartal-2017-roku,4,25.html.
- CSO (2016a), Statistical Yearbook of Agriculture 2016, Central Statistical Office, Warsaw, <a href="https://stat.gov.pl/en/topics/statistical-yearbooks/st
- CSO (2016b), Zasięg ubóstwa ekonomicznego w Polsce w 2016 r., https://stat.gov.pl/obszary-tematyczne/warunki-zycia/ubostwo-pomoc-spoleczna/zasieg-ubostwa-ekonomicznego-w-polsce-w-2016-r-,14,4.html.

- CSO (2015a), Statistical Yearbook of Agriculture 2015, Central Statistical Office, Warsaw, https://stat.gov.pl/en/topics/statistical-yearbooks/statisticalvearbooks/statistical-vearbook-of-agriculture-2015,6,10.html.
- CSO (2015b), Subiektywny dobrobyt w Polsce w 2015 r., https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/5486/20/1/1/subie ktywny dobrobyt w polsce w 2015r.pdf.
- CSO (2014), "Prognoza ludności na lata 2014-2050" [Population projection 2014-2050], Central Statistical Office, http://stat.gov.pl/obszary-tematyczne/ludnosc/prognozaludnosci/prognoza-ludnosci-na-lata-2014-2050-opracowana-2014-r-,1,5.html.
- Czarnecki, A. (2015), "The changing role of small towns as sales and supply markets for rural hinterland", in: Zajda, K. and S. Michalska (eds.), Young Researchers and the Problems of Polish Rural Areas, pp. 147-168, University of Łódź, Łódź, Poland.
- Dzialek, J. (2009), "Social capital and economic growth in Polish regions", MPRA Paper, No. 18287. University of Munich. Germany. https://mpra.ub.unimuenchen.de/18287/1/MPRA paper 18287.pdf.
- Esparcia, J. (2014), "Innovation and networks in rural areas: An analysis from European projects". Journal Rural Vol. 34, innovative of Studies, pp. 1-14, https://doi.org/10.1016/j.jrurstud.2013.12.004.
- European Commission (2017), "Competitiveness in low-income and low-growth regions: report", The lagging regions Commission Staff Working SWD(2017)132 final, European Commission, Brussels, http://ec.europa.eu/regional_p olicy/sources/docgener/studies/pdf/lagging regions%20report en.pdf.
- European Commission (2016), "CAP context indicators 2016 update", Agriculture and Rural Development, https://ec.europa.eu/agriculture/sites/agriculture/files/capindicators/context/2016/indicator-table en.pdf (accessed 30 August 2017).
- European Commission (2015), "The 2015 aging report: Economic and budgetary projections for the 28 EU member states (2013-2060)", Brussels, http://ec.europa.eu/e conomy finance/publications/european economy/2015/pdf/ee3 en.pdf.
- European Commission (2014), "CAP context indicators 2014-2020: Update December 2014", https://ec.europa.eu/agriculture/sites/agriculture/files/capindicators/context/2014/indicator-table en.pdf.
- European Commission (2008a), "Poverty and social exclusion in rural areas, country study: Poland", European Communities, Brussels, http://ec.europa.eu/social/BlobServl et?docId=2087&langId=en.
- European Commission (2008b), "Poverty and social exclusion in rural areas, final report, Annex I: Country studies Poland", European Communities, Brussels.
- European Environment Agency (2012), Corine Land Cover (CLC) 2012, Version 18.5.1 (database).
- Eurostat (2017),**Population** projections to 2080, Code: tps00002, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps 00002&plugin=1.
- Eurostat (2016a), Farm Structure Database, http://ec.europa.eu/eurostat/web/agriculture/ data/database.

- Eurostat (2016b), Eurostat regional yearbook, population projections, http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics-on-regional-population-projections#Projected change-s-in-regional-populations.
- Fałkowski, J., M. Jakubowski and P. Strawiński (2014), "Returns from income strategies in rural Poland", *Economics of Transition*, Vol. 22/1, pp. 139-178, http://dx.doi.org/10.1111/ecot.12032.
- FDPA (2016), "Polska wieś 2016, Raport o stanie wsi" ["Polish village 2016, Report on the condition of the villages"], Foundation for the Development of Polish Agriculture, www.fdpa.org.pl/polska-wies-2016-raport-o-stanie-wsi-informacja-prasowa.
- Feltynowski, M. et al. (2015), "Some problems of local development: The example of former state agricultural farms in Poland", *Research for Rural Development*, Vol. 2, pp. 237-243.
- Fihel, A. and P. Kaczmarczyk (2013), "Migracja a polski rynek pracy", [w:] Rynek pracy wobec zmian demograficznych, pod red. M. Kiełkowskiej, Instytut obywatelski, ["Migration and the Polish labor market", in: Kiełkowska, M., *Labor Market Towards Demographic Change*, Citizens' Institute], Warsaw.
- Gąsiorowskia, J. and E. Bieleckab (2014), "Land fragmentation analysis using morphometric parameters", *The 9th International Conference "Environmental Engineering"*, Selected papers, http://dx.doi.org/10.3846/enviro.2014.205.
- Government of Poland (2017), Strategy for Responsible Development, Warsaw.
- Jalowiecki, B. and M.S. Szczepanski (2007), "Heritage of the Polish regions", in: Kojder, A. (ed.), *Jedna Polska? Dawne i nowezró"nicowania spoΠeczne [One Poland? Old and New Social Differentiation*], Wydawnictwo WAM, Kraków, Poland.
- Jaska, E. (2015), "Dostępność i wykorzystanie technologii informacyjnokomunikacyjnych na obszarach wiejskich", Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu, ["Accessibility and use of information and communication technologies in rural areas", Scientific Journals of the Association of Agricultural and Agribusiness Economists], Vol. XVII/44.
- Karwacki A. (2006), Błędne koło, Reprodukcja kultury podklasy społecznej, UAM, Toruń, Poland.
- Kiniorska, I. and J. Wronska-Kiczor (2011), "Changes in the population potential in rural areas of the Swietokrzyskie *voivodeship*", *Infrastruktura i Ekologia Terenów Wiejskich*, Vol. 11, pp. 49-59.
- Kowalewski, A. et al. (2013), "Raport o ekonomicznych stratach i społecznych kosztach niekontrolowanej suburbanizacji w Polsce", Fundacja Rozwoju Demokracji Lokalnej, IGiPZ PAN, Warsaw.
- Kowalski, J.K. (2013), Duże bezrobocie ukryte w rolnictwie, Gazeta Prawna 04 February 2013, http://serwisy.gazetaprawna.pl/praca-i-kariera/artykuly/677789,duze-bezrobocie-ukryte-w-rolnictwie.html.
- Łapiński, K., M. Peterlik and B. Wyżnikiewicz (2015), Szara strefa w polskiej gospodarce w 2015 roku, Instytut Badań nad Gospodarką Rynkową, Warsaw.

- Losby, J.L. et al. (2002), "Informal economy literature review", Institute for Social and Economic Development (ISED) Consulting and Research and the Aspen Institute, Newark, Delaware and Washington, DC,
 - www.kingslow-assoc.com/images/Informal Economy Lit Review.pdf.
- Michalska, S. (2009), "Rural poverty in Poland: Scale of the problem, reductional factors, groups of risk", in: Rosner, A. (ed.), Globalization and Rural Development: Chinese and Central European Perspectives. Instytut Rozwoju Wsi i Rolnictwa Polskiej Akademii Nauk, Warsaw and Instytut Rozwoju Wsi Chinese Academy of Social Sciences, Beijing.
- Mickiewicz, A. and B. Mickiewicz (2016), "Pozarolnicza działalność gospodarcza na obszarach wiejskich w Polsce", Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu ["Non-agricultural economic activity in rural areas in Poland", Academic Yearbook of the Association of Agricultural and Agribusiness Economists], Vol. 18/1.
- Milczarek, D. (2002), "Privatization as a process of institutional change", The Case of State Farms in Poland, Shaker Verlag, Aachen, Germany.
- Mroz, B. (2010), "Migration into the shadow: Unregistered work in Poland", mimeo, Warsaw School of Economics.
- OECD (2017), "International migration database", OECD International Migration Statistics (database), http://dx.doi.org/10.1787/data-00342-en (accessed 9 August 2017).
- OECD (2016a), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2016-en.
- OECD (2016b), "Elderly population by region", in: OECD Factbook 2015-2016: Economic, Environmental and Social Statistics, OECD Publishing, Paris, http://dx.doi.org/10.1787/factbook-2015-4-en.
- OECD (2016c), Governance of Land Use in Poland: The Case of Lodz, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260597-en.
- OECD (2016d), Low-Performing Students: Why They Fall Behind and How to Help Them Succeed, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264250246-en.
- OECD (2016e), OECD Economic Surveys: Poland 2016, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco surveys-pol-2016-en.
- OECD (2016f), OECD Regional Outlook 2016: Productive Regions for Inclusive Societies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260245-en.
- OECD (2016g), OECD Regions at a Glance 2016, OECD Publishing, Paris, http://dx.doi.org/10.1787/reg glance-2016-en.
- OECD (2016h), "Patents by regions (Edition 2016)", OECD Patent Statistics (database), http://dx.doi.org/10.1787/0c24fb8f-en.
- OECD (2016i), Policy Priorities for Making Poland a More Inclusive and Knowledge-Based Economy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264267886-en.
- OECD (2016j), "Regional demography", OECD Regional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

- OECD (2016k), "Regional economy", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/a8f15243-en.
- OECD (2016l), "Regional innovation", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/d8c3473a-en.
- OECD (2015), "PISA 2015 key findings for Poland", webpage, www.oecd.org/poland/pisa-2015-poland.htm (accessed 22 May 2017).
- OECD (2014), *OECD Economic Surveys: Poland 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-pol-2014-en.
- OECD (2013a), *OECD Regions at a Glance 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/888932913665.
- OECD (2013b), "Survey of Adult Skills: Poland country profile", webpage, http://gpseducation.oecd.org/CountryProfile?primaryCountry=POL&treshold=10&topic=AS (accessed 22 May 2017).
- OECD (2012), *Promoting Growth in All Regions*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174634-en.
- OECD (2008), "Declaring work or staying underground: Informal employment in seven OECD countries", in: *OECD Employment Outlook 2008*, OECD Publishing, Paris, http://dx.doi.org/10.1787/empl_outlook-2008-4-en.
- Okólski, M. and I. Topińska (2012), "Social impact of outmigration and rural-urban migration in Central and Eastern Europe, final country report, Poland".
- Rosner A. and M. Stanny (2014), "Monitoring rozwoju obszarów wiejskich. Etap I" ["Monitoring of the development of rural areas. Stage I"], European Fund for the Development of Polish Villages, Institute of Rural and Agricultural Development of the Polish Academy of Sciences, Warsaw.
- Schneider, F. and C.C. Williams (2013), *The Shadow Economy*, The Institute of Economic Affairs, London, https://iea.org.uk/wp-content/uploads/2016/07/IEA%20Shadow%20Economy%20web%20rev%207.6.13.pdf.
- Schneider, F., A. Bühn and C.E. Montenegro (2010), "New estimates for the shadow economies all over the world", *International Economic Journal*, Vol. 24/4, pp. 443-461, https://doi.org/10.1080/10168737.2010.525974.
- Stanny, M. (2013), "Przestrzenna zróżnicowanie rozwoju obszarów wiejskich w Polsce" ["Spatial disparities in the development of rural areas in Poland"], Institute of Rural and Agricultural Development of the Polish Academy of Sciences, Warsaw.
- Swinnen, J.F.M. and S. Rozelle (2006), From Marx and Mao to the Market: The Economics and Politics of Agricultural Transition, Oxford University Press.
- Szafraniec, K. and P. Szymborski (2016), "Transition from education to employment: A specific character of rural youth of the selected post-communist countries", *Wieś i Rolnictwo*, Vol. 4/173, pp. 101-121.
- Tarkowska, E. (2006), "The young generation of former state farms: Inheriting or overcoming poverty?", *Special Issue of the Polish Journal on Social Policy: From Poverty to Social Exclusion*, pp. 20-23, www.ipiss.com.pl/wp-content/uploads/downloads/2013/04/ps en 2006.pdf#page=20.

- Tarkowska E. and K. Korzeniewska (2002), Młodzież z byłych PGR ów. Raport z badań, ISP, Warsaw.
- Tocco, B., A. Bailey and S. Davidova (2013), "Determinants to leave agriculture and change occupational sector: Evidence from an enlarged EU", Factor Markets Working Paper, No. 46(2013), https://www.ceps.eu/system/files/FM%20WP46%20Determinan ts%20to%20Leave%20Agriculture.pdf.
- Walewski, M. (2011), "An attempt to measure the trends in shadow employment in Poland", World Bank Policy Research Paper, No. 5910.
- Wasielewski, K. (2013), Młodzież wiejska na uniwersytecie droga na studia, mechanizmy alokacji, postawy wobec kształcenia, Wydawnictwo Naukowe UMK, Toruń, Poland.
- Wieruszewska, M. (ed.) (2007), Tu i tam. Migracje z polskich wsi za granicę (Here and There: International Migrations from Polish Villages), Instytut Rozwoju Wsi i Rolnictwa Polskiej Akademii Nauk (IRWiR PAN), Warsaw,
- Wiest, K. (2016), Women and Migration in Rural Europe: Labour Markets, Representations and Policies, New Geographies of Europe, Palgrave Macmillan.
- Wilczyński, R. (2016), "Sytuacja rozwojowa wsi w województwie opolskim w warunkach depopulacji", Studia Obszarów Wiejskich, Vol. 41, pp. 209-227.
- Witkowski, J. (2004), "Measurement of rural labour force in Poland", Central Statistical Office of Poland, https://www.nass.usda.gov/mexsai/Papers/mexsaipoland.pdf.
- Woessmann, L. (2003), "Schooling resources, educational institutions and student performance: The international evidence", Oxford Bulletin of Economics and Statistics, Vol. 65/2, pp. 117-170, http://dx.doi.org/10.1111/1468-0084.00045.
- Zawalińska, K. (2012), "Rozwój obszarów wiejskich w warunkach zmieniającej sie koniunktury gospodarczej" ("Rural development in the times of economic fluctuations"), Roczniki Naukowe, Vol. 24/1, Warszawa-Poznań-Białystok, Poland.
- Żmija, D. (2015), "Economic poverty in rural areas of Poland", Acta Sci. pol. Oeconomia, Vol. 14/3, pp. 167-175.

Annex 1.A1. Additional tables and figures

Table 1.A1.1. **GDP per worker, growth and ratio with national average by converging TL3** region, Poland

PPP constant USD 2010

TL3 region	GDP pe	r worker	GDP per worker growth		vorker ratio al average	Convergence	Employment growth
•	2000	2014	2000-14	2000	2014	2000-14	2000-14
Leszczyński	29 635	57 849	4.89%	84.03	108.47	24.43	-0.57%
Kaliski	28 713	55 636	4.84%	81.42	104.32	22.90	-0.50%
Nowosądecki	22 960	44 436	4.83%	65.11	83.32	18.21	-1.08%
Świecki	29 916	53 673	4.26%	84.83	100.64	15.81	-0.91%
Tarnowski	25 902	46 972	4.34%	73.45	88.07	14.62	-0.86%
Nowotarski	23 016	42 427	4.47%	65.27	79.55	14.29	-1.15%
Inowrocławski	26 910	47 929	4.21%	76.31	89.87	13.56	-1.30%
Włocławski	26 040	46 242	4.19%	73.84	86.70	12.86	-1.43%
Koniński	32 389	55 705	3.95%	91.84	104.45	12.60	-0.56%
Grudziądzki	25 329	44 680	4.14%	71.82	83.78	11.95	-0.81%
Rzeszowski	29 308	49 932	3.88%	83.11	93.62	10.52	0.75%
Piotrkowski	27 177	45 988	3.83%	77.06	86.23	9.16	0.41%
Szczecinecko- pyrzycki	32 137	53 137	3.66%	91.13	99.63	8.50	-1.36%
Pilski	34 715	56 950	3.60%	98.44	106.78	8.34	-0.71%
Płocki	55 715	88 319	3.35%	157.99	165.60	7.61	1.65%
Łomżyński	23 239	39 167	3.80%	65.90	73.44	7.54	-0.31%
Tarnobrzeski	29 589	47 189	3.39%	83.90	88.48	4.58	0.12%
Chełmsko-Zamojski	20 299	31 719	3.24%	57.56	59.47	1.91	-0.94%
Bialski	21 937	33 990	3.18%	62.21	63.73	1.53	-0.07%
Suwalski	25 551	39 339	3.13%	72.45	73.76	1.31	0.02%

Source: Calculations based on OECD (2016), "Regional economy", OECD Regional Statistics (database), http://dx.doi.org/10.1787/6b288ab8-en.

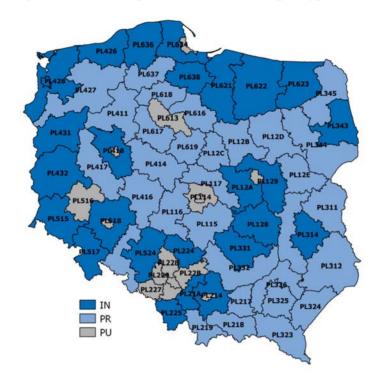


Figure 1.A1.1. TL3 region codes and OECD region type, Poland

Note: IN: intermediate, PR: predominantly rural; PU: predominantly urban.

Reference

OECD (2016), "Regional economy", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/6b288ab8-en.

Annex 1.A2. Defining rural Poland

The definition of rural areas is difficult, but has key policy implications

How rural areas are thought about and defined has important policy implications. The geographical lens through which policy issues are bound in turn impacts how they are acted upon and the types of policy interventions that are proposed. Defining rural areas is arguably more complex than defining urban ones. While urban agglomerations share a number of features that makes them intrinsically alike, characteristics and functions of rural areas can range widely. For this reason, rural areas are often oversimplified as all those areas that lay outside of an urban agglomeration. Such an approach fails to describe rural areas *per se*, and does not take into account the specificities of rural areas.

There is no one best way to define rural areas, as there are several approaches with various benefits and drawbacks. In Poland, rural areas are defined on the basis of the municipal administrative division by the National Official Register of Territorial Division of the Country (TERYT). The classification builds on the individuation of three types of *gminas*: urban (*miasto*), rural (*wieś*) and mixed. According to the subdivision, rural areas are defined as rural *gminas* and the rural parts of mixed *gminas*, and urban areas are defined as urban *gminas* and the urban part of mixed *gminas*. As of 2015, 63% of *gminas* in Poland are classified as rural, 25% mixed and 12% urban. Therefore, according to the official classification, 40% of the national population lives in rural areas and 93% of the national land is rural.

Table 1.A2.1. Number of gminas in Poland by typology as of 31 December 2015, by voivodeship

Region	Rural gminas	Urban-rural gminas	Urban gminas	Total
Łódzkie	133	26	18	177
Mazowieckie	228	51	35	314
Małopolskie	121	47	14	182
Śląskie	96	22	49	167
Lubelskie	170	23	20	213
Podkarpackie	109	35	16	160
Podlaskie	78	27	13	118
Świętokrzyskie	70	27	5	102
Lubuskie	40	33	9	82
Wielkopolskie	115	92	19	226
Zachodniopomorskie	49	54	11	114
Dolnośląskie	78	55	36	169
Opolskie	36	32	3	71
Kujawsko-Pomorskie	92	35	17	144
Pomorskie	81	19	23	123
Warmińsko-Mazurskie	67	33	16	116
Poland	1 563	611	304	2 478

Source: Central Statistical Office of Poland (2015), http://stat.gov.pl.

The TERYT classification of rural areas is used for official statistics and therefore is applied in most academic research and policy analysis on rural development. However, the TERYT classification has a number of limitations:

- 1. The territory is either classified as rural or urban. Dichotomous classifications of the territory fail to describe the complexity of the rural-urban continuum.
- 2. The classification is primarily focused on defining "urban", leaving the definition of "rural" to the residual territories. The category of rural areas includes both peri-urban regions and peripheral rural regions, although they share very few characteristics.
- 3. The typology relies on qualitative criteria. Urban status is conferred to gminas through political and administrative procedures, regardless of quantitative or objective characteristics of the gminas.
- 4. There is no differentiation among different types of rural. Rural regions that have significant linkages with their closest urban centre are not distinguished from rural regions that are remotely located.
- 5. The "mixed gmina" classification creates limitations and distortions for policy analysis and research. Rural parts of mixed gminas are incorporated into the definition of rural areas. However, certain variables, such as municipal revenue and expenditure as well as the allocation of EU funds, cannot be broken down to this lower territorial level. The approach can bias some analyses. For example, the average accessibility of rural dwellers to public services is overestimated because services are often located in the urban part of mixed *gminas*.

Policy definitions have also been created in order to fit the scope of rural policy design. A tailored definition of rural areas was created for the implementation of the Rural Development Programme 2014-2020 and the Strategy for Sustainable Development of Rural Areas, Agriculture and Fisheries for 2012-20. The main aim of the definition was to provide support to small urban localities (less than 5 000 inhabitants) that execute functions to those of rural localities. This definition has some shortcomings: accessibility to services are not considered; the definition is based only on population thresholds; and localities' boundaries are defined on administrative regions rather than functional reasons (Box 1.2A.1).

The application of different regional taxonomies can produce greatly different outcomes

Contrasting the ways in which the TERYT and the OECD classifications categorise the share of population living in rural areas highlights the implications of different approaches. According to the TERYT classification, the share of people living in rural areas is the largest in Podkarpackie (59%), the smallest in Ślaskie (23%) and decreases very gradually in between. This gradual decrease is even more evident in terms of the share of rural land: apart from Ślaskie, which appears highly urbanised, the other 15 Polish regions register a rural land share between 89% and 98%. In contrast, the OECD classification individuates a more diverse picture (see Box 1.A2.2 for a description of the extended typology). Six voivodeships completely lack rural regions, and four include exclusively intermediate TL3 regions (Pomorskie, Warmińsko-Mazurskie, Opolskie and Lubuskie). Five voivodeships include both rural and urban TL3 regions, and five voivodeships include only rural/intermediate TL3 regions. The OECD typology reveals a much more polarised distribution of population and land than the TERYT typology.

Box 1.2A.1. The origins of Poland's administrative typology of gminas

The current categorisation encompassing urban, rural-urban (semi-urban) and rural *gminas* was introduced in 1991/92 ("administrative restructuring") at the initial stage of system transition in Poland. During the socialist era, there were only two such administrative categories: towns/cities and other *gminas* (*gminas*). However, in many cases, the seat of local authorities was located in a nearby town. Consequently, since 1991/92, in a large number of such cases, the seat of local authorities has remained in a town, while the adjacent municipality (*gmina*) has been incorporated as a rural part of the rural-urban municipality. In other cases, a town and adjacent municipality have constituted two separate administrative units with their own local authorities. The justification for why some were considered as one municipality while others were considered as two separate units is not evident.

Since 1989, almost 100 *gminas* have changed their status to "urban". Since 2004, 18 applications have been refused for various reasons – e.g. low population density, limited political support, insufficient number of important public institutions and a low level of technical infrastructure. Among the 99 new towns that were established between 1989 and 2017, 77 are historical towns that have in fact been regranted urban status lost in previous centuries. Post-1989, only one town has lost urban status: the municipality of Wesoła, which was incorporated into the city of Warsaw in 2002.

Urban status is granted or regranted (after having lost urban privileges in the past) to a settlement only when several criteria/conditions are met. The criteria conferring urban status are as follows:

- In terms of **spatial planning** an applicant-settlement must: be in a possession of suitable technical infrastructure (entire settlement must be supplied with gas network, water and wastewater disposal systems, as well as central heating system, then additionally it must have its own sewage plant and the whole settlement must be supplied with a system of selective/separate collection of waste); be covered by a local spatial development plan (including the prospect of the town's future developments) approved by the local authority; must display specific urban (spatio-functional) attributes and characteristics (urban/town arrangement with distinct market square, dense dwelling arrangements of an urban character, asphalt surface of the streets, storm water drainage, sidewalks, street lighting, etc.); have a distinct centre (central area); not contain any farmsteads or farm buildings in densely built-up areas; not display any non-urban characteristics, such as dispersed buildings, agricultural land, etc.
- In historical and administrative terms, an applicant-settlement must: hold urban status in the past or constitute an important administrative centre (here, it is not a strict requirement but rather an advantage when applying for urban status); be in possession of a sufficient number of public institutions that play an important "supra-local" role and contribute to basic urban functions (referring to economic base theory); be a seat of the municipality.
- In **demographic and functional** terms, an applicant-settlement must: contain a sufficient number of inhabitants (the threshold is 2 000, in practice this condition is often not fulfilled/not regarded strictly); at least two-thirds of the working population must be employed in non-agricultural industries.
- In **political** terms: the idea of applying for urban status must be supported by local residents (i.e. the support of the majority of residents of a prospective town and of the surrounding rural area manifested in initial/pilot consultations); a positive opinion/decision issued by governor of a province/voivodeship.

Box 1.2A.1. The origins of Poland's administrative typology of gminas (continued)

In general, despite the bureaucracy that is very strongly felt in the whole procedure, the above-mentioned criteria are respected more and more loosely.

Rationale behind being granted an urban status

Urban status can be considered as prestigious and can allow gminas to apply for specific funding schemes dedicated strictly to towns/cities, e.g. so-called "Jessica" fund for revitalisation of old centre streets and dwellings. In some cases (especially in suburban areas of large cities), rural gminas apply for urban status as a safeguard against incorporation by an adjacent city they protect their autonomy. It is deemed that such status confers more powerful mediating/negotiating autonomy. At the same time, in most cases (new towns) changing administrative status still keeps the opportunity to apply for funding dedicated to rural areas since new towns do not exceed 5 000 inhabitants (a threshold for towns to be considered as a rural area). Thus, this is a way that allows new towns to extend the spectrum of possibilities for development (combining "urban" and "rural" funding schemes).

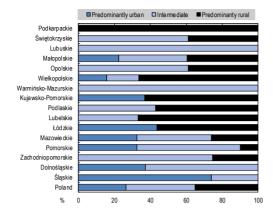
Many settlements in Poland fully meet the above-mentioned criteria for urban status; however, local self-government and/or local people are not interested in applying for urban status, hence those gminas have remained "deliberately" rural ones. Some local decision makers point out significantly lower education subsidies from the central budget for urban than for rural gminas. Some others say that they will be applying for urban status in the future when the municipality is fully covered by technical infrastructure and facilities (build-up by making use of current rural funding schemes) at the earliest. At the same time, as a result, there is a new tendency for urban gminas to apply for semi-urban status (six cases over the past nine years) due to a willingness to take advantage of different funding schemes dedicated to rural areas and combine it with "urban schemes". It is sometimes technically possible since even though there is an urban municipality/town there are still "pure" rural areas and also separate little settlements within its boundaries to be excluded as a rural part of the new rural-urban (semi-urban) municipality.

Source: Adam Czarnecki, Institute of Rural and Agricultural Development of Polish Academy of Sciences.

Additional sources: Dziennik Ustaw [Journal of Laws], No. 2 Pos. 9. Decree of Cabinet, 27 December 1990, on division of executive bodies for towns/cities and neighbouring gminas, as well as on boundaries, names and seats of gminas; Dziennik Ustaw [Journal of Laws], No. 3 Pos. 12. Decree of Cabinet, 28 December 1990, on merging of some towns/cities and gminas in which acted common executive bodies; Dziennik Ustaw [Journal of Laws], No. 87, Pos. 397, Decree of Cabinet, 26 September 1991, on division or merging of some towns/cities and gminas in which acted common executive bodies, as well as on modifications of the names and seats of those gminas.

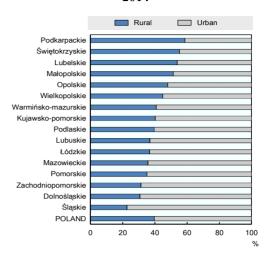
According to both the OECD and the TERYT regional classifications, the regions of Podlaskie and Łódzkie have a similar share of population living in rural areas. However, when applying the OECD regional typology, the rest of the population lives exclusively in urban regions in the case of Łódzkie, and exclusively in intermediate regions in the case of Podlaskie. The TERYT classification does not provide such differentiation. As such, one could be misled to believe that the two regions have a similar "degree of rurality", albeit Łódzkie contains the third-largest city in Poland (Łódź, approximately 700 000 inhabitants) and Podlaskie's largest city has less than 300 000 inhabitants.

Figure 1.A2.1. Share of population by region type, OECD regional typology, Poland, 2014



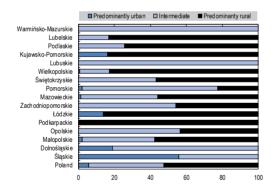
Source: OECD (2016b), "Regional demography", OECD Regional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

Figure 1.A2.2. Share of population in rural areas, TERYT regional typology, Poland, 2014



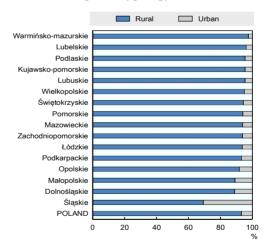
Source: Poland Official Statistics.

Figure 1.A2.3. Share of land in predominantly rural regions, OECD regional typology, Poland, 2014



Source: OECD (2016b), "Regional demography", OECD Regional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

Figure 1.A2.4. Share of land in rural areas, TERYT regional typology, Poland, 2014



Source: Poland Official Statistics.

Applying rural definitions for policy purposes

Rural definitions and typologies matter greatly in policy development and implementation because they bound geographies and the lenses through which issues are viewed and thus acted upon. OECD countries are drawing on increasingly complex and multifunctional territorial definitions in order to understand relationships and better target policies to place. Finland, Italy and Sweden offer but a few examples of how rural definitions can be adopted for different policy purposes which may have application in Poland and are discussed briefly below.

Table 1.A3.1. TL3 regions by type and voivodeship, Poland

Region code	OECD type	Extended	Name Polish	Name (English)	TL2 (voivodeship)
PL113	PU	PU	Miasto Łódź	Miasto Łódź	Łódzkie
PL114	PU	PU	Łódzkie	Lódzki	Łódzkie
PL115	PR	PRC	Piotrkowski	Piotrkowski	Łódzkie
PL116	PR	PRC	Sieradzki	Sieradzki	Łódzkie
PL117	PR	PRC	Skierniewicki	Skierniewicki	Łódzkie
PL127	PU	PU	Miasto Warszawa	Miasto Warszawa	Mazowieckie
PL128	IN	IN	Radomski	Radomski	Mazowieckie
PL129	IN	IN	Warszawski-Wschodni	Warszawski-Wschodni	Mazowieckie
PL12A	IN	IN	Warszawski-Zachodni	Warszawski-Zachodni	Mazowieckie
PL12B	PR	PRC	Ciechanowski	Ciechanowski	Mazowieckie
PL12C	PR	PRC	Płocki	Plocki	Mazowieckie
PL12D	PR	PRC	Ostrołęcki	Ostrolecki	Mazowieckie
PL12E	PR	PRC	Siedlecki	Siedlecki	Mazowieckie
PL213	PU	PU	Miasto Kraków	Miasto Kraków	Małopolskie
PL214	IN	IN	Krakowski	Krakowski	Małopolskie
PL217	PR	PRC	Tarnowski	Tarnowski	Małopolskie
PL218	PR	PRC	Nowosądecki	Nowosadecki	Małopolskie
PL219	PR	PRC	Nowotarski	Nowotarski	Małopolskie
PL21A	IN	IN	Oświęcimski	Oswiecimski	Małopolskie
PL224	IN	IN	Częstochowski	Czestochowski	Śląskie
PL225	IN	IN	Bielski	Bielski	Śląskie
PL227	PU	PU	Rybnicki	Rybnicki	Śląskie
PL228	PU	PU	Bytomski	Bytomski	Śląskie
PL229	PU	PU	Gliwicki	Gliwicki	Śląskie
PL22A	PU	PU	Katowicki	Katowicki	Śląskie
PL22B	PU	PU	Sosnowiecki	Sosnowiecki	Śląskie
PL22C	PU	PU	Tyski	Tyski	Śląskie
PL311	PR	PRR	Bialski	Bialski	Lubelskie
PL312	PR	PRC	Chełmsko-Zamojski	Chelmsko-Zamojski	Lubelskie
PL314	IN	IN	Lubelski	Lubelski	Lubelskie
PL315	PR	PRC	Puławski	Pulawski	Lubelskie
PL323	PR	PRC	Krośnieńsk	Krosnienski	Podkarpackie
PL324	PR	PRC	Przemyski	Przemyski	Podkarpackie
PL325	PR	PRC	Rzeszowski	Rzeszowski	Podkarpackie
PL326	PR	PRC	Tarnobrzeski	Tarnobrzeski	Podkarpackie
PL331	IN	IN	Kielecki	Kielecki	Świętokrzyskie
PL332	PR	PRC	Sandomiersko-	Sandomiersko-	Świętokrzyskie
1 2002	110	1110	Jędrzejowski	Jedrzejowski	OWIQIONI ZYONIO
PL343	IN	IN	Białostocki	Bialostocki	Podlaskie
PL344	PR	PRC	łomżyński	Lomzynski	Podlaskie
PL345	PR	PRC	Suwalski	Suwalski	Podlaskie
PL411	PR	PRC	Pilski	Pilski	Wielkopolskie
PL414	PR	PRC	Koniński	Koninski	Wielkopolskie
PL415	PU	PU	Miasto Poznań	Miasto Poznan	Wielkopolskie
PL416	PR	PRC	Kaliski	Kaliski	Wielkopolskie
PL417	PR	PRC	Leszczyński	Leszczynski	Wielkopolskie
PL418	IN	IN	Poznański	Poznanski	Wielkopolskie
PL424	IN	IN	Miasto Szczecin	Miasto Szczecin	Zachodniopomorskie
PL424 PL426	IN	IN	Koszaliński	Koszalinski	Zachodniopomorskie
PL420 PL427	PR	PRC	Szczecinecko-pyrzycki	Szczecinecko-pyrzycki	Zachodniopomorskie

Table A.3.1. TL3 regions by type and voivodeship, Poland (continued)

Region code	OECD type	Extended	Name Polish	Name (English)	TL2 (Voivodeship)
PL428	IN	IN	Szczeciński	Szczecinski	Zachodniopomorskie
PL431	IN	IN	Gorzowski	Gorzowski	Lubuskie
PL432	IN	IN	Zielonogórski	Zielonogórski	Lubuskie
PL514	PU	PU	Miasto Wrocław	Miasto Wroclaw	Dolnośląskie
PL515	IN	IN	Jeleniogórski	Jeleniogórski	Dolnośląskie
PL516	PU	PU	Legnicko-Glogowski	Legnicko-Glogowski	Dolnośląskie
PL517	IN	IN	Wałbrzyski	Walbrzyski	Dolnośląskie
PL518	IN	IN	Wrocławski	Wroclawski	Dolnośląskie
PL523	PR	PRC	Nyski	Nyski	Opolskie
PL524	IN	IN	Opolski	Opolski	Opolskie
PL613	PU	PU	Bydgosko-Toruński	Bydgosko-Torunski	Kujawsko-pomorskie
PL616	PR	PRC	Grudziądzki	Grudziadzki	Kujawsko-pomorskie
PL617	PR	PRC	Inowrocławski	Inowroclawski	Kujawsko-pomorskie
PL618	PR	PRC	świecki	Swiecki	Kujawsko-pomorskie
PL619	PR	PRC	Włocławski	Wloclawski	Kujawsko-pomorskie
PL621	IN	IN	Elbląski	Elblaski	Warmińsko- mazurskie
PL622	IN	IN	Olsztyński	Olsztynski	Warmińsko- mazurskie
PL623	IN	IN	Ełcki	Elcki	Warmińsko- mazurskie
PL633	PU	PU	Trójmiejski	Trojmiejski	Pomorskie
PL634	IN	IN	Gdańsk	Gdanski	Pomorskie
PL636	IN	IN	Słupski	Slupski	Pomorskie
PL637	PR	PRC	Chojnicki	Chojnicki	Pomorskie
PL638	IN	IN	Starogardzki	Starogardzki	Pomorskie

Note: PU: predominantly urban; PR: predominantly rual; IN: intermediate; PRC: predominantly rural close to a city.

Finland's spatial typology – Functional areas and growth zones

In some countries, revised rural definitions have been spurred by the reform of local governments. Finland is a case in point. It first introduced a rural typology in 1993 based on municipal boundaries. It identified three rural types: 1) rural areas close to urban areas: 2) rural heartland areas; and 3) sparsely populated rural areas. Starting in 2005, a restructuring of municipalities resulted in fewer and larger municipalities and an increasing degree of rurality within municipalities. Consequently, a new rural typology was needed in order to better capture these dynamics. Statistics based on administrative boundaries were found to be unsuitable for spatial analysis because they could not adequately represent regional differences. To this end, Finland launched a new definition in 2013 based on spatial data (250 m² grid cells). It analyses territories based on multiple variables which are organised into seven regional types: inner urban area, outer urban area, peri-urban area, local centres in rural areas, rural areas close to urban areas, rural heartland areas and sparsely populated rural areas. The framework employs a wide range of variables to capture the diversity of rural places including: population, employment, commuting patterns, construction rates, transport access and land-use data. Collectively these variables are used to construct indicators of economic activity, demographic change, accessibility, intensity of land use and other attributes for each region (OECD, 2016a).

Box 1.2A.2. The OECD's extended regional typology

The OECD regional typology was created in 1991 with the purpose of increasing regional data comparability across OECD countries. This typology classifies TL3 regions as predominantly urban (PU), intermediate (IN) and predominantly rural (PR) on the basis of population density and size. In more recent years, the OECD has developed an extended regional typology, which differentiates between rural regions close to a city and remote rural regions, depending on the driving distance to major regional centres. Since 2015, the OECD typology has been updated for EU countries following the grid-based classification proposed by Eurostat. According to the current OECD classification, rural regions across the OECD account for 35% of the national population and 53% of the national land.

The grid-based OECD typology starts with calculating population densities at the 1 km² grid-cell levels. Based on this information, it then identifies "urban clusters", which consist of contiguous grid cells of 1 km² with a density of at least 300 inhabitants per square kilometre and a minimum total population of 5 000. Two categories are identified based on the urban clusters: 1) high-density clusters or urban centres "consist of contiguous grid cells of 1 square kilometre with a density of at least 1 500 inhabitants per square kilometre and a minimum total population of 50 000"; and 2) rural grid cells are those cells falling under the established threshold (a density below 300 inhabitants per square kilometre) and any other cell not classified as an urban cluster is by definition a rural grid cell. Then, a TL3 region is classified as:

- predominantly urban (PU), if the share of population living in rural grid cells is below 20%
- intermediate (IN), if the share of population living in living in rural grid cells is between 20% and 50%
- predominantly rural (PR), if the share of population living in rural grid cells is higher than 50%.

An additional criterion is based on the size of the urban centres contained in the TL3 regions. A region previously classified as PR (IN), becomes IN (PU) if it contains an urban centre with at least 200 000 (500 000) inhabitants representing 25% of the regional population. These three categories are known as the OECD regional typology.

In the third step, the OECD regional typology is extended by considering the driving time of at least 50% of the regional population to the closest populated centre with more than 50 000 inhabitants. This only applies to the IN and PR categories, since by definition the PU regions include highly populated localities. The result is a typology containing five categories: predominantly urban (PU), intermediate close to a city (INC), intermediate remote (INR), predominantly rural close to a city (PRC) and predominantly rural remote (PRR).

Sources: http://ec.europa.eu/eurostat/statistics-explained/index.php/Urban-rural typology and Brezzi, M., L. Dijkstra and V. Ruiz (2011), "OECD extended regional typology: The economic performance of remote rural regions", http://dx.doi.org/10.1787/5kg6z83tw7f4-en.

These more detailed classifications have been useful for policy purposes and continue to be elaborated upon. For example, there is an ongoing project that looks at functional areas and growth zones, which is a synthesis of commuting and services areas (grocery, speciality shops and other). From this basis it is possible to analyse functional areas and where people are living their daily lives. Finland has also developed a classification of growth areas, which are corridors linked by transport connections. These classifications will aid rural and urban policy by showing where the national linkages are occurring and will help to determine which areas are successful and which face ongoing challenges that require targeted interventions.

Tailored definitions in Italy

Italy has adopted territorial classifications that recognise its polycentric character. A new policy for territorial cohesion, the "Inner Areas" policy, was first discussed in 2012 and received its first financial allocations in 2014. Within this policy framework, the national territory has been classified in six types of regions in order to allow policies to address specific regional issues. Rural areas, or "inner areas", are not individuated using demographic criteria such as population density or population size, but on the basis of accessibility to services. The territory of the country has been divided into service centres (single municipality or multi-municipality), belt areas and inner areas (intermediate, remote or ultra-remote) using a travel-time distance criterion.

The definition is tailored for rural policy making and focuses on accessibility to health, education and transport services. In particular, the following indicators have been chosen: accessibility to secondary schooling, a comprehensive health centre and a medium-sized train station. If the travel-time distance to a local centre offering these three key services is less than 20 minutes, the area is defined as a belt; if the travel time is between 20 and 40 minutes, the area is defined as an intermediate inner area; and if the travel time is between 40 and 75 minutes, the area is defined as a remote inner area; if the travel time is more than 75 minutes the area is defined as an ultra-remote inner area. In Italy, about 13.3 million people live in inner areas, and 46.1 million in service centres.

Sweden's grid-cell based typology

Different state agencies in Sweden introduced a number of rural definitions that draw distinctions between different types of rural regions, functionality and their accessibility to urban areas. For example, as far back a 1996 the National Rural Development Agency developed a classification of local units individuated by localities, which included an analysis of accessibility to workplaces and services. Following the incorporation of the National Rural Development Agency into the Swedish Agency for Growth Policy Analysis (Tillväxtanalys), the agency has developed its own territorial classification, largely adapted from the OECD taxonomy. The classification is based on population in grid cells of 1 km² to calculate the rural and non-rural population in a municipality and different threshold values in order to determine a municipality's classification.²

Rural Sweden is characterised by a dispersed population with settlements of various sizes and functional economic areas measured by labour market interactions provide a better way to capture this diversity. The Swedish Agency for Growth Policy Analysis' territorial classification better reflects the diversity of its rural landscape. However, this definition needs to be applied consistently across government to tailor and co-ordinate public policies in order to match the challenges and opportunities facing different rural places (OECD, 2017).

Notes

- 1. Established under the Regulation of the Council of Ministers of 15 December 1998 on the detailed principles of conducting, application and dissemination of the public register of the territorial division and related obligations of government administration bodies and local government units, Journal of Laws of 1998, No. 157, Item 1031.
- 2. The basic classification contains three types of gminas, which are determined by identifying: 1) gminas with less than 20% of their population in rural areas and a total population of at least 500 000 in adjacent gminas (predominantly urban); 2) other gminas with less than 50% of their population in rural areas (intermediate); 3) gminas with at least 50% of their population in rural areas (predominantly rural) (OECD, 2017).

References

Brezzi, M., L. Dijkstra and V. Ruiz (2011), "OECD extended regional typology: The economic performance of remote rural regions", OECD Regional Development Working Papers, No. 2011/06, OECD Publishing, Paris, http://dx.doi.org/10.1787/5kg 6z83tw7f4-en.

Central Statistical Office of Poland (2015), http://stat.gov.pl.

- OECD (2017), OECD Territorial Reviews: Sweden 2017: Monitoring Progress in Multi-level Governance and Rural Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268883-en.
- OECD (2016a), OECD Regional Outlook 2016: Productive Regions for Inclusive Societies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260245-en.
- OECD (2016b), "Regional demography", OECD Regional Statistics (database), http://dx.doi.org/10.1787/a8f15243-en.

Chapter 2. Towards an integrated rural policy for Poland

This chapter examines the structure and focus of Poland's national rural polices along with the development priorities and policy interventions of regions and local governments in rural areas and the role of the European Union in structuring supports. The chapter begins with an overview of national policies for rural development in Poland and how they have changed over time – from a sole focus on agriculture towards a greater focus on rural development more broadly. Following this, key areas of rural policy are discussed: agriculture; rural economic diversification; spatial, land-use and environmental policies; infrastructure; and public services. The chapter ends with a discussion of how the aforementioned set of policies could be better integrated for more effective rural development.

Rural Poland has undergone a considerable transformation in recent decades. Some rural regions in Poland have seen a doubling of their productivity, massive investment in infrastructure and improvement in socio-economic outcomes in a relatively short amount of time. And yet, collectively, rural regions have not been catching up over the past years in terms of average gross domestic product (GDP) per capita (see Chapter 1). GDP per capita in rural regions stood at 80% of the national average in 2014, below the OECD average of 90%. There remain considerable disparities between urban and rural areas and between rural areas within different parts of the country in terms of employment, economic growth and access to services (see Chapter 1). Further, despite support for agricultural modernisation and economic diversification, the transformation of rural areas has proceeded slowly in many cases.

Rural policies are important for Poland for a number of reasons. Rural residents account for a large share of the population (approximately 40%) and the well-being of rural residents is critical to the growth and prosperity of the country. Poverty is the highest in rural areas and the highest among agricultural households and as such, there is a clear need for rural policies to support economic diversification and employment in order to help raise rural dwellers' quality of life. Further, Poland has a polycentric settlement pattern with small and medium-sized cities dispersed throughout its territory. Stronger rural-urban linkages can result in better economic and social development outcomes and benefits for all participants. These serve as just a few examples that highlight the importance of rural policies for the country's development.

One of the most impactful events for rural development was integration with the European Union in 2004 and the role of Cohesion Policy and the Common Agricultural Policy in particular. While once focused almost entirely on agriculture, there is an increasingly multidimensional view of rural development that encompasses support for economic diversification. In equal measure, there has been a shift from a highly centralised top-down approach to policy making towards one where a broader array of actors are involved in elaborating and implementing policy, including community-based groups. Successive decentralisation reforms have been formative in promoting local community development; however, this process of decentralisation is by no means complete and moreover, silos between agricultural and rural development policies persist.

Rural policy in Poland today is shaped by a web of EU, national and regional policies across the agricultural, economic, environmental, social and cultural realms that create various incentives and disincentives for rural development. As will be discussed, more could be done to align these incentives and improve the effectiveness of rural policies based on local conditions and needs. At times, contradictory policies detract from overarching aims. Positively, the national development framework adopted in 2009 enhances co-ordination of policies across ministries, including the many sectoral policies which impact rural development. However, the nature of territorially based investments is not always evident under the new approach and silos remain between how rural development is conceived across agricultural and regional development portfolios. While much has been achieved, more needs to be done to use EU funds in a strategic way that is complemented by domestic policies and interventions.

This chapter examines the set of rural policy measures that are important for rural Poland across a number of policy areas. It begins with an overview of rural policies in Poland, including how they have evolved in recent decades and the types of actors at the national, regional and local/community scales. Following this, policies to support the ongoing structural change of agriculture are discussed, with an emphasis on the dual

nature of farming in Poland (i.e. big commercial farms coexisting with a large number of small, family farms) and its implications for public policy. Next, the programmes that support economic diversification are examined, followed by land use and environmental policies and programmes for rural infrastructure development. Finally, programmes for service delivery in rural areas are discussed. The chapter ends with a reflection on how the various policies examined can be better integrated across sectors and levels of government and be geared to the needs of rural residents and their communities.

Overview of policies for rural development in Poland

Rural policy in Poland has evolved over the past three decades, from an initial focus of rural areas as predominantly sites of agricultural production towards recognition of them as places with a diversity of economic, cultural and environmental functions. This multidimensional view of rural economies and hence, rural policy, is increasingly recognised across OECD countries (OECD, 2016f). There remain, however, markedly different approaches to rural policy across the OECD in terms of how these ideas are instrumentalised by national and regional governments. A general delineation can be made between narrow or broad rural policies (i.e. those that are targeted versus those that are overarching in nature).

- Broad rural policy refers to efforts to influence all actions that impact rural areas within and by the different administrative sectors as part of the development of rural society. This approach has been adopted in Britain since the 2000s, for example through the idea of "rural mainstreaming" (Shortall and Alston, 2016; OECD, 2011). It is also evident in Finland, in its cross-sectoral Rural Policy Committee.
- Narrow rural policies include all measures and instruments that are specifically targeted at rural development. As discussed in Chapter 1, the ways in which rural areas are defined is therefore particularly important for the design of such interventions.

There are merits and drawbacks to each approach – broad versus narrow. In aiming to integrate different sectoral policy interventions, broad rural policies may address geographies beyond just rural. Overarching approaches that combine, for example, agriculture, transport and energy policies can lose territorial focus and/or may have unintended impacts on rural dwellers. In contrast, the narrow rural policy approach can suffer from being less cross-sectoral or integrated in its interventions. The appropriateness of either approach depends in large part on the nature of rural territories (e.g. the socio-demographic characteristics of the population and the structure of local economies) and their access to goods, services and infrastructure. In places where a significant share of the rural population lives far from services and faces social and economic marginalisation, narrower rural policies are needed. Where rural populations live close to urban territories (and hence services) and have lower levels of social and economic marginalisation, broader rural policies may be more appropriate.

Poland, like most OECD countries, has a greater focus on narrow rural policies, such as the national rural development programme. However, these are complemented with broader policies such as the national and regional development strategies and in operational programmes, such as the programme targeting Poland's eastern regions which have lower economic growth, dispersed settlement patters and higher rates of poverty. Policies and institutions for rural development in Poland are heavily influenced by the common policies and community method of the European Union. It is important to recognise that there are also a host of policies that are often sectoral in nature that impact rural areas and that are not targeted to place, but that can have territorial consequences nonetheless. These include policies and funding for education, healthcare and social services which may have unique (and sometimes unintended) territorial consequences. A benefit of the broad rural policy approach is that it aims to create a mechanism to overcome this lack of a territorial lens within sectoral policies. The relationship between broad, narrow and sectoral policy types are depicted in Figure 2.1. While this review focuses on national rural policies (including regional policies with a rural dimension), sectoral policies are also discussed. The following section outlines the rural policy environment, including the institutions at various scales and the main policy actors.

Broad rural policies

Narrow rural policies

Supranational

Sectoral policies

(not spatially targeted)

Local

Figure 2.1. The rural policy mix

The evolution of rural policy in Poland – From agriculture towards agriculture/rural development

Historical legacies have shaped Poland's territory, leaving distinct geographic patterns of regional and rural development to this day. Between 1795 and 1918, Polish territory was divided among three European powers – Russia, Prussia and Austro-Hungary – and each territory was subject to different legal, economic and political systems. For example, the enfranchisement of peasants took place decades apart in these territories and the provision of schooling differed significantly and was adopted at different times. These types of historical differences have had lasting impacts on everything from the settlement patterns in these territories to the structure of agriculture and the socio-economic characteristics of the population. There were attempts for inter-regional integration during the interwar period (1918-39); however, these were short-lived (Hathaway and Hathaway, 1997). Post-World War II, the Polish border shifted west and efforts were made to integrate these new areas. In general, one can characterise the first half of the 20th century as one of shifting empires, borders and, in general, tumult.

During the communist period (1945-89) there was stability in state institutions and borders. Rural policies at this time focused on agricultural development. In some cases, formerly privately held farms were collectivised (i.e. state farms were established); in others, land was parcelled out into small farms. While efforts were made to reduce the gap in standards of living between rural and urban dwellers, by the mid-1950s it became clear that state farms were not producing the desired results and in response, mechanisms were introduced to influence private farms (e.g. regulating their size).² In the 1970s, agricultural price support policies were introduced in an effort to increase farm incomes

and public programmes for health services and pensions were expanded to individuals working on private farms. Therefore, while Poland did not have the same scale of farm collectivisation as seen in other communist states (e.g. the Czech Republic, the Slovak Republic and Ukraine), the agricultural sector was embedded within the socialist economy, which provided low but stable sources of income for farmers. Policies during this time restricted the opportunity for farmers to expand the size of their farms and farm inputs were under state control.

In 1989, the period of one party rule under the communist regime came to an end, and with it, the policies of state socialism that had structured the agricultural sector for so long. Alongside Poland's transition to a democratic political system came market deregulation and the privatisation of former state industries.³ This represented a major change in the market conditions for farming and for rural development more generally. Subsidies for agriculture were abandoned, credit policies for farms were tightened and farmers entered a market with competitive prices (including imports); however, the supply of farm inputs remained monopolised (Kowalski, 1993; 35), Unemployment in both rural and urban areas increased significantly during this initial period of transition, though less so than that experienced in most other Central and Eastern European countries during this time (Swinnen, Dries and Macours, 2005). The early 1990s was a transformative period and led to, among other things, a shift away from the extraction of raw materials and towards the production of processed goods for export (Gomułka, 2016). These structural changes significantly impacted rural dwellers and economic migration increased as people sought opportunities further afield.

The process of integration with the European Union in the 2000s brought major changes to rural policy, including new economic programmes, institutions and policy approaches. EU pre-accession financial support for Poland's agricultural sectors and rural areas began in 2002 (the Special Accession Programme for Agricultural and Rural Development, SAPARD). Upon accession to the EU, Polish agricultural producers gained access to a large European market and to European Commission funds for rural areas and agriculture. The EU's Common Agricultural Policy (CAP), structural funds and other instruments have supported a multidimensional view of rural development. The focus of rural policy thus shifted towards a wide range of policies that are important to rural life – education policy, infrastructure, entrepreneurship, environmental protection, etc. – alongside the traditional focus on agricultural modernisation (Tarkowska, 2008: 317).⁵ Since 2004 (Poland's first year as an EU member state), there has been a multi-year plan for both agriculture and rural development. In the early years of the programme, funding was focused on the competitiveness of agriculture; over time, initiatives focused on rural development more broadly have increased. This is a positive development; however, as this chapter will discuss, more could be done to further integrate the two policy areas.

Accompanying this policy shift, the transition to a democratic parliamentary democracy in the late 1980s led to a series of decentralisation reforms. After 40 years of highly centralised government throughout the communist period, "the reconstruction of local government became one of the first and most important pillars of the 1989 political transformation in Poland" (Kulesza and Szescilo, 2012: 485). The first municipal local (gmina) elections took place in the 1990s. Further decentralisation occurred in 1998 when two additional levels of subnational government were created at the regional (voivodeship) and county/district (powiat) levels. In whole, the reforms consolidated the number of provinces or regions and created an intermediate tier of government between the national and local levels (Box 2.1). Decentralisation has increased the importance of voivodeships in the delivery of rural policy and gminas have become important actors in the delivery of services to rural citizens and in basic infrastructure provision. Local empowerment and decentralisation continue to be articulated as an important policy objective of the national government through its new Strategy for Responsible Development (this is discussed further in Chapter 3). While this is an articulated objective, its implementation is another matter and comes down to the regulatory role of the state and that of central state institutions.

Box 2.1. Subnational government in Poland

Poland has three tiers of subnational government: *voivodeships* (regions), *powiats* (counties) and *gminas* (communes or municipalities) (Table 2.1). The *voivodeships* are based on historical regions for the most part, of which there are 16 in total. All told there are 314 *powiats* (including 65 cities with *powiat* status) and 2 479 *gminas*. Major cities can hold the status of both *gmina* and *powiat*. Prior to this configuration (1975-98), the administrative structure included over three times the number of *vovoideships* and the *powiat* level did not exist.

Table 2.1. Polish subnational political and administrative structure

Governmental tier	Count	Political structure	Political executive
Regions (voivodeships)	16	Regional directly elected assembly (voivodeship sejmik) Regional representative of central government (voivode)	Marshal (marszałek), deputy marshals and board members elected among assembly's ranks or outside the assemby from the executive office (zarząd województwa)
County (powiats)	314 (including 66 cities with <i>powiat</i> status)	Directly elected council	County chairman (starosta), deputy county chairman and board members elected by county council form the county executive (zarząd powiatu)
Commune/municipalities (gminas)	2 478	Directly elected council	Directly elected mayor

Note: In large cities, the tiers of *powiat* and *gmina* are one in the same. There are three legal types of municipalities: 1) urban communes; 2) rural communes; 3) urban-rural communes.

Sources: OECD (2015b), OECD Environmental Performance Reviews: Poland 2015, http://dx.doi.org/10.1787/9789264227385-en, p.52; OECD (2016b), Governance of Land Use in Poland: The Case of Lodz, http://dx.doi.org/10.1787/9789264260597-en; OECD (2017e), "Subnational governments in OECD countries: Key data", https://www.oecd.org/cfe/regional-policy/Subnational-governments-in-OECD-Countries-Key-Data-2016.pdf; Mikuła, Ł. and M. Walaszek (2016), "The evolution of local public service provision in Poland".

The European Union: Funding frameworks, policies and priorities

Funding frameworks, policies and priorities set by the European Commission have a major influence on the structure of national policies in member states. Strategic priorities at the European level, such as the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth, set overarching policy agendas and allocate funding. These are translated into country-specific recommendations and target objectives. Within the EU policy framework there is scope for country members to determine their own complementary priority areas and as such, Poland's rural policies are a mix of both EU and national priorities (involving the co-financing and co-management of funds). The national government also pursues territorial and sectoral policies of its own for rural development.

There are six priorities for rural development policy that have been set by the EU under the current funding perspective (2014-20), and Poland has decided to work across all six areas. These are:

- 1. facilitating knowledge transfer and innovation in agriculture, forestry and rural areas
- 2. improving the competitiveness of all types of farming and increasing the viability of farms
- 3. improving food chain organisation and promoting risk management in agriculture
- preserving and enhancing ecosystems dependent on agriculture and forestry
- 5. supporting resource efficiency and the transition to a low-carbon and climateresilient economy in the sectors of agriculture, food and forestry
- 6. promoting social inclusion, poverty reduction and economic development in rural

This last priority is also identified as LEADER (from the French Liaison entre actions de développement de l'économie rurale, or Links between actions for the development of the rural economy) and community-led local development (CLLD). Member states can choose from a menu of 20 measures to serve the priorities they have identified in their rural development programmes (implemented through the European Agricultural Fund for Rural Development [EAFRD] and national funds).

European Union and policies and funding for agricultural and rural development

The EU's rural policy is formatively shaped by both the CAP and by Cohesion Policies, which aim to improve the economic well-being of regions in the EU and avoid regional disparities. Poland is one the greatest beneficiaries of the CAP and Cohesion Policy funds in the EU. The key objectives of the CAP are to increase agricultural productivity, provide a fair standard of living for farmers, stabilise markets and ensure food accessibility; these have heavily shaped markets, policies and interventions in member states. 10 Measures within the CAP include direct payments to support farmer's income, which in turn oblige them to respect a number of standards regarding food safety, environmental protection, animal welfare, and the maintenance of land in good environmental and agricultural condition in carrying out agricultural activities.¹¹

Since the mid-1990s the European Union has gradually been reducing its support to agriculture. New instruments, in particular payments that do not require production, have gained weight and price distortions have been significantly reduced (OECD, 2017b: 1). At the same time, more payments are submitted for environmental compliance. An overwhelming share of the CAP support to the agricultural sector goes to producers (more than 85%) (OECD, 2017b: 1). 12 Poland's average direct payment support per hectare is below the European average (EUR 212.46 versus EUR 241.87) and its percentage of direct payments per standard agricultural output is above the European average (14.06% versus 12.76%), which is indicative of decoupled nature of the CAP direct support since the 2003 reform (Tropea, 2016: 31). However, direct payments per labour force are much lower than the European average (at EUR 860 versus EUR 1901), which is indicative of Poland's large share of small farms (Tropea, 2016: 32).

The CAP's sectoral focus is complemented by a territorial perspective through the EAFRD – sometimes referred to as the "second pillar" of the CAP. The EAFRD provides supports for rural development more broadly. It was introduced during what is known as the "Agenda 2000" reform to promote sustainable rural development through growth and employment. However, even within the CAP's Pillar I, part of the payments can encompass a territorial dimension as well, e.g. through direct payments which go also to less favoured areas or through voluntary coupled support.

While both of the CAP's funds (the European Agricultural Guarantee Fund and the EAFRD) are clearly targeted to rural areas through support for farmers and rural development, there are also other EU funds that are important for rural development as well. The EAFRD is one of five funds within the European Structural and Investment (ESI) funds, which is the European Union's main investment policy tool. There are priority areas under each funding perspective of the ESI funds. These funding agreements take place in seven-year blocks, referred to as the multiannual financial framework. Poland is presently taking part in its second such programme. ¹⁵ In the 2014-20 programming period, 11 thematic objectives were established from which national governments could choose to direct support. Poland has chosen to support all 11 thematicobjectives (Figure 2.2). ¹⁶ Thematic objectives are translated into priorities that are specific to each of the ESI funds and that are set out in the fund-specific rules.

Research and innovation Employment and social inclusion Strengthening research, technological development and Promoting sustainable and quality employment and supporting labour Enhancing access to, and use and quality of, information mobility and communications technologies Promoting social inclusion, combating poverty and any discrimination Infrastructure Promoting sustainable transport and removing Firms bottlenecks in key network infrastructures Enhancing the competitiveness of small and **ESI funds** medium-sized enterprises, of the agricultural sector (for the EAFRD) and of the fishery in Poland and aquaculture sector (for the EMFF) Environment **Education and training** Supporting the shift towards a low-carbon Investing in education, training and economy in all sectors vocational training for skills and lifelong Promoting climate change adaptation, risk learning prevention and management Preserving and protecting the environment Governance and promoting resource efficiency Enhancing institutional capacity of public authorities and stakeholders and efficient public administration

Figure 2.2. European Structural and Investment funds, thematic areas, 2014-20

Source: Own elaboration based on European Union (2013), Regulation (EU) No. 1303/2013 of the European Parliament and of the Council of 17 December 2013, Official Journal of the European Union, http://eurlex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013R1303&from=EN.

Each of the above-listed thematic objectives includes interventions in rural areas. Partnership agreements stipulate that 6.7% of non-EAFRD allocations must be rural-specific. There are five ESI funds in total: the European Regional Development Fund (ERDF); the European Social Fund (ESF); the Cohesion Fund (CF); the European Maritime and Fisheries Fund (EMFF); and the aforementioned EAFRD (Table 2.2). In the 2014-20 funding perspective, Poland is also one of 19 member state beneficiaries of the Youth Employment Initiative (YEI). The separate funds within the ESI are co-financed between the EU and the national government, with the amount of co-

financing varying by funding type.¹⁷ For Poland, EUR 104.8 billion is expected to be invested through the ESI funds in the 2014-20 period through a combination of 24 national and regional programmes (the EU funding contribution is EUR 86 billion while the national contribution from Poland is EUR 18.8 billion) (European Commission, 2016c). This represents around 7% of all public expenditures for Poland.

Table 2.2. Components of the European Structural and Investment funds, Poland, 2014-20 programming period

ESI fund	Description	EU and national contributions, in millions	Total funding amount, millions	Percentage out of total ESI funds for 2014-20
European Regional Development Fund (ERDF)	Promotes balanced development in the different regions of the EU	EU: EUR 120 641.61 POL: EUR 21 877.24	EUR 142 518.85	45.5%
European Social Fund (ESF)	Supports employment-related projects throughout Europe and invests in Europe's human capital – its workers, its young people and all those seeking a job	EU: EUR 38 819.18 POL: EUR 6 832.06	EUR 45 651.24	14.6%
Cohesion Fund (CF)	Funds transport and environment projects in countries where the gross national income per inhabitant is less than 90% of the EU average	EU: EUR 69 623.97 POL: EUR 12 286.58	EUR 81 910.55	26.2%
European Maritime and Fisheries Fund (EMFF)	Helps fishermen to adopt sustainable fishing practices and coastal communities to diversify their economies, improving quality of life along European coasts	EU: EUR 531.22 POL: EUR 179.29	EUR 710.51	0.2%
European Agricultural Fund for Rural Development (EAFRD)	Focuses on resolving the particular challenges facing the EU's rural areas	EU: EUR 25 894.12 POL: EUR 14 743.96	EUR 40 638.08	13.0%
Youth Employment Initiative (YEI)	Supports young people not in employment, education or training in regions experiencing youth unemployment rates above 25%	EU: EUR 1 514.63 POL: EUR 133.64	EUR 1 648.27	0.5%

Note: The YEI is not traditionally thought of as one of the five core ESI funds; it is a special fund for the 2014-20 perspective and includes joint initiatives with the ESF.

Sources: European Commission (2017a), "The Youth Employment Initiative in Poland", http://ec.europa.eu/social/BlobServlet?docId= 13481&langId=en; European Commission (2014a), "Summary of the Partnership Agreement for Poland, 2014-2020", https://ec.europa.eu/info/sites/info/files/partnership-agreement-poland-summary-may2014 en.pdf; European Commission (2017b), "Total EU allocations of European Maritime and Fisheries Fund 2014-2020 (unit €, current prices)", https://ec.europa.eu/fisherie s/sites/fisheries/files/docs/body/overall-table-2014-2020.xls; European Commission (2017c), "European Maritime and Fisheries Fund Poland", https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/op-poland-fact-sheet_en.pdf; European Commission (2017d), ESIF Finance Implementation Details (database), https://cohesiondata.ec.europa.eu/dataset/ESIF-2014-2020-Finance-Implementation-Details/99is-gm52.

The EAFRD (which structures and co-funds Poland's rural development programme, RDP) comprises 13% out of the total ESI funding envelope between 2014-20. Of all the measures financed from the EAFRD, investments in physical assets is the largest in budgetary terms, followed by farm and business development, and payments for areas facing natural constraints. The vast majority of payments under this programme are directed to farmers, which reflects the division of labour with other ESI funds that address other rural development issues. The EMFF - with its focus on coastal communities and fisheries – also has a territorial focus on rural areas, though not exclusively, as these activities can include funding for projects for urban locales as well; it is a much smaller funding envelope (at 0.2% out of total). For some ESI funds, the national government manages funds, or devolves the responsibility of management to agencies to administer. Regions play a major role in the delivery of the largest ESI funds – the ERDF – which accounts for 45.5% of the total funding envelope. Each region in Poland has a regional development programme which sets its investment priorities for the 2014-20 period. These include funds that are targeted to rural areas. The ESF is a crucial fund to combat poverty, social exclusion or inequality in access to social infrastructure in rural areas. Other funds are targeted to either individuals who face some kind marginalisation – e.g. poverty or low labour market attachment – or to regions and territories that are underdeveloped in terms of access to services or infrastructure (e.g. the Operational Programme for Eastern Poland, see Box 2.2). ¹⁸ In both cases, investments in rural areas are important.

Box 2.2. The Strategy for Socio-economic Development of Eastern Poland until 2020

Poland's eastern *voivodeships* (Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie) have the lowest levels of economic development in the country and are among the poorest regions in the European Union. Place-based policies play an important role in targeting support to these areas. The most important initiative in this regard is the Strategy for Socio-Economic Development of Eastern Poland until 2020, which co-ordinates interventions in the eastern macro-region across three strategic areas: support for innovation, labour and human capital development, and infrastructure development. Together these measures aim to increase the level of innovation, activate labour market participation and improve the quality of human capital, and increase the accessibility of the region through investments in transportation and digital infrastructure. The programme for eastern Poland is co-financed by the European Regional Development Fund (ERDF) and is managed by the Ministry of Economic Development.

The first programming period (2007-13) focused on hastening the pace of social and economic development in eastern Poland pursuant to the sustainable development principles. EUR 2.7 billion was allocated from ERDF resources and national public funds. The programme supported investments to: stimulate the development of a competitive, knowledge-based economy; establish the transregional broadband network; develop selected metropolitan functions of *voivodeship* capitals; and improve the accessibility and quality of transport connections with eastern Poland *voivodeships*. The current programming period (2014-20) is focused on increasing labour productivity in all sectors of the economy in eastern Poland. Approximately EUR 2.3 billion has been allocated from the resources of the ERDF and national public funds. The operational programme aims to support the establishment of innovative small and medium-sized enterprises and enhancing the competitiveness of enterprises. It will also support investment to improve the transport accessibility of *voivodeship* capital cities and their functional areas.

Source: Ministry of Agriculture and Rural Development.

National policies for rural development

Poland's national development strategy signals policy complementarity between EU and national funds, with national funds being used to meet objectives where EU funds do not apply. In 2009, Poland adopted a new national management system in an effort to bring a cross-cutting approach to the organisation of development policy. Accordingly, Poland has developed long- and medium-term national development strategies and nine accompanying sub-strategies to guide the country's development. The medium-term strategy to the year 2020, elaborated by the Ministry of Economic Development, sets out the country's development objectives and identifies priority areas of action, including initiatives that can be funded by the 2014-20 EU perspective within the partnership

agreement. The intention is for the national development strategy to connect European objectives under the Europe 2020 Strategy with national objectives. In doing so, the strategy draws on both joint EU-national funding and stand-alone national funding for some objectives.

Poland's long-term goal for rural development – as stated in the Strategy for the Development of Rural Areas, Agriculture and Fisheries – is to improve the quality of life for rural residents and to efficiently use the resources and potential of rural areas, including that of agriculture and fisheries, for the sustainable development of the country. The five specific objectives corresponding to this long-term goal for sustainable rural development are:

- 1. improving the quality of human and social capital, employment and entrepreneurship in rural areas
- 2. improving living conditions in rural areas and their spatial accessibility
- 3. food security
- 4. increasing the productivity and competitiveness of the agri-food sector
- 5. environmental protection and adaptation to climate change in rural areas.

These priorities for rural development closely align to that of the EU-Poland Partnership Agreement supports for interventions in rural areas, with the exception that poverty reduction has not been until recently explicitly stated in Poland's national long term strategy.

The system of strategic documents for the development of rural areas is depicted in Figure 2.3. The "Strategy for the Sustainable Development of Rural Areas, Agriculture and Fisheries" is one of the nine integrated strategies for national development. Almost half (48%) of the strategy's budget is financed from EU funds (Ministry of Agriculture and Rural Development, 2012). This strategy, together with the EU-Poland Partnership Agreement and operational programmes at the state level in turn inform the Rural Development Programme (2014-2020) which determines how the EAFRD will be used (Ministry of Agriculture and Rural Development, 2017a).²¹

Another of the nine integrated development strategies is the "National Strategy for Regional Development 2010-2020: Regions, Cities, Rural Areas (NSRD)", which defines the main challenges, assumptions and objectives of the regional policy of the state as well as the principles and mechanisms of co-operation between the government and voivodeship self-governments. For example, the strategy describes the use of territorial contracts whereby voivodeship self-governments and the national government agree on development goals and investments. The adoption of the strategy in 2010 was formative in increasing the role and independence of regions in regional development. It sets as one of its strategic objectives eliminating inter-regional disparities, especially as pertains to rural areas with low accessibility, those that are losing their socio-economic functions (e.g. border areas with an underdeveloped road or rail network).

Poland's current rural development programme (RDP 2014-2020) is focused on instruments that support agriculture. The share of employment in agriculture was 11% in 2015 and in terms of value added, the agricultural sector contributed 2.41% in 2016, which is less than other countries in the region with smaller shares of employment such as the Czech Republic, Hungary and the Slovak Republic, reflecting higher shares of the large-scale post-collectivisation farm structure in these countries (see Chapter 1). Under the current EU funding period, there was political consensus that rural development would be supported by Cohesion Policy. To this end, at least EUR 5.2 billion (6.7% of all Cohesion Policy funds) has been earmarked for rural areas from current implemented Cohesion Policy funds. The partnership agreement defines the links between Cohesion Policy funds and the rural development fund. However, it remains to be seen how this commitment will be translated into aid supporting granting criteria that targets rural beneficiaries. See Box 2.3 for a description of how the policy priorities of Poland's rural development programme have evolved over time.

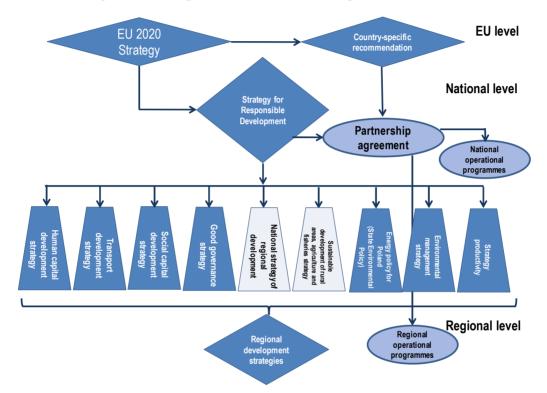


Figure 2.3. Strategic documents for the development of rural areas

Source: Ministry of Investment and Economic Development of Poland.

On 14 February 2017 a new medium-term national strategy was adopted: the Strategy for Responsible Development until 2020 with a Perspective to 2030. The adoption of the new strategy implies changes to Poland's development management system (including an update of nine integrated strategies). The new Strategy for Responsible Development defines a new model of development – a sovereign strategic vision, principles, objectives and priorities for the country's development in economic, social and spatial terms during the period up to the year 2020 and in the perspective up to the year 2030. Due to its role and assigned tasks, the strategy is an instrument to manage the main development processes in the country in a flexible way. The content and implications of the new national development strategy are discussed in Chapter 3.

Box 2.3. The evolution of Poland's rural development programme

Poland's rural policy has changed considerably since the country's accession to the EU in 2004. Following accession, Polish rural development policy was largely subordinated to the principles of the Common Agricultural Policy (CAP), and a new administrative structure built to implement it. Poland's first Rural Development Programme (2004-06) was mainly aimed at supporting farms, including measures designed to increase the competitiveness of agriculture. Between 2004 and 2006, expenditures on the competitiveness of agriculture amounted to 61% of all funds provided under EU programmes dedicated to rural areas and agriculture. The Ministry of Agriculture and Rural Development notes that this reflects the focus on supporting full compliance with EU requirements and the compensatory nature of the rural development programme (RDP) in the context of phasing-in of direct payments. In the following programing period (RDP 2007-13) this ratio decreased to 46%, and in the current period (RDP 2014-20) it is assumed to be approximately 54%. The second highest priority in the RDPs is environmental protection. The share of expenditures on this objective has remained quite stable between 2004-20 (30-32%). This stability is probably determined by the limited absorption capacity of these funds in Poland.

High volatility, on the other hand, may be observed in case of RDP measures aimed at improving the quality of life in rural areas, including investments in small-scale infrastructure. Between 2004 and 2020, their share has varied between 7% and 20%. This is in part due to changes in the philosophy of support for rural areas under the RDP with larger infrastructure investments and other measures dedicated to rural areas to be funded to a greater extent by other operational programmes under the Cohesion Policy. Traditionally, measures supporting the development of local communities under LEADER programme have not been significant. Currently they amount to 5% of the RDP budget, but their role in the subsequent budget periods is clearly increasing (Figure 2.4).

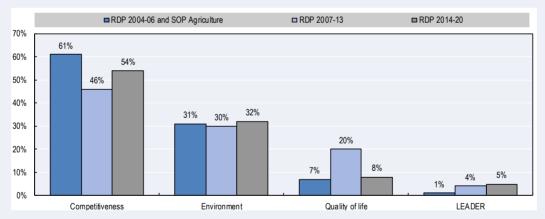
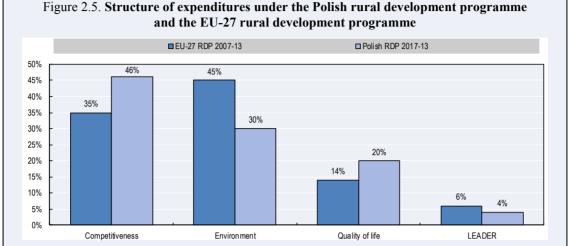


Figure 2.4. Structure of expenditures under the Polish rural development programmes in 2004-20 budget periods

Notes: The breakdown is based on axis classification for the 2004-13 programmes and on similar allocation of individual measures for the 2014-20 programme. Calculations based on the yearly reports by the Ministry of Agriculture and Rural Development.

Source: Institute for Rural and Agricultural Development of Polish Academy of Science.

Compared to other EU countries in the 2007-13 period, Poland has placed a greater emphasis on agriculture (46% of RDP expenditures in Poland vs. 35% in the EU-27) than the environment (30% in Poland vs. 45% in the EU-27). At the same time, expenditures aimed at improving quality of life in rural areas have a higher share in Poland (20% of the RDP budget in Poland vs. 14% in the EU-27). In 2007-13, the share of expenditures on the grassroots entrepreneurship programme LEADER was slightly lower in Poland (4% vs. 6% in the EU-27), but in the current perspective has increased.



Box 2.3. The evolution of Poland's rural development programme (continued)

Note: Calculations based on yearly reports by the Ministry of Agriculture and Rural Development and Zawalińska (2009).

Source: Institute for Rural and Agricultural Development of Polish Academy of Science.

In terms of the types of economic instruments used to support rural development, Zawalińska (2008) concludes that support in the form of investments (i.e. pro-efficiency measures) have been conducted in a similar proportion to income transfers and weakly targeted area payments (i.e. pro-equality measures). At the national level, the ratio of funds allocation between pro-efficiency and pro-equality measures was 42:58 in 2004-06 and 54:46 in 2007-13. Therefore, it can be said that there is a growing tendency towards pro-efficiency measures. However, at the regional (*voivodeship*) level this ratio has varied widely. On the one hand, there are regions that are very effective at acquiring investment funding. For example, regions where subsidies for infrastructure investments amounted to over 50% of the RDP funds included Kujawsko-Pomorskie (56%) and Wielkopolskie (52%). On the other hand, there are also regions where around 50% of the funds were absorbed in the form of direct transfers (e.g. Świętokrzyskie – 47%) or area payments that do not stimulate pro-efficiency behaviours (e.g. Zachodniopomorskie – 50%) (Zawalińska, 2008). The capacity to absorb different kinds of funds varies by region.

Sources: Institute for Rural Areas and Agriculture Development of Polish Academy of Science; additional sources from: Zawalińska, K. (2009), "Instrumenty i efekty wsparcia Unii Europejskiej dla regionalnego rozwoju obszarów wiejskich w Polsce" ("Instruments and effects of European Union support for regional rural development in Poland"); Zawalińska, K. (2008), "Ile jest spójności a ile efektywności w polityce rozwoju obszarów wiejskich w Polsce?" ("Cohesion and efficiency as two objectives of the rural development policy in Poland").

Other national policies impacting rural development

Beyond national policies that directly target rural areas or sectors, there are a myriad of policies that may not specifically target rural locales but that impact them nevertheless. For example:

 Social policies such as the "Family 500+" programme, which provides financial support for families with two or more children, can have a greater impact in rural areas where incomes are lower than in urban locales and the financial incentives that that programme creates are thus greater. The programme could help limit child poverty, but it may also lower female labour force participation, which in rural areas of Poland is already low, due to a lack of well-paid jobs (OECD, 2016c: 24). More generally, the structure of social welfare policies in Poland creates various disincentives to take up work, especially for second earners (Kurowska, Myck and Wrohlich, 2015).

- Labour market policies also have important consequences for rural areas. For example, labour force participation may decrease further due to the withdrawal of older workers from the labour force as a result of the lowering the statutory retirement age in late 2017. This policy may have a disproportionate impact on rural locales where there is a higher concentration of senior residents.
- Policies regarding the delivery of education and healthcare can impact access in rural areas depending on how they are configured, e.g. regulations about school size and facilities can lead to larger schools at greater distances in rural areas.
- Environmental policies, such as the protection of watersheds and forests, can disproportionality impact rural areas since they constitute the largest share of land in the country.
- Transport policies impact rural development by providing linkages to facilitate the movement of goods and people. This includes the network of national roads, railway lines, airports and harbour ports.

The national government's rural policies therefore in practice extend much beyond those that are labelled as "rural". A territorial lens on such overarching policies can help ensure that they are adequately tailored to place. Poland's National Spatial Development Concept 2030 offers guidance on how to co-ordinate and implement public policies that have a significant territorial impact; however, in practice, its co-ordinative ability is weak (OECD, 2016b). Some OECD countries have adopted "rural proofing" as a way to consider the impacts of public policies on rural residents and communities. However, there is a risk that such an approach is simply a form of "box checking" that does not meaningfully address these issues.

Regional development strategies

Regional self-governments (voivodeships) are responsible for regional economic development, public education including higher education, hospitals and preventative healthcare programmes (and other health programmes), and the labour market and infrastructure at the regional level.²² While regional governments have a relatively limited responsibility for providing public services (mainly higher education, transport, counteracting unemployment, family and cultural policies), their strategic role is important owing to the elaboration of regional development strategies and the management of EU funds which, inter alia, identify priorities and support investments and projects for rural development in their regions.

The creation of a regional tier of government and its accompanying responsibilities was spurred by the process of accession to the European Union. Initially, regional policy in Poland focused on developing the objectives and principles of EU Cohesion Policy and was nationally led. In 2010, a framework for regional development was set out in the National Strategy of Regional Development. It enhanced the role for regional policy and the importance of approaches to spatial development that are coherent across sectors and mutually reinforcing across scales.

Each *voivodeship* in Poland elaborates a development strategy, regional sectoral strategies (e.g. regional innovation strategy) and a regional operational programme (ROP) for each programming period of a seven-year duration. Regional development strategies present a diagnosis of key challenges and opportunities for the region and set medium-term development priorities. Their elaboration includes public engagement and consultation and the strategies themselves are meant to align with the regional spatial development plan, sectoral strategies and regional programmes such as the ROP. For example, the eastern *voivodeship* of Podlaskie has based its regional development strategy on its competitive strengths (Box 2.4).

Box 2.4. Podlaskie *voivodeship*'s regional development strategy: "Green, open, accessible and entrepreneurial"

Podlaskie faces several development challenges. The region overall has a lower level of development, more limited accessibility to both the rest of Poland and to its neighbours to the east, an aging population and lower skills levels than the national average, and low rates of entrepreneurship and limited economic diversification in rural areas at a time when employment in agriculture is declining. And yet, the region also has many assets and opportunities for development. Podlaskie *Voivodeship*'s Development Strategy 2020 articulates a vision for the future based on the region's competitive advantages.

The region seeks to develop opportunities associated with its many nature reserves (national parks and Natura 2000 protected areas) which are important for the diversification of rural economies. It aims to boost its entrepreneurship by focusing on its comparative strengths in such areas as agricultural production, "ecological and green" products and services, renewable energy sources, environmentally friendly technologies, ecotourism and the silver economy. The region further aims to increase its accessibility, including transport, tele/digital communications, and business services.

The development strategy recognises the importance of strengthened connections along its eastern neighbours including Belarus, Lithuania, the Russian Federation, Ukraine and other Baltic states. Co-operation with border countries has generally been limited as they are not in the EU. Until recently, the Russian Federation formed an important export market for many of the *voivodeship*'s products; however, the Russian embargo has limited this trade for particular commodities (e.g. apples) and new markets have been sought in response. Notwithstanding some of the barriers, the eastern market on Podlaskie's doorstep has been an underutilised asset in some respects.

Source: Podlaskie voivodeship development strategy 2020, https://strategia.wrotapodlasia.pl/resource/file/download-file/id.459.

Regional operational programmes

The ROPs are co-financed with EU funds (the ESF and the ERDF), which determines its investment priorities for regional policy, including investments in rural areas. Since 2007, regions have been fully responsible for a large share of European funds under Cohesion Policy. Under Cohesion Policy, all regions in Poland are defined as "less developed" – meaning that their GDP per capita is less than 75% of the average GDP of the EU-27 – with the exception of Mazowieckie *voivodeship*, which recently transitioned to being a "more developed" region and includes Warsaw. Less-developed regions are allocated a larger funding envelope. In the 2014-20 programming period, the regions with the largest per capita funding allocations are Zachodniopomorskie, Świętokrzyskie, Lubelskie and Podlaskie respectively.

Each ROP is based on an assessment and diagnoses of the key challenges facing the region and a determination of the relative priorities for development. Among all ROPs, social inclusion is the largest priority in terms of funds allocated, followed by the transition to a low-carbon economy and network infrastructure in transport and energy, while climate change, technical assistance, and information and communications technologies receive the smallest funding envelopes (Figure 2.6).

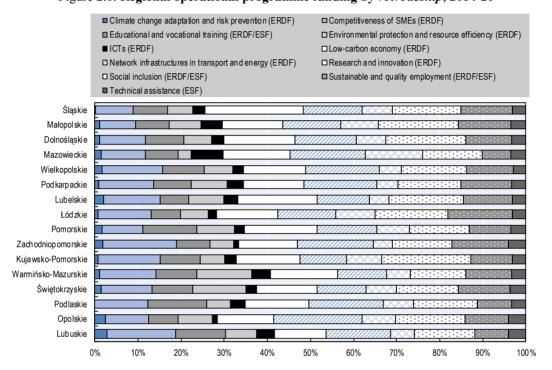


Figure 2.6. Regional operational programme funding by voivodeship, 2014-20

(2017d), European Commission "European Structural and Investment **Funds** data" https://cohesiondata.ec.europa.eu.

The ROPs determine strategic investments and mobilise local actors – local governments and other public sector entities and the private and non-profit sectors – by providing them with access to funding/co-financing for a wide range of activities. These programmes are therefore a major impetus for endogenous development and in large measure rely on the engagement of public and private actors to mobilise activities and investments. For example, the ROPs offer support to firms to conduct research and development activities, funding to local governments for public infrastructure and roads, and revitalisation and programmes for job seekers. How funds are directed to rural areas is not always clear in the ROPs. Some ROP funds are targeted to rural areas - e.g. rural renewal under Małopolskie's 2014-2020 ROP. But in other cases, territorial targets are not specified.

Poland's Development Monitoring system (STRATEG) provides a host of indicators to monitor socio-economic development linked to the ROPs. However, the rural territorial impact of these indicators is not reported. It is difficult to disaggregate their place-based effects. Information on the estimated percentage of the allocation dedicated to rural areas is included in each of the Specific Description of Priority Axes of each ROP. These amounts show the potential source of funding dedicated to rural areas within specific themes (Table 2.3). Each managing authority tries to allocate these amounts for this aim;

however, there is no guarantee that exactly the same amounts will be spent as this is not a subject of targets or indicators required by the European Commission. The national government has no compliance mechanism by which to ensure that these amounts are met. There are plans to introduce a monitoring tool for this process at the end of 2018.

Table 2.3. Estimated percentage of regional operational programme allocation dedicated to rural areas

Regional operational programme	Estimated % of the allocation of ROP dedicated to rural areas	Amount (million EUR)
Dolnośląskie Voivodeship	min 15%	397
Kujawsko-Pomorskie Voivodeship	32%	637
Lubelskie Voivodeship	50%	1 115
Lubuskie Voivodeship	10%	90
Łódzkie Voivodeship	11.1%	250
Małopolskie Voivodeship	26.8%	746.7
Mazowieckie Voivodeship	11%	228.8
Opolskie Voivodeship	40%	360
Podkarpackie Voivodeship	11%	232.6
Podlaskie Voivodeship	19%	230
Pomorskie Voivodeship	30%	557.8
Śląskie <i>Voivodeship</i>	13%	454
Świętokrzyskie Voivodeship	23.7%	314.4
Warmińsko-Mazurskie Voivodeship	11%	189.2
Wielkopolskie Voivodeship	27%	661.5
Zachodniopomorskie Voivodeship	11%	176
Total	6 580	

Source: Elaboration by the Ministry of Investment and Economic Development of Poland.

Local development

Local government – The role of powiats and gminas in rural development

Local governments are in many ways lead actors for rural development, yet, they are largely "policy takers" – their scope for action is highly shaped by rules, regulations and fiscal frameworks determined by national and regional governments. The county (*powiats*) and municipal (*gmina*) levels of local government provide infrastructure and services to citizens that support local economic development and the quality of life in communities.²⁵

Rural counties (*powiat ziemski*) are largely funded by the central government to execute programmes and services that municipalities cannot carry out individually. Their main responsibilities are secondary schools, public health services, social welfare, culture, architecture and construction, and public safety and most multi-municipality infrastructure.²⁶ However, because of their limited finances, the role of *powiats* in social and economic development policy is limited. There are ongoing debates in Poland about the efficacy of the county level of government, particularly in areas surrounding municipalities with county status (Sakowicz, 2017).

Gminas on the other hand bear the main responsibility for local development, including spatial planning, real property management, housing, social services, early childhood and primary education, and environmental protection. Urban and urban-rural *gminas* also manage infrastructure, including roads, water supply, wastewater and, since 2013, municipal waste collection and treatment.²⁷ Fiscally, *gminas* are less reliant on central government grants and subsidies than *powiats* and as such, have somewhat more scope to levy and use own-

source resources for their development initiatives. In terms of subventions from other levels of government, small rural gminas benefit from grants that take into account more limited tax capacity and needs related to the community's socio-economic characteristics. Local governments are represented at the national level by the following associations: the Association of Polish Cities, the Union of Polish Metropolis, the Association of Polish Counties, the Union of Rural Municipalities and the Union of Small Towns.

Community-led local development

Community-led local development is a broad term encompassing a wide range of community actors that are critical to the success and resilience of rural areas. This includes local governments, residents, businesses, faith groups, non-profit organisations, industry/business associations and so on – that work together, take collaborative decisions and develop a common vision for their community's future. It is often remarked that community-led local development in Poland, like in many Central and Eastern European countries, is underdeveloped. In particular, civil society organisations are less prevalent in Poland compared to other European and OECD countries; involvement in civic social groups by residents is lower; and democratic self-government at the local level is relatively recent. And yet, there has been a great amount of progress in a short amount of time. Hundreds of national and international non-governmental organisations (NGOs) have flourished in Poland since 1989 covering a wide span of activities related to rural development.

Many NGOs work under donor-funded projects on rural and agricultural development and in doing so engage directly or indirectly with government departments or agencies. There are groups with a specific advocacy focus, such as the International Coalition to Protect the Polish Countryside (ICPPC), which works to protect small, traditional farms in Poland, and the Rural Development Foundation, which focuses on non-agricultural initiatives in villages such as improving IT infrastructure. There is also a large network of farmers' associations, co-operatives and societies that represent their members' interests.²⁸ The National Union of Farmers, Agricultural Circles and Farm Organisations is among the largest of these groups, with around 1.1 million members. Poland has a long history of agricultural production co-operatives which help farmers pool their resources and collectively negotiate prices - functions which are particularly useful for smaller scale agricultural producers. There were approximately 1 000 farmers' co-operatives operating in 2014; however, this number is declining and it bears noting that the market share of such co-operatives in Poland is lower than that of many EU countries (Matyja, 2016). Beyond these types of partnerships, Poland has a wide range of NGOs and foundations that support rural development through their activities and that produce analytical studies on the conditions of rural development.

The EU LEADER programme and community-led local development: The role of local action groups

The EU has spearheaded a community-led approach to rural development. The EU LEADER programme, which was first adopted in the 1990s, has played a critical role in reorienting rural development beyond agricultural policies only (Kisiel and Gierwatowska, 2013). The approach has been so successful in rural areas that it was subsequently expanded to three additional EU funds under community-led local development (CLLD) (these are the ESF, the EMFF and the ERDF).²⁹ In rural areas, local action groups (LAGs) have been established at the initiative of local governments, entrepreneurs and civil associations within a certain territory or community in order to implement objectives related to the EU LEADER programme. LAGs are a form of "special association" where, at the decision-making level, private partners and associations must make up at least 50% of the local partnership. LAGs decide the direction and the content of the rural development strategy and take decisions about the different projects that are financed under the LEADER programme – there are over 300 such groups in Poland. Umbrella organisations such as the Polish Rural Forum (est. 2002) support the LEADER approach by offering a national platform for co-operation among rural organisations.

The CLLD, using the three aforementioned funds, is a new approach in Poland for 2014-20. There are only two regions (Podlaskie and Kujawsko-Pomorskie) that have decided to implement CLLD financing from more than one fund and more than one policy. The logic to combine these elements is to promote more integrated investments that can draw on both soft and hard instruments. However, in practice, the funds have separate regulations for project implementation, which can make the process challenging for proponents to navigate. One solution to this issue would be to allow projects to have double financing for soft and hard measures as opposed to having to divide one project into two or three separate components. At present, the frameworks set in executive regulations prevent such solutions. In order to promote such integrated approaches in the new programming period, it will be important to simplify these processes. Doing so is particularly important given the wider use of the CLLD planned in the government's new Strategy for Responsible Development.

The LEADER programme in Poland has propelled the growth of third-sector organisations; where LEADER programmes operate, there is a higher share of third-sector organisations (Furmankiewicz, Janc and Macken-Walsh, 2016). However, the extent to which civil society organisations have been meaningfully engaged in the LAGs has been questioned, as has their ability to overcome sectoral interests (which is a fundamental objective of the LEADER programme) (Furmankiewicz, Janc and Macken-Walsh, 2016). The LAGs have strong public sector influence and the vast majority of these organisations in Poland have been established by public sector entities as opposed to civic or voluntary ones (Kisiel and Gierwiatowska, 2013). Given this, it is important that Polish rural policy foster meaningful community-led local development while at the same time supporting and encouraging often nascent local institutions in these efforts. The local capacity and the third sector are further discussed in Chapter 3.

Participatory budgeting – The Solectwo fund

In order to spur the involvement of community members in local development, a *Solectwo* (village council) fund was established in 2009 in order to promote participatory budgeting in rural areas. The funds are based on a combination of *gmina* local budget and national funding. National funding allocations are higher for lower income municipalities. The funds are used to improve quality of life in rural areas on investments such as playgrounds, sidewalk repair and landscaping. Residents and community groups submit projects for consideration and prioritise which ones should be funded. The use of this instrument within *gminas* has increased significantly in recent years. The fund is presently being used in almost 90% of rural municipalities and is the strongest instrument for public participation in the country in terms of the number of community members engaged and the size of the funds. These funds are voluntarily established by *gmina* councils.

Polices to support the ongoing structural change of agriculture

Polish agriculture has yet to transition to a fully modern form and in the last few years has faced serious short-term shocks from the loss of the Russian market, which was a long-standing major export destination. Further, among a range of potential future scenarios,

agriculture could be adversely affected by the CAP reforms (Government of Poland, 2017). However, there is every reason to believe that while farming and food processing in Poland will not remain as they currently are, there will be ample opportunity for evolution in a way that allows Poland to expand its role as a major producer within the European Union. Despite considerable agricultural modernisation in recent decades, it is a sector that continues to have a great deal of unused production potential due to the dual nature of farming in the country (Nowak, Kamińska and Krukowski, 2015). This challenge – the need for agricultural modernisation in order to increase productivity – is central to Poland's rural development programme, and yet, many policies serve to maintain uncompetitive and small-scale agriculture.

The importance of family farms in Poland

Poland has enshrined support for family farms in its Constitution, but has a problematic concept of the "family farm"

In Poland, as in all OECD countries, the vast majority of farms are operated by individual families. While there are very large farms that are operated as a corporate entity, with ownership held by unrelated individuals, these are relatively uncommon. The majority of large farms, even if incorporated, are closely held by members of a single family and operate in the same way as other family farms. Poland, however, is fairly unique in terms of committing the agricultural system of the country to family farms in Article 23 of the Polish Constitution. Family farms in the Constitution are broadly defined as those that combine an agricultural farm and a household (Puślecki, 2016). Consequently, family farms are given preference in legislation affecting the system of agriculture in Poland.

Poland distinguishes between two types of farms: 1) those operated by a "natural person" (private person); 2) those operated by "legal persons" (firms), which are organisations such as corporations that exist as distinct entities. Polish legislation has increasingly favoured natural persons as farmers. In 2003, a family farm was defined in legislation as a farm of no more than 300 hectares that is operated by a natural person (Law on Formation of Agricultural System, 2003). This law gave the Agricultural Property Agency the right to pre-empt sales of farmland that it deemed harmful to the structure of family farms. More recently, the 2016 Land Law freezes the sale of state-owned farmland and restricts the purchase of farmland to individual farmers who are defined as persons with: agricultural skills who will operate the farm; who have lived in the municipality where the land is located for at least five years; and who will not operate a farm of more than 300 hectares after the purchase. The new law makes it harder for those who are not currently farmers to become a farmer. It also makes it more difficult for people to relocate from one part of Poland to another, which will fragment land markets. It further creates a significant impediment to expanding the size of a farm beyond 300 hectares. While 300 hectares is a relatively high threshold for a farm, this restriction could have a negative impact on land-intensive farming such as cereal production, which is driven by scale economies, and livestock pasture systems.

By defining the maximum size of a family farm in terms of land owned, the law is biased against certain types of commodity production

The result of this approach to defining a family farm creates an impediment to the modernisation process of agriculture. The law targets a specific size of farm as the maximum that qualifies as a "family farm," irrespective of whether larger farms are more productive or competitive in national or international markets. Moreover, it defines a family farm in terms of the amount of land operated, thereby privileging very large land-intensive farms and penalising medium-sized land-extensive farms. For example, a 300-hectare fruit or vegetable farm would produce a large value of output, but be a family farm, whereas a pasture-based cattle farm with 300 hectares on marginal land would not produce a very high income for the family that operates it. The new law also limits the scope of farmland markets by making it difficult for anyone other than a long-term resident of the municipality where the land is located to buy farmland. Reduced demand for farmland could lower prices and reduce the incentive for unproductive small farmers to sell their land, which would continue to freeze these individuals in farming activities.

Poland has two distinct types of farms that are not well described by the current Polish farm typology

In order to effectively adapt to changing conditions, two distinct policy approaches are needed: one for the large number of inefficient small farms and another for the relatively small number of commercial farms that account for the vast majority of production and exports (Box 2.5). Both types of farms are important in Poland, but for different reasons. Small farms account for the vast majority of farm households and are a powerful political and social force. Large commercial farms will never be a major source of employment, but can make a disproportionate contribution to Polish GDP and exports if they can continue to match competing farms in other EU and OECD countries in terms of technological sophistication and productivity. Current policy frameworks for small farms could be improved to better incentivise their transition to more productive farms where feasible, and to expand engagement in non-agricultural employment where it is not feasible. Further, support to commercial farms could be enhanced, particularly for those medium-sized farms that show potential for productivity gains.

To date, Poland has largely focused its policy attention on the problems of small farms

Agricultural policy in Poland has focused on the vast majority of the farm population that operates very small farms – less than 10 hectares. Policies have evolved over time from supporting farm incomes through price supports to supporting farm well-being by providing targeted social policy to households living on small farms. With accession to the EU and the transfer of agricultural policy to the CAP, Poland has had to rely more on social policy than traditional agricultural policy to achieve this objective. Nevertheless, Poland has often interpreted the CAP policies in ways that favour the smallest farms, rather than commercial agriculture. For example, a 2015 review of CAP Pillar I Implementation by the EU Directorate-General for Internal Policies found that Poland is one of the countries that has engaged in the greatest tailoring of the CAP to meet national priorities (Directorate-General for Internal Policies, 2015: 115). Poland, along with Croatia and Greece, employ six of the eight possible ways of modulating Pillar I payments. In particular, Poland has chosen to transfer 25% of funds from Pillar II to Pillar I, capped payments at EUR 150 000, employs coupled support and adopting the small farmer scheme (Directorate-General for Internal Policies, 2015: 115). Compared to other EU countries. Poland along with Bulgaria has used to a higher degree the possibility of targeting the income support to small and medium-sized farms (Directorate-General for Internal Policies, 2015: 110).³⁰ Going forward, Poland should provide a more balanced policy framework that addresses the needs of both small and commercial farms and rural development.

Beyond policies targeted to the dual nature of farming in Poland, territorial approaches are also important. Poland's agricultural productivity exhibits strong regional variation. These are only partially explained by differences in climatic and geographic conditions. For example, regions with a high level of social development also have the highest agricultural productivity (Nowak, Kamińska and Krukowski, 2015). Rates of education for farm managers are also the highest in the most developed regions and in turn, this is positively correlated with the absorption rate of the EU funds (Gwiazdzinska-Goraj and Rudnicki, 2016). Studies show that higher levels of operator education and training are associated with higher farm productivity (European Commission, 2016b; OECD, 2017a). Given this, it is evident that some parts of Poland are more able to take part in certain agricultural policies, such as support for farm modernisation, due to the framework conditions and institutions which support this work. In other regions, policies should focus on developing these framework conditions from the onset. Agricultural policies are therefore intertwined with rural development more broadly. Poland has evolved towards such an approach, but more could be done to enhance policy complementarity between agriculture and rural development policies (a theme returned to at the end of this chapter).

Setting the right policy incentives for small farms

While the number of very small farms is steadily declining in Poland, as is their share of the farm population and farm output, it has been at a rate that both internal and external observers believe is too slow (Chaplin, Davidova and Gorton, 2005; Dzun, 2016; Dries and Swinnen, 2002; OECD, 2008; Petrick and Tyran, 2003; Wigier, 2014a). Smaller farms are most prevalent in the south-eastern provinces of Poland; they also have the slowest rate of transformation to larger farms (Marks-Bielska, 2016). Most of the small farms in Poland sell less than half their output in formal markets. Therefore, a large share of their production is either utilised on the farm or sold through informal means. The main source of income for these farms is transfer payments, either from the European Union or from national farm subsidies and national social welfare programmes. This makes them particularly reliant on the continuation of both agricultural and social policy benefits. A significant share of the Polish population are small-scale farmers and this population tends to be politically active, thus forming an important lobby for protective rural policy (Halamska, 2016; Wigier, 2014a).

Box 2.5. Poland's small farm/big farm divide

Poland's agricultural policies since the transition in 1989 have been strongly oriented to slowing the rate of exit of small and very small farms, most of which cannot sustain a family by market sales (Macours and Swinnen, 2008; Rutkowski, 2006; Wilkin, 1997). For most of the intervening years, this policy reflected the huge transition that was taking place across Poland that led to major disruption in labour markets and considerable declines in earnings. Workers on large state and co-operative farms lost their jobs early in this process and had great difficulty finding alternative employment. This made it clear that the vastly larger number of workers on private farms could not be absorbed by their local rural labour markets, nor by urban labour markets. Consequently, finding ways to maintain an at least adequate lifestyle on these farms became the "best" available policy option.

Upon accession to the European Union a new agricultural policy regime was introduced that provided a large, new infusion of support for farming, but which was more focused on larger and more commercial farms (Campos, Jaklic and Juvancic, 2010; Majewski, Guba and Was, 2016; Petrick, 2001). With the Common Agricultural Policy (CAP) support, the Polish farm sector became more bifurcated, with a fairly small share of farms rapidly increasing their output and driving down their costs of production by investing in land and equipment. However, the vast majority of farms remained small and below minimum efficient scale, with only limited agricultural sales. For these farms, the introduction of the Single Farm Payment provided a new infusion of income that was decoupled from their level of production. This, along with national transfers, allowed most small farms to survive even as the cost of food in Poland fell.

The unique issues facing small farms

Agriculture remains a major sector in the Polish economy, especially in terms of its role in international trade and as a share of the workforce. However, it is well recognised that the current structure of agriculture – the size distribution of farms in terms of either land holdings, share of output or share of farm income – is not desirable (Csaki and Lerman, 2002; OECD, 2008; Petrick, 2001; Henningsen, 2009; Wigier, 2014a). Almost half of all Polish farms produce too little output to provide even a EUR 4 000 per year contribution to household income (European Commission, 2016a). Most of these farms have too little land to produce a large enough output to be viable businesses, other farms have weak management or too few assets to be efficient producers.

In 2005, farms with annual sales below EUR 4 000 accounted for 70% of all farms, while by 2013 they accounted for 48% of all farms (Eurostat, 2005; 2013). Clearly, farms with sales this low cannot by themselves provide an adequate family income. The statutory poverty line for income in Poland for a household with two adults and two children in 2013 was just over EUR 4 000 per year. The OECD estimates average household income in Poland at approximately EUR 16 000. If we assume a gross margin of 20% of standard output as the net income from farm sales, then a farm with EUR 100 000 in sales would provide EUR 20 000 as the return to family labour and capital, which is somewhat higher than the average Polish household income. Clearly, even those farms with close to EUR 50 000 in sales cannot provide an adequate income for the farm household after operating expenses and the cost of capital are removed. Eurostat data for 2013 suggest that there were about 77 000 farms in Poland with a standard output of EUR 50 000 or more, or about 5% of all farms, that could provide enough household income to support a family of four, if they were the sole source of earned income. For the vast majority of farms, agricultural production alone is not able to provide sufficient income.

Certainly farms with lower sales can be viable farm units, but the family will require other sources of income, either from off-farm employment or transfer payments to meet an acceptable standard of living. The roughly 225 000 farms with sales between EUR 15 000 and EUR 49 000 would be strong candidates for having a business orientation that would allow the farm to be a profitable business, but not big enough to be the only source of household earned income. Farms with sales of less than EUR 15 000 might better be characterised as lifestyle operations, where the income from faming can never make more than an incidental contribution to family living expenses. In summary, the current structure of Polish agriculture suggests that the majority of Polish farm families will either have to continue to rely on transfer and subsidy payments for the majority of household income, or will have to strongly engage in off-farm employment, because their farm is too small to have much output to sell. Some small farms may be able to grow to a large enough size to become profitable and a smaller number will be able to expand to reach the size to allow full-time family farming, but for this to occur a new orientation in agricultural policy will be required.

Box 2.5. Poland's small farm/big farm divide (continued)

Commercial, market-oriented farms

About a third of all Polish farms can now be considered to be commercial enterprises that are strongly oriented to the market and that generate a significant share of household income from farming (FADN, 2017). These might be thought of as the target group for traditional agricultural policy. Virtually all of these farms have reached this status since 1989, when the new regime liberalised land ownership land transfers and reintroduced market forces to Polish agriculture. It is this group of farms that operates the majority of land, produces the greatest amount of output and accounts for Poland's success in turning from a net food importer to a major food exporter (Stańko and Mikuła, 2014).

These farms have embraced modern agriculture and account for the majority of farm investments in equipment and new technology. They are also more likely to rely on borrowed funds than small farms. Although they receive more subsidies per farm, if measured in amounts of money, these subsidies are a smaller share of farm income than is the case for small farms (see Chapter 1). Farms in this category operate widely different amounts of land, depending on their commodity specialisation, which makes measuring the size of a farm in terms of land owned a weak indicator. The number of these farms continues to increase over time, as does their share of output and income. This growth is the best indicator of the still underutilised potential of Polish agriculture because, despite a less than encouraging national agricultural policy, there are farmers who believe that investing in Polish agriculture offers a good potential return.

Commercial farms are the main target of the CAP, which provides differential rates of support to farms producing different commodities, and secondarily provides funds for farm modernisation and improving environmental quality. Support for farms is largely based on the volume of output, although the Single Farm Payment is calculated on the amount of land operated. Because the CAP is oriented to commercial farming, it has been the main engine for expanding the size of the commercial farm sector in Poland since accession to the EU. The future direction of the CAP reform will be an important factor in the future success of Poland's commercial farms. However, commercial farms in Poland have other key advantages, including reactively low-cost labour, inexpensive land and the ability to further adopt advanced agricultural production technology that can reduce costs and increase yields.

Sources: Macours, K. and J.F.M. Swinnen (2008), "Rural-urban poverty differences in transition countries", https://doi.org/10.1016/j.worlddev.2007.11.003; Rutkowski, J. (2006), "Labor market developments during economic $\underline{https://openknowledge.worldbank.org/bitstream/handle/10986/8710/wps3894.pdf?sequence=1\&isAllowed=y;}$ Wilkin, J. (1997), "From agricultural policy to rural policy: Central Europe in transition", www.fao.org/docrep/w7440e/w744 0e09.htm; Campos, M., T. Jaklic and L. Juvancic (2010), "Factors affecting farm productivity in Bulgaria, Hungary, Poland, Romania and Slovenia after the EU accession and likely structural effects"; Majewski, E., W. Guba and A. Was (2016), "Farm income risk assessment for selected farm types in Poland: Implications of future policy reforms"; Petrick, M. (2001), "Poland's agriculture: Serious competitor or Europe's poorhouse? Survey results on farm performance in selected Polish voivodeships and a comparison with German farms"; Csaki, C. and Z. Lerman (2002), "Land and farm structure in transition: The case of Poland"; OECD (2008), OECD Territorial Reviews: Poland 2008, http://dx.doi.org/10.1787/9789264049529-en; "Whv Henningsen. A. (2009),is the Polish farm sector still underdeveloped?". https://doi.org/10.1080/14631370802663646; Wigier, M. (2014a), "The competitiveness of Polish agriculture after accession to the EU"; Stańko, S. and A. Mikuła (2014), "Tendencje w handlu zagranicznym produktami rolno-spożywczymi w Polsce w latach 1995-2013".

Most small farms are challenged by two major land issues. First, they have too little land to be able to reach a minimum efficient scale of production. Second, they typically suffer from a high degree of fragmentation of farm holdings. Farms of less than 3 hectares may have well over ten distinct and spatially dispersed fields, none of which is big enough to cultivate efficiently, even with small machinery. Fragmentation makes it difficult for a small farm to either expand or leave agriculture, because land, the main asset in farming, is difficult to purchase and sell. Where fields are fragmented, it is hard to assemble contiguous parcels of land that are required for modern farm operations.

Further, the value of land falls because it is less profitable to operate. These factors tend to freeze landowners in their current situation, thus limiting the prospects for farm consolidation and for exits from farming. The prevalence of small farms negatively impacts agricultural productivity, but it has also locked some individuals in a cycle of poverty (Zmija, 2015). Improvement in agricultural production for these groups and/or a transition to a greater share of non-agricultural employment in order to boost incomes, is therefore an important objective for integrated rural policy.

Small-scale farmers tend to have among the highest rates of poverty in rural Poland along with residents in the areas of former collective farms (Tarkowska, 2008). Poland's transition in the 1990s led to the closure of many state-owned industries that had provided at least part-time work for small-scale farmers. In the wake of these closures, recourse to farm employment provided these individuals an important safety net during this tumultuous period; and yet, at the same it has created a "low-income trap" for many (PARSP, 2005). Thus, the predominance of small farms in many parts of rural Poland is not just a productivity issue, it is a social issue as well. Persistent poverty and hidden unemployment on small farms needs to be addressed by either increasing the productivity of farms and/or increasing opportunities for off-farm employment.

The current policy mix for small farmers

The key policies formally related to agriculture that benefit small farms are: EU direct support scheme, the national agricultural tax that is paid in lieu of income tax, the opportunity for early retirement, exemptions from having to maintain financial records for the farm business, and a dedicated medical and pension plan for farmers which is subsidised by the state (Kasa Rolniczego Ubezpieczenia Społecznego, KRUS).31 The EU Single Farm Payment provides a modest, but significant, annual cash infusion to small farm operators of 1 hectare minimum. In 2015, there were approximately 1.35 million recipients of such direct payments in Poland and 90% of these recipients received an amount less than EUR 5 000 per annum (FDPA, 2016: 97). While not a large amount of funds, this payment represents an important part of the household budget and thus generates an incentive for small farm holdings (FDPA, 2016: 98). The Single Farm Payment only requires that the land be kept in adequate condition to farm, which decouples the payment from actual production. Consequently, it is widely believed that a considerable amount of the land held by small farms is leased informally to neighbors to operate it. Because the lease is informal, the owner continues to claim the single payment, and the tenant receives a favorable lease rate.

Within the CAP, Poland has adopted specific programmes which are beneficial to small farms along with some national policies that do the same (see Box 2.6 for the role of rural development policy support for small farms). Their net effect is to provide a considerable inducement to remain a small farm operator, despite the low income associated with such farming practices (Gaziński, 2016; Ministry of Agriculture and Rural Development, 2014). The Polish government has long provided a strong degree of support to low-income households, including farm households that receive a distinct medical insurance and pension package. Government transfers were significant enough to roughly maintain historic levels of total income inequality after the transition through the 1990s, even as earned income inequality greatly increased when jobs were lost due to restructuring (Keane and Prasad, 2002). Figure 2.7, shows the steady pattern of public support for small farms overall between 2004 and 2012 (Wigier, 2014). It is important to note that the number of farms has steadily declined over this period, which results in average outlay per farm increasing more rapidly than that of aggregate support. Transfer

payments remain in place within Polish society and create disincentives to participate in market activity by creating a wedge between after-tax earned income in the formal economy and lower nominal income with supplemental benefits from farming.

State budget subsidies • • • • EU Subsidies Million PLN 60 000 50 000 40 000 30,000 20 000 10 000 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 2.7. Polish and EU budgetary expenditure of the agricultural sector

Note: ASIF (KRUS): Agricultural Social Insurance Fund (Farmers Social Insurance).

Source: Wigier, M. (2014a), "The competitiveness of Polish agriculture after accession to the EU.

Reforming social insurance and tax incentives facing small farmers

A major policy question is how to address the separate social insurance system for farmers, KRUS, of which there are presently approximately 1.3 million enrolees, half of which are aged 45 years or older (2017). 32 KRUS establishes incentives to remain in agriculture, especially for older farmers, even if transfers provided by the insurance system are very low. KRUS covers those who own agricultural holdings exceeding 1 hectare and for whom agricultural activity remains their only or major source of income. Participation in formal employment generally leads to conversion to the regular pension system and transfer to the regular medical insurance plan with its requirement to pay higher premiums; it also requires that the individual pay income tax.³³ Where wages are low, the resulting after-tax income may be less than is available with low farm earnings and transfers. Similarly, after a threshold level of output sales, the farm household loses access to these subsidies.³⁴ These policies create a disincentive to earn more money by expanding farm sales and/or by entering formal off-farm employment.

The OECD has long recommended that the subsidies to KRUS be substantially reduced, that special rules regarding KRUS eligibility based on land ownership and the nature of the farming activity should be abolished, and that treatment under KRUS and the regular social security system (Zakład Ubezpieczeń Społecznych, ZUS) should eventually converge (OECD, 2006; 2014a; 2016c). However, reforms to the system of agricultural social insurance are contentious and difficult to achieve, in no small measure because this group contains so many low-income households for which these measures are important.35 Were Poland to either close KRUS to new enrolment, or reduce the rate of subsidy for new enrolees, this would significantly alter the incentives to continue as a small low-income farm enterprise. However, it could also further marginalise a population that is also at high risk of poverty in the process. It is therefore important that such reforms proceed in a manner that allows for individuals to gradually adjust. There are several options in this regard:

Box 2.6. Poland's support for small farms: The role of rural development policy

Small farms in Poland benefit from direct payments from the Common Agricultural Policy (CAP; Pillar I). The voluntary small farm payment system replaces all types of support under the direct payments system (except for transitional domestic support) with one payment of no more than EUR 1 250 per farm. Farmers participating in the small farm payment system are only exempted from controlling the standards and cross-compliance requirements, and from the obligation to apply greening practices because it is deemed that their structure (small area size) "automatically" contributes to greening (small plots, diversified, traditional activity structure, etc.). In Poland, the amount of support under the scheme for small farms is determined individually for each farmer as the sum of all EU direct payments to which the farmer would be entitled if s/he remained in the standard scheme. Farmers could join the system for small farms only in the first year of application of the system (i.e. in 2015). Farmers receiving direct payments of no more than EUR 1 250 per farm were included in the scheme automatically, unless they did not agree.

Rural development policies also direct support to these groups in order to further farm modernisation and enhance the competitiveness of farms. These supports are outlined in the Ministry of Agriculture and Rural Development's Rural Development Programme for 2014-2020 which governs all of the funds from the CAP outside of direct payments (i.e. Pillar II).

The instrument "Restructuring of the small farms" aims to increase the income and profitability of smallholders. This sub-measure is directed towards farms whose value is below EUR 10 000. In return for a one-off payment of EUR 15 000, owners of such farms promise to increase their value both by at least 20% and to a level above EUR 10 000. Those who take part in this sub-measure are required to maintain this higher output for at least five years consecutively; also, their participation renders them ineligible to draw on other rural development programme measures throughout this time. This instrument is an important step towards establishing incentives for more productive farms; however, it remains to be seen if it provides enough of an inducement to shift behavior. The evaluation thereof will be important in order to establish if this is the case.

Further, in order to help overcome the challenges associated with production on small-scale firms, support has been made available for farmers' producers groups and for participation in quality schemes, which can help to create economies of scale. Beyond these measures, the Ministry of Agriculture and Rural Development is also working to develop legislation that would allow farmers to sell their products directly to consumers more easily, while maintaining food safety requirements.

Sources: Ministry of Agriculture and Rural Development (2017c), "System płatności dla małych gospodarstw" [in Polish], www.minrol.gov.pl/Wsparcie-rolnictwa/Platnosci-bezposrednie-w-2015-r/System-platnosci-dla-malych-gospodarstw; Ministry of Agriculture and Rural Development (2017b), "Restrukturyzacja małych gospodarstw" [in Polish], www.minrol.gov.pl/Wsparcie-rolnictwa/Program-Rozwoju-Obszarow-Wiejskich-2014-2020/Restrukturyzacja-malych-gospodarstw?

• Phasing out KRUS through eligibility requirements and rate premiums. KRUS polices could be maintained for individuals above a certain age bracket (e.g. allowing people older than 45 to remain in the KRUS system with no changes to the rules). At the same time, the programme could be closed to new entrants. This reform would need to work in tandem with a mechanism for people now enrolled in KRUS who are younger than 45 with a transition process that will move them into the ZUS. This transition could involve premium assistance that phases out over time and as income increases. Rate premiums could be marginally increased year by year to bring the KRUS system closer to the regular insurance system payments.

- Create incentives to join the regular social security system. Such incentives could be structured in a variety of ways. For example, new forms of support to the current social insurance system for farmers to develop agricultural activity or to undertake other professional activities could help stimulate a shift to the ZUS. Another option would be to provide assistance to low-income farm households to cover premiums for enrolling in the ZUS in order to support the transition away from KRUS. This would require that farm households file income tax so that benefit eligibility can be evaluated.
- Training and employment support for KRUS beneficiaries. The agricultural social insurance system could also be restructured in such a way as to create incentives for the vocational training and skills upgrading of farmers in order to either increase the profitability of their farms or to transition to a greater share of non-agricultural employment. Presently, registrants of KRUS are generally not able to obtain the benefits associated with unemployment status, including access to training opportunities and/or employment support through local and regional employment offices.³⁶ Opening up these benefits to them would assist their transition and need not necessarily require that the status of unemployment be conferred on them
- Increase incentives for non-agricultural employment and entrepreneurship. Eligibility penalties could be relaxed and an increased threshold for non-farm economic activity could be adopted over a period of time in order to allow adjustments to higher rate premiums.
- Supporting job creation in rural areas. In addition to the above-mentioned actions, the successful transition out of the current KRUS setting is contingent on real progress in the diversification of the rural economy in order to increase employment in non-agricultural sectors.

The government of Poland has recently introduced a special tax for small business that is linked to the reduced payment for the ZUS which in turn creates an incentive for small farmers to both establish a business and switch to the regular insurance system. Individuals who establish a business will be eligible for a lower business taxation rate and lower ZUS contributions for a period of 2.5 years. Another incentive for farmers to undertake non-agricultural activities is the provision adopted January 2015 permitting individuals holding KRUS insurance who work on commission contracts (umowa zlecenie) to be simultaneously insured by the ZUS if earning income is no higher than the minimum wage (PLN 2 000 in 2017). These are promising initiatives, but need to be combined with other incentives, as noted above.

A related critical policy issue concerns the exemption of small farms from reporting income tax (Kobielski, 2015). Requiring all farm enterprises to report income could increase the incentives to take on off-farm employment because the tax on earned income would be offset by reported losses from the farm enterprise. This would require defining farms as agricultural holdings; however, presently under Polish law it is the farmer who is the legal entity (Pawłowska-Tyszko et al., 2013: 93). After calculating annual profits and losses, farm households would be more aware of the financial implications of their current status.

Poland is not alone in needing to reform its farmers' social insurance system. Other European countries that have faced this task are Austria, Germany and Italy. In Germany, the need to reform the farmers' social insurance system took place in part because of its growing share of the national agricultural budget (72% in 2007) (Mehl, 2009). Initial legislative change took place in 1994 with successive reforms thereafter. Germany's experience in reforming its farmers' social insurance system highlights the importance of strong upfront negotiations and a piecemeal process that is enacted in successive waves to allow for adjustment.

Future challenges and risks for small farms

Absent a change in policy, the number of very small farms in Poland will continue to steadily decline. Although the current level of government support is sufficient to keep most existing farm households in place, these are mainly composed of older people and there is little evidence that the next generation will be willing to take over all of the farms that will require new operators. However, relying on slow attrition is an expensive way to achieve a considerably lower number of small farms. It implies ongoing high levels of subsidy for these farms. It hinders the process of assembling small parcels of fragmented land into large enough blocks so that they can be farmed efficiently. It also reduces Poland's agricultural output and export revenue below its potential. Finally, in an upcoming era where workers will become scarce because of a combination of population aging and falling fertility rates, it locks a significant share of the rural labour force into a form of employment that offers individuals a low level of income and exacerbates future worker shortages. In addressing these challenges, it is important that policies for small farms distinguish between those who potentially have a competitive future in the sector and those who do not. To this end, different types of agriculture-dependent households should have access to alternative pathways to improve their incomes over the long term.

Given the scope of the European Union in shaping agricultural policies, Poland has, like any member, a limited ability to influence how farm policy will evolve in the future. There are several potential evolutions of the CAP. It is possible that direct support could increase in the future – e.g. due to gaps in climate and environment requirements/ambitions related to farming (between the EU and its trade partners) in the context of ongoing trade liberalisation negotiation agreements (Transatlantic Trade and Investment Partnership, Comprehensive Economic and Trade Agreement, Mercosur, New Zealand, Australia, others); or that it could remain at present levels. Alternatively, it is possible that the CAP budget will be lower in the next programme period than in the current one and that direct payments will be seen as less desirable than before (Buckwell et al., 2017). Lower levels of support and a shift away from direct payments would be particularly difficult to bear for small farm households in Poland, but would likely encourage a faster outflow from farming. Some reforms, such as structuring incentives for farmers to partake in an increasing share of non-agricultural employment and/or partaking in skills upgrading or retraining schemes, will help mediate the risks associated with a decline in direct supports. It will be increasingly important for other EU policies and national policies to support the transition to off-farm employment for small farms (Nurzyńska, 2016). For those small farms that remain in operation, extension services to facilitate farmers' access to technology and knowledge that can contribute to their effective participation in innovation networks will continue to be important as will support for land consolidation and farm enlargement.

Development pathways for more inclusive agricultural development

Policies to support the adjustment of smallholders require a framework that acknowledges two important elements. First, the long-term, i.e. inter-generational, future for the majority of smallholders cannot exclusively lie in farming; hence there is a need for policies that enhance households' opportunities outside the sector as well as within it. Second, in order to improve both agricultural competitiveness and the prospects for earning more outside

the sector, the most important policies may not in fact be agricultural policies. It is therefore important that smallholder policies are framed in an economy-wide context, with agricultural policies one component of the overall policy mix.

A strategic framework for smallholder development policies needs to make a distinction between those who potentially have a competitive future in the sector and those who do not (Table 2.4). If the policy objective is simply to keep as many smallholders as possible in farming, then that needs to be stated explicitly, as it is not possible to have coherent policies that simultaneously seek to improve productivity and competitiveness, and yet provide enough protection that smallholders do not face competitive pressures (Cervantes-Godov and Brooks, 2008). On the other hand, if the policy objective is to encourage a productive and competitive agricultural sector, then there is a need to embrace structural adjustment and identify policies that can facilitate that process. One option in this regard could be to promoting broader diversification of incomes for small farms that would include specialised production (herbal, horticultural, regional products, products for the pharmaceutical and cosmetics sectors) and moving up the value-added farm production.

Table 2.4. A strategic framework for more inclusive agricultural development

		Development pathway			
Policy instrument	Help farmers become more competitive within agriculture	Diverse income source Within agriculture	ces Outside of agriculture	Leave the sector for off-farm employment	Safety nets for those unable to adjust
Invest in human capital	Minor effects of formal education for this generation; technical training more appropriate for productivity	Can help farm family members and rural workers move into skilled jobs	Important for farm family members and rural workers	Important for managing intergeneration change	
Invest in infrastructure	Helps with market integration	Helps improve local jo	ob opportunities	Can ease migration decisions for offspring	
R&D extension	Public and private sector important; gains from adoption and adaptive research	Can expand agricultural employment			
Credit	Should focus on correcting market failures	Indirect impacts			
Labour market reforms		Important for raising employment opportunities and wage incomes			
Cash transfers (possibly conditional)				Conditional school attendance may complement investments in schools	The most important policy for those unable to adjust
Regional policies	Important for improving market integration	Expanded non-farm activity would raise farm wages	Important for buildi economy with wide	ng a diversified rural r job opportunities	
Develop producer associations	Reduce transaction costs and help exploit economies of scale	Indirect impacts			
Land policies and property rights	Need to encourage rental markets and facilitate land purchases by small farmers				

Sources: Adapted from Cervantes-Godoy, D. and J. Brooks (2008), "Smallholder adjustment in middle-income countries: Issues and policy responses", http://dx.doi.org/10.1787/228583166164, p. 9.

The premise of the following framework is that different types of agriculturedependent households will have different potential pathways to improved incomes over the long term, and correspondingly different policy requirements. The development pathways are described in the columns, and the policy instruments in the rows. The first column (improving competitiveness within agriculture) applies to farm households only, but the other columns apply to both farm households and salaried worker households. Note that the development pathways (columns) are not mutually exclusive: for example, one household member can enhance the farm's competitiveness while another provides off-farm income. Also, the instruments (rows) do not exhaust all possible policies, but focus on those with persuasive arguments.

Increasing the potential of commercial farms

Commercial farms in Poland are steadily increasing their share of production, land operated and share of farm numbers (Chmieliński and Karwat-Woźniak, 2015; Drost, 2013; Wigier, 2014a). This has occurred despite mixed support for larger farms from the Polish government. Commercial farms are the main beneficiaries from the CAP because it is strongly oriented to supporting professional farms. However, domestically, commercial farmers in Poland operate in a national policy environment that is more oriented towards supporting small-scale traditional agriculture. These policies include: decisions by the national government to modulate the CAP programme payments in ways that provide more money for smaller farms and limit the amounts going to larger farms; restrictions on farmland purchase; and phased-out access to national programmes that benefit small farms, such as exclusion from income taxes and access to the farmer social insurance system (KRUS).³⁷

In 2015, Poland had approximately 731 000 business-oriented farms which accounted for around 94% of Poland's total agricultural output (FADN, 2015). Large farms with more than 100 European size units accounted for just over 35% of commercial farm output, and 33% of total farm output (FADN, 2015). These roughly 18 000 farms were 2.5% of all commercial farms and somewhat more than 1% of all Polish farms (FADN, 2015). These large farms tend to be more productive than smaller farms and are the only farms that rely to a significant degree on hired farm labour (see Chapter 1). The largest farms are found in the northern and westerns parts of Poland, where most state-owned farms used to be situated. While they are clearly less politically influential in Poland than are the vast number of small farms, they play an outsize role in providing both food for domestic purposes and for export markets. It is their growth in number and share of production that explains how Poland has gone from being a net food importer to a significant food exporter since 2003 (Wigier, 2014b).

Larger farms benefit from the CAP Pillar II farm modernisation support because it allows them access to funds to buy new equipment and improve buildings. This was especially important in the early years after EU accession, when agricultural credit in Poland was limited. More recently, Poland has seen an influx of banks from western Europe that have expertise in agricultural finance and these lenders are providing a variety of debt instruments to larger Polish farms on a commercial credit basis. The shift from a grant-financed form of agricultural investment to one based on debt and equity finance will be important for the sustained growth of Polish farming. Farmers who borrow money place their assets at risk, and this leads them to make more careful analysis of the value of the investments they are making than is often the case when they are given a grant or subsidy.

While commercial farms are less reliant on subsidies, they are sensitive to regulatory changes and legislation that limits their production choices. In particular, recent restrictions on the purchase and sale of land that are intended to protect small farms from competition may adversely affect the steady evolution of Polish agriculture to a more commercial

orientation, without doing much to help small farms. The larger parcels of contiguous land that are most valuable to bigger farms are too expensive for small farms to purchase as a single parcel. Breaking this land up into smaller parcels might allow new small farms to be created, but this would provide little benefit to existing small farms, and would harm the long-term future of Polish agriculture.

Poland has targeted food and food processing as growth opportunities for the national economy, and there is a clear recognition that success in this regard will require more commercial farms (Grzelak and Roszko-Wójtowicz, 2015). 40 A considerable number of domestic and international firms now produce in Poland for internal and export markets. These firms source their raw materials from medium and larger commercial farms because they are able to provide sufficient volume and consistent quality. Unlike farming, which now employs relatively few non-family workers, food processing relies on large numbers of relatively unskilled workers, which can have a significant impact on local labour markets. Poland has targeted food processing as one of its growth opportunities, but without an increasing supply of high-quality, low-priced agricultural production that can only be provided by commercial farms, the possibility of expanding this sector and capturing a larger share of international trade will be difficult.

Policy initiatives to strengthen Polish agriculture

There are a number of policy areas that fall outside the purview of the CAP and are applicable to farms of all sizes that Poland could more fully engage in. These initiatives do not directly support farm income but they put in place an environment that can strengthen the potential for farms to become more efficient and productive. Policies that ensure adequate access to credit, support intergenerational renewal, provide a strong farm advisory service, invest in innovation in agriculture, and support market development activity for farm and food products all help to create an environment that supports famers' activity and increases their contribution to national income.

Improving access to credit

Continued growth of Polish agriculture will hinge on the ability of farm families to make investments in their business. These investments will largely have to be financed by loans, making an adequate supply of credit important. Small farms in Poland typically lack access to credit, either from agricultural lenders or in the form of common household finance and have a medium level of financial knowledge (Horska, Szafrańska and Matysik-Pejas, 2013). Without a demonstrated ability to generate adequate income to repay a loan, they are bad credit risks for all lenders. However, without access to external funds they have little hope of improving their business. Various grants and subsidies are a partial solution to this problem, but are only available in limited amounts and for specific uses, which restricts their impact. Larger commercial farms now have many more options in terms of sources of credit than in the recent past, but these are still more limited than the array of lenders in western Europe.

Many OECD countries have created a specialised mezzanine lender in order to address agricultural development problems when faced with similar situations – examples include the Crédit Agricole in France, Rabobank in the Netherlands and the Farm Credit System in the United States. These institutions were all established as co-operative lenders that focus on providing a stable supply of credit to farmers at prevailing interest rates. Importantly, national governments provide guarantees on the borrowing costs of these lenders to permit them to raise funds at a preferential rate.

Over time, Poland has developed a number of programmes that provide access to credit through the Bank Gospodarstwa Krajowego (BGK), but these are not specifically oriented to farming. In particular, in rural areas where there are few financial intermediaries and there has been little reliance on borrowing, it can be important to combine lending with agricultural support services that work with potential borrowers in order to demonstrate how credit can be used to improve farm operations. Microcredit financing has been established in Poland in order to support those with limited access to conventional credit such as farmers. The uptake of these types of loans has spurred their expansion; in 2015 a new microcredit enterprise scheme was funded in Poland by the European Commission.⁴¹

Supporting intergenerational renewal

Poland has the largest share of young farmers (those under 40 years of age) in Europe. This demographic structure can be an asset for the sustainability of the agricultural sector. In all OECD countries, farming has a high rate of intergenerational succession, where children take over the family farm. With low farm incomes not only can it be unattractive for the next generation to become a farmer, but it is financially difficult to manage the transition where two generations have to live off the earnings of a single farm. But it is also important to allow others who do not come from a farm background to enter farming. Under recent policies this infusion of new talent is becoming increasingly difficult in Poland.

Installation costs, access to land and credit, and economic sustainability are recognised as some of the greatest challenges facing young people who wish to enter farming. The 2014-2020 CAP Pillar I introduced a compulsory measure for income support to young farmers commencing agricultural activities with additional payments based on direct payment entitlements. Member states can use up to 2% of their national ceilings for direct payments, to grant to young farmers an annual payment for a maximum period of five years (on top of the basic payment). The second pillar of the CAP also includes support for young farmers; however, it adopts a more flexible approach. In Poland's case, the young farmer scheme is focused entirely on farm and business development, as opposed to the other options of knowledge, advisory services, investments in physical infrastructure and co-operation. 43

A crucial part of the farm renewal process is providing a sound agricultural education for those interested in farming as a career. This is important because Poland requires that incoming farmers have formal technical qualifications before they are allowed to operate a farm. The current system of technical training in agriculture is fragmented, lacking in resources and not oriented to providing modern training in farming methods. Agricultural schools should play a stronger role in helping to transform Polish agriculture. Farmers in Poland are required by law to demonstrate formal qualifications in farming in order to be eligible to operate a farm and to obtain subsidies. The Minister of Agriculture and Rural Development runs and supervises a system of schools to train farmers (45 in total). These schools provide training in 25 agricultural professions and there has been a recent emphasis to increase the agri-food sector, where growth opportunities have been identified. In addition to these schools, there are also agricultural schools that are run mostly by powiats self-governments. This capacity offers a potentially powerful mechanism to provide technical education to young members of farm households and others interested in becoming farmers. Rather than just providing technical education in farming practice, there should be a concerted effort to introduce farm financial management concepts and budgeting methods. Further, students should be encouraged to explore career opportunities that include the benefits of off-farm employment as a way to increase and stabilise income. It may even be possible to encourage examination of alternative career paths in farm-related fields, which may broaden horizons beyond full-time farming.

Strengthening farm advisory services

A strong farm advisory service is the main mechanism for providing new farming approaches to farms. Advisory services take the new ideas from agricultural research and innovative practices and create sets of farming practices tailored to the needs and abilities of farms in a particular region. Farm advisory services are provided by a number of different entities - public and private. There is an agricultural advisory centre in each of the 16 voivodeships. Other entities also provide advisory services for agriculture, such as farmer agricultural chambers and private advisors. While there is no single reason why private advisory services cannot be effective in principle, the current Polish situation with a large share of very small low-income farms makes paying for advisory services challenging. Farmers cannot easily afford to pay for services. Currently private advisors largely focus on developing grant applications for EU subsidies since they can be paid from the proceeds. While EU financial support can be a source of improved farm productivity, it is more likely to occur if a farm is provided with comprehensive advice, including innovative solutions.

A 2014 evaluation of the agricultural and knowledge system in Poland remarked that there is a lack of mutual interaction among the many institutions and actors that provide advisory services and that the creation of agricultural knowledge is too often done in isolation (Kania, Vinohradnik and Tworzyk, 2014). In particular, it was noted that extension services are under-supported and that the dissemination of knowledge generated by universities is proceeding too slowly, in contrast to research institutes under the Ministry of Agriculture and Rural Development (MARD), which are obliged to prepare reports for practice. The evaluation further remarked that the system of voivodeship advisory services was poorly co-ordinated with that of the national advisory service. In 2016, the supervision of voivodeship advisory services was transferred to the MARD, thus increasing national control and co-ordination over these services.

A particular challenge in all OECD countries is linking advice in agronomic practices into farm financial management. In Poland this is an even bigger issue, because so many Polish farms do not have financial records. Without records, farm planning is extremely challenging. A clear challenge for farm advisory services is to help Polish farmers embrace sound financial planning.

Support for agricultural innovation

Innovation is the main means by which farms increase their productivity over time. New crop varieties, new inputs and new production technologies have allowed a reduced number of farmers to produce an increased amount of food. But these innovations have to be generated by investments in research and development. Poland has benefited from adopting innovations first introduced in other countries, but could further increase its capacity to provide quality food at competitive prices by increasing internal agricultural research investment. This would allow research to focus on particular Polish conditions and new market opportunities. For example, when agricultural exports to the Russian Federation were terminated, it was important to adjust products to make them acceptable to new markets. Having the capacity to be able to carry out these changes in a timely manner reduced the cost of the embargo.

Polish agriculture has demonstrated strong capacity for modernisation and innovation since EU accession; however, these gains have not been evenly spread. Large-scale commercial farms exhibit the highest rates of technological adoption and innovation, while medium-sized farms lag and the engagement of small farms in these activities is very limited (Józwiak, Kagan and Mirkowska, 2016). Fostering knowledge transfer and innovation is one of the priority areas under the CAP Pillar II. Poland complements these objectives with its own funding and support for scientific research for agricultural development (e.g. through research and scientific institutions such as the Institute of Agricultural and Food Economics) and also supports knowledge sharing through its agricultural advisory centres. However, the connections between these two groups—scientific research institutions and agricultural advisory services—could be strengthened in order to better translate knowledge into practices that can benefit farmers on the ground (Kania, Vinohradnik and Tworzyk, 2014). Moreover, spending on research and development within the agricultural sciences in Poland has declined in recent years (Baer-Nawrocka and Poczta, 2016).

The Network for Innovation in Agriculture and in Rural Areas (Sieć Innowacji w Rolnictwie i na Obszarach Wiejskich) was established in 2015 to help facilitate the implementation of agricultural innovations. The establishment of this network is very promising and in coming years a special platform for knowledge dissemination will be developed, along with connections to the European Innovation Partnership. There are also a wide array of private advisory services and firms that support agricultural modernisation. Extension services, co-operation between stakeholders, and other means of disseminating innovation and sharing best practices should be enhanced. Particular strategies could be developed to engage medium-sized farms in agricultural innovation.

The current EU financial perspective (2014-20) places a special emphasis on programmes to support agricultural innovation. However, what constitutes innovation can be difficult to define and can differ from one farm to the next. This impacts how EU funds are implemented under the 2014-20 perspective. Many activities of this programme are scored based on the implementation of innovative activities – but there is a diversity of practices in terms of what is considered innovative and hence, parameters and inconsistently applied.

Helping to expand new market opportunities

Poland has become a major agricultural exporter, which increases the importance of expanding its efforts to identify new markets. Polish firms have already demonstrated a great deal of success in expanding to new markets, most notably in the wake of the Russian embargo where new markets were found. As Poland continues to expand production it will require the identification of new markets to absorb the increase in output. Even large farms face challenges in identifying market opportunities, and it is impossible for small farms to understand anything other than local market opportunities by themselves. A strong national agricultural product marketing initiative, complemented by region-specific initiatives, can help export more of its output.

A modern and efficient network of producers groups strengthens market access for Polish agricultural products. EU support for producer groups has spurred their uptake in Poland; upon accession Poland had just 20 agricultural producer groups, but by the end of 2015 this number had expanded to 1 317 (Wesołowska, 2016). Producer groups have helped Polish farmers purchase new machines, expand or establish storage facilities, and invest in efficient machinery and equipment used for washing, cleaning, grading and packaging of fruits and vegetables. These are very positive developments and in regions

such as Wielkopolskie where there is a strong co-operative tradition, producer groups have flourished. In the coming years, Poland should further focus on enhancing the vertical and horizontal consolidation of producer groups and of their associations.

Connecting small farms to markets

A central problem facing small-scale producers is the difficulty of developing a marketing channel for their products. An individual small farm has a relatively small amount of surplus production that can be sold after household consumption is met, and it is usually hard to develop a relationship with a broker, distributor or processor that allows the residual production to be sold. The typical fallback option is to rely on direct marketing either through a farm stand or through a farmers' market. Commercial food distribution channels cannot easily deal with individual small farms due to: high fixed costs of contracting for a small volume of product, potential problems with the farmer meeting required quality standards and intermittent supply from a single farm. While a large-scale farm may be able to contract directly with a processor or distributor, small-scale farms require an intermediary who can aggregate small amounts from multiple producers to obtain a large enough amount of uniform quality to be attractive to the processor or distributor. However, introducing an aggregator adds significant cost that is reflected in lower prices to the farmers. The aggregator has costs associated with identifying farmers, assembling products from diverse sources and verifying quality that can be significant. Further, unless there is a large enough quantity of output that is produced over multiple months, the marketing interval may not be long enough to justify setting up as an aggregator. As the number of farms increases and the amount of production of individual farms declines, the viability of an aggregation business also declines.

Market imbalances in bargaining power between small farmers relative to large food processing companies is a sensitive policy issue. In response to these concerns, at the beginning of 2010, the prime minister of Poland appointed a special taskforce to work on increasing the transparency of agricultural markets and improving the functioning of the agro-food chain; the taskforce was subsequently dissolved in 2013. One possible solution is for farmers to form a production and marketing co-operative that provides advice to farmers on production methods to assure uniform and high-quality products, and pools production to facilitate sales to distributors and processors. Because the farmers own the co-operative it has no incentive to extract a profit margin, which should maximise benefits to the individual farmer. However, while co-operatives are in principle attractive solutions to the marketing challenge of small-scale farms, they have been found to be difficult to operate due to low volume, large numbers of producers and challenges in maintaining consistent quality. All of these add costs that have to be spread across all producers, which can reduce a farmer's interest in participation. In Poland, an additional residual issue is the distrust many farmers have of external agencies that impose management conditions, even if they are collectively owned and not part of the state. As noted in the preceding section, some regions of Poland have a stronger tradition of co-operatives and producer groups than others. Some studies in Poland have noted that farmers can be reluctant to pay membership fees and have low awareness of the benefits of organising (Milczarek-Andrzejewska, 2014). The public sector can play an important role in both strengthening these initiatives and encouraging them where they are less prevalent by creating platforms to share knowledge between groups and determining best practices in order to better understand the risks involved in setting up and participating in such groups and the benefits they can bring to members.

Rural economic diversification – Policies to support the non-agricultural economy

Agriculture alone is not enough to sustain rural areas. As Poland's agricultural sector continues to modernise, it is becoming less labour intensive and this in turn increases the importance of strengthening the non-agricultural rural economy, including opportunities to combine farm income with non-agricultural businesses and employment. Doing so will help reduce rural un-/under-employment and poverty which persists in rural Poland. Poland's non-agricultural rural economy has grown in recent years, but the pace of this transformation has been slow. Recent research indicates that less than 3% of all active agricultural holdings obtain income from sources other than agricultural production (an increase from 2.5% in 2006). There are approximately 1.1 million economic entities in rural areas that are not associated with agricultural activity (REGON).

The slow pace of non-agricultural economic development is incongruous. On the one hand, there are many successful examples of rural businesses in Poland and, as will be discussed, a wide range of supports are available for both new and established businesses (see Box 2.7 for examples of rural entrepreneurship in eastern Poland). And yet, the pace of transformation has been slow and the business landscape is dominated by microenterprises. Entrepreneurs either struggle to think about the next level of their businesses or face a number of disincentives to its expansion – e.g. structural barriers such as the disincentives created by KRUS (as discussed in the previous section), distance to markets, regulatory barriers. Further, rural entrepreneurs report difficulties in finding employees for both low and higher skills occupations - this is despite high rates of official and hidden forms of unemployment in many rural areas. Many have remarked upon a lack of entrepreneurial attitudes among the rural population as one explanation of the slow pace of economic transformation (see, for example, Biczkowski and Biczkowska [2016]). However, the findings of a recent survey of the entrepreneurial attitudes of rural and urban residents in Poland contradict such assertions and find little difference between the two (Mularska-Kucharek and Wiktorowicz, 2015). The aforementioned disincentives to employment may in part serve to explain this discrepancy.

The opportunities for non-agricultural businesses in rural areas differ considerably across Poland. Rural communities that are close to cities benefit from agglomeration dynamics and are more likely to have a larger share of businesses in the services sector, as are rural areas that are attractive for tourism. Rural communities close to cities have seen more dynamic economic growth and, as such, it is important to strengthen the linkages between rural areas and small and medium-sized cities – this is recognised in Poland's new Strategy for Responsible Development. In rural regions where tourism is less prevalent and where there are greater distances to urban agglomerations and markets, the profile of rural businesses is different – e.g. forms of manufacturing or industries related to the agricultural sector such as food processing dominate. The territorial location of rural firms impacts the size of companies, institutional frameworks and, in turn, the ways in which public policy supports entrepreneurship. This section examines a range of public interventions to support entrepreneurship – from financial lending and skills training to local economic development strategies and smart specialisation.

Box 2.7. Examples of successful rural entrepreneurship from Podlaskie, Eastern Poland

Rural Poland has many examples of successful entrepreneurship. Firms report different barriers and enablers for their development. Many of these successful rural firms report difficulties in finding employees, despite relatively high rates of rural unemployment and underemployment in the regions in which they operate, with some firms relying heavily on Ukrainian migrants. For the firms producing goods for export and heavy machinery in the east of Poland, the quality of the transport infrastructure is reported as a major bottleneck to development. All firms report a desire for a stable and business-friendly regulatory environment. Examples of successful rural entrepreneurship from Podlaskie, eastern Poland include:

- Pronar (est. 1998), with headquarters in Podlaskie, produces and sells machinery and equipment for agriculture, municipal services and the transportation industry and holds approximately 50% of the Polish market share for such equipment. The company also manufactures wheels for agricultural and municipal machinery, pneumatic and hydraulic systems, axles for trailers, as well as steel profiles and plastic components. In 2014 Pronar opened a Research and Development Centre which works on developing new designs and approaches. The firm has approximately 2 000 employees.
- PATER (est. 1976), with headquarters in Podlaskie, produces concrete products and curbs and other finishing products for gardening purposes; it has three production facilities based on German lines. The firm has approximately 100 employees.
- BielMlek Milk Cooperative (est. 1954), Podlaskie, produces milk and cheese for domestic and international markets; 80% of the production is exported. The co-operative includes 1 250 farmers who supply milk and 150 employees. With established co-operation with the local technical university, the co-operative is seeking to increase its research collaboration with other groups as well (e.g. a medical university and dairy institute).

For these firms in eastern Poland, one of the greatest barriers that they reported to the growth of their businesses is transport connectivity. As a more peripheral region, this region faces some inherent limitations and despite investments in the road network, low capacity rural roads remain a challenge.

Public support for entrepreneurs and small and medium-sized enterprises

The diversification of the rural economy has been at the forefront of EU policy objectives and is well-aligned with the OECD's approach to rural development (Rural Policy 3.0; see Chapter 3). A wide range of government actions at the central, regional and local levels support the non-agricultural rural economy. On the one hand, there are interventions that create an enabling environment to support businesses of all types, such as investments in transportation and digital infrastructure which facilitate access to markets and access to high-quality services such as healthcare and education. This section, however, focuses on those supports that provide new and existing enterprises with access to knowledge, capital, market development, and support for producer or sectoral groups to make the most of joint efforts. There are many government initiatives that could be said to provide such support - some of which are territorially specific (e.g. those included in the Operational Programme for Eastern Poland) and others that are targeted at economic sectors which are showing strong potential, such as the food-processing industry. In other cases, national or regional policies are adapted to reflect the needs of rural enterprises. Innovation and support for entrepreneurship is a prominent measure under Poland's Partnership Agreement with the EU (2014-20) and there are a number of new measures to support this objective (Table 2.5). The current agreement places a particular focus on smart specialisation measures that are implemented under the

Operational Programme for Innovative Development and for Eastern Poland and regional operational programmes (through the Enterprise Development Programme). Regions may freely choose an area for smart specialisation. Nine of 16 Polish regions have chosen support for high-quality food production as smart specialisation in their strategic documents. It is important to note that the smart specialisation framework in regions and the implementation measures/resources in the mentioned programmes tend to be focused on scientific research and innovation in Poland, which can neglect rural innovation.

Table 2.5. Key programmes to support entrepreneurship in Poland

Programme	Main interventions				
Rural Development Program 2014-2020	Bonuses for starting non-agricultural activities Entrepreneurship development, development of agricultural services for micro- or small enterprises Processing and marketing of agricultural products Support for entrepreneurship in rural areas under LEADER				
Regional operational programmes	 Support for small and medium-sized enterprises (including in rural areas) Support for economic promotion (domestic and international) and support for the development of new markets Boosting ICT usage in the regional economy; support to services using ICT Support for the R&D activity of enterprises Investments in the infrastructure necessary for the technological development of enterprises Support for the system for social economy entities Infrastructure for science institutions at the regional level (through territorial contracts) 				
Operational Programme Eastern Poland 2014-2020					
Operational Programme Smart Growth					
Operational Programme Digital Poland - Eliminating disparities in access to fast broadband - Improving the quality of and further expanding the digitalisation of public services - Improving the digital competences of Polish society					
Source: Ministry www.funduszeeuropejski	of Economic Development (2017), European Funds Portal, e.gov.pl/en.				

There are territorial differences in the adoption of RDP support measures for entrepreneurship in Poland. In a review of the impact of rural development programme measures for economic diversification over the 2003-17 period, it is found that such measures had the most significant impact in the Wielkopolskie *voivodeship* and in the northern part of the region of Mazowsze (at the border of the Mazowieckie, Podlaskie and Lubelskie *voivodeship*s) and in the western part of the Warmińsko-Mazurskie *voivodeship* (Biczkowski and Biczkowska, 2016). In contrast, the programme was demonstrated to have had less of an impact in southern Poland (with the exception of a few *powiats*). Several factors could explain these differences; it is an issue that merits further study in order to improve the impact of these funds.

The need to better align rural development programme and Cohesion Policies

In the assessment of many internal experts, Poland's support for rural entrepreneurship and economic diversification has not been adequate and more could be done to remove the barriers facing small and medium-sized enterprises (Nurzyńska, 2013; Kłodziński,

2014). Poland's rural development programme (co-funded with EU, CAP Pillar II) is one of the most important programme that supports employment opportunities outside of agriculture. However, it is noted that different rural development programmes throughout the years 2002-20 (including pre-accession support) have allocated a relatively low share of their total budgets towards policies that stimulate non-agricultural employment (Nurzyńska, 2016). Importantly, CAP Pillar II support for entrepreneurship in the rural development programme was nearly 10% of the budget in the previous programming period (2007-13) but is limited to 8% of the budget in the current period (2014-20). Within those amounts, support for non-agricultural activities was 53% in the previous period and has fallen to just 40% in the current one.

In an ex ante assessment of the current rural development programme (2014-20) commissioned by the MARD, it was noted that, despite this being assessed as one of the key priorities for rural development, the current structure of RDP activities provides only limited support for creating employment opportunities outside agriculture. Under the current structure, government support for rural development is shifted to other EU operational programmes and to domestic policies, which have smaller funding allocations (Ministry of Agriculture and Rural Development, 2014). Echoing these findings, a 2011 ERDF report on rural entrepreneurship in Poland notes that despite well-prepared planning documents at the EU and national levels, there is still no breakthrough in creating non-agricultural jobs in rural areas. In particular, the report notes a persistent sectoral approach and a lack of synergies between national policies for rural development within the framework of the CAP and regional development policy. Given these assessments, it is evident that more could be done to better couple interventions within the rural development programme with that of Cohesion Policy (Ferry, 2013; ERDF, 2011). Further, as mentioned in the previous section, there is a need to reduce the disincentives to remain a small business in order to more effectively foster rural entrepreneurship (e.g. the barriers to the expansion of off-farm employment created by KRUS and the tax system). The following section examines interventions to support the non-agricultural economy across a number of areas.

Access to business services, finance, training and creating a supportive business environment

Poland has undertaken a number of efforts in recent years to create a supportive environment for businesses - urban and rural alike. For example, the Ministry of Investment and Economic Development has established a Point of Single Contact platform (businessinpoland.gov.pl), which offers online services to entrepreneurs including a help centre for direct advice. E-services for business were used by 92% of enterprises in 2015 in Poland; this is a very impressive uptake given that the use of eservices by citizens is one of the lowest in the EU (European Commission, 2017e). In an effort to support small businesses, the Ministry of Investment and Economic Development has proposed legislation that will reduce social insurance contributions to the ZUS for small and micro enterprises.

Rural businesses can be disadvantaged by the distances they face in accessing business advice and support services, such as from banks, accountants and consultants, compared with urban-based enterprises. Various programmes in Poland offer business services, including SME expansion and retention programmes, business development centers, advisory services (including rural advisory centres which gather and distribute information concerning support for farmers and SMEs) and loan guarantees and tax abatements for the expansion of small businesses. One of the areas that could be strengthened is marketing assistance at the regional level, including territorial marketing. At present, LAGs undertake such initiatives but often around a narrow activity – e.g. culinary traditions and tourism. Notably, the region of Małopolskie is excelling at such co-operation and regional marketing and has the second (after Podlaskie) greatest number of accredited regional products in Poland.

Box 2.8. Support for entrepreneurship and innovation in rural areas: The US example

Innovation in rural areas relies to a great extent on the action of local entrepreneurs. While some innovations are imported from urban places either by the local branch plants of large multinational companies or by the transfer of ideas developed for initial use elsewhere, these innovations tend not to be fully embedded in the local economy. By contrast, innovations that come from local people are more likely to be based on better uses of local resources, or on new ways to solve problems for which an existing solution is not available.

The key issue for public policy is identifying ways to stimulate latent entrepreneurs to act on their ideas and to develop better support mechanisms for them when they do choose to act. There are two distinct motives for rural entrepreneurs that must be recognised. The first is a simple profit motive where the entrepreneur perceives that there is a current gap in the market that can be filled by his or her actions. The second is known as "user innovation", where an individual has a problem in their life or business for which no adequate solution is available, so they invent one. It is only after the invention that the idea of becoming an entrepreneur occurs.

Essentially support for innovative rural entrepreneurs takes two forms. The first is ensuring that existing support for innovation does not discriminate against rural entrepreneurs. Forms of discrimination include: a focus only on formal innovation systems where science-based research and development activity is a prerequisite for support (as is the case in Poland), focusing support only on innovations that have the potential for rapid growth (gazelles), requiring that an innovation be novel in a national or international context before it can be supported, establishing high minimum funding levels and complex application procedures that can be difficult for individuals or small firms to deal with, and concentrating efforts to promote innovation in urban areas. The second is more broad-based support for small rural business, including assistance in moving from identifying an idea – the latent entrepreneur – to then acting on that idea and developing a business plan and to actually starting a business. In rural areas the first of the three steps can be the most difficult. In many rural areas there is not a strong tradition of entrepreneurship, and in almost all rural areas there are few peers who can be looked to by someone interested in starting an innovative business.

Financing a start-up can be a particular challenge in rural areas because the financial intermediation system is weak. Incomes are lower in rural areas, leading to less ability for the entrepreneur to raise equity funds from own sources or family and friends. Banks tend to be less capable of assessing business plans and are more risk averse. Start-up costs can be higher in rural areas because facilities may have to be constructed rather than rented and equipment must be imported. Mainstream venture capital is designed to bridge this gap but is primarily designed for high-growth/high-return ventures which are also not normally evident in rural areas. Many rural areas have bridged this gap through the creation of community development finance institutions (CDFI) which provide revolving loan funds to local SMEs and start-ups. The initial capital for the institution may be raised from the local community, other financial institutions and government. CDFIs can be banks, credit unions, loan funds, microloan funds or venture capital providers. CDFIs are normally accountable to their local community and operate on a not-for-profit basis with legislative and funding support from governments. For example, the United States Treasury provides technical and financial assistance including loan guarantees to CDFIs across the country.

Source: Elaboration based on US Treasury (2016), "Community Development Financial Institutions Fund", www.cdfifund.gov/Pages/default.aspx (accessed 9 January 2016).

One of the key issues raised by businesses in Poland – both urban and rural – is the desire for a stable regulatory environment. In some cases, new regulations have been imposed that have significant impact on businesses in a short timeframe which has made it very difficult to adjust (e.g. windfarms).

Rural businesses have a variety of options to access capital

Access to finance is indispensable for the development of new businesses and the expansion of existing ones. Rural Poland is dominated by micro- and small businesses, which can face particular challenges in accessing finance. In particular it is found that "incomplete information and even lack of information from the part of both capital providers and enterprises prevents the development of normal and efficient relations between them; lack of a credit history and insufficient guarantees for creditors, especially in the case of the small and young firms; limited and, sometimes, inadequate range of financing products are also the barriers" (Czemiel-Grzybowska and Skowronek-Mielczarek, 2017). A challenge for rural enterprises is their creditworthiness and options to provide collateral for credit.

Poland has a number of programmes that provide various forms of self-employed persons, entrepreneurs and SMEs more generally to help to overcome these obstacles. A large number of these are linked to EU funds (e.g. the 2014-2020 ROPs include funds dedicated to the SMEs in disadvantaged areas). The Operational Programme Knowledge Education Development implements the European Social Fund and the Youth Employment Initiative in Poland with specific funds for skills development targeted to rural areas and areas in eastern Poland. There are also subsidies available from district employment agencies and loans, credits and guarantees offered by the Joint European Resources for Micro-to-Medium Enterprises programme of the EU (JEREMIE). The Rural Development Programme provides financial assistance for microenterprises. Under this programme, companies located in a rural or an urban-rural area will be refunded up to 50% of eligible costs. Farmers insured by KRUS are eligible for a start-up bonus (to a maximum amount of PLN 100 000) and LAGs offer grants to rural businesses as well (up to PLN 100 000). Groups such as the Rural Development Foundation support non-agricultural business through a micro-loan programme established in 2003. There are also funds that are targeted to promote entrepreneurship in areas that have been identified as requiring strategic intervention. For example, Zachodniopomorskie has established special integration areas where entrepreneurs who invest in these areas have access to special EU funds.

Despite the aforementioned options, there seems to be a reluctance to borrow money in rural areas and SMEs report a lack of access to finance as a barrier to business development (Pellešová and Šýkorová, 2014). Taking on debt is seen as a very large risk by many individuals, even those with sound investment prospects. As a result, the demand for borrowed funds is less than it should be given the potential for sound investments. Farmers, current business owners and potential entrepreneurs could all benefit from exposure to basic business management concepts, including when and how to make use of borrowed funds to increase profitability.

There are a range of new tax incentives for research and development, but links between research institutions and rural enterprise are generally weak

Expanding employment has led to increased output in Poland, but with only weak gains in productivity. As labour becomes more scarce, future economic growth will have to be driven by increased productivity (Government of Poland, 2017: 22). This requires both better workforce skills and increased rates of innovation in terms of products and processes. Because rural industries such as agriculture, forestry and mining, are export-oriented it is vital that they have access to the most modern technologies and have the financial means to adopt them. Foreign direct investment can provide both the knowledge and the financing, but Poland's access then becomes dependent upon the strategy of multinational firms. In rural areas where SMEs are dominant, there is only limited potential for foreign direct investment to occur, but foreign technology can be readily transferred to Polish firms. However, many rural SMEs lack the ability to identify new technologies and may also lack the financial resources to adopt them. The resulting technology gap weakens the competitive position of Polish rural businesses and can contribute to weak employment and income levels.

Poland has lower levels of spending on research and development (R&D) (see Chapter 1). In general, the take up of R&D tax incentives has been low, particularly in rural areas (OECD, 2016c). In an effort to address these issues, Poland established a new system of R&D tax incentives in 2016 which increased deduction rates (i.e. for labour costs and other R&D costs), and in 2017 further incentives were established (under the Act on Innovativeness) which further expands such tax incentives. Some R&D tax incentives are linked to investments in special economic zones, of which there are several located in rural regions of Poland. These zones also benefit from reduced taxes on profits and property with rural areas having the highest such tax deductions.

The main academic institutions for R&D in Poland are located far from rural areas for the most part and this can impact the relationship between rural enterprises and public research. The connections between private enterprises and universities in many cases could be strengthened. Poland has a network of national research institutes that support and collaborate with specific industries (e.g. agriculture); however, the relationship between regular universities in the regions and business has not traditionally been strong and the culture of such collaboration outside of the academic research communities is quite new in many universities. Regional development funds provide support to enhance these connections. For example, Białystok University of Technology has recently developed an academic business incubator and there is an Institute of Innovation and transfer of technology. These are promising developments and it is hoped that in the coming years the relationships between regional universities and rural businesses can be strengthened through such efforts. A recent World Bank report on technology transfer in the region of Podkarpackie recommends a single regional technology transfer office to overcome the challenge of unexploited R&D potential – a model that may be useful in other Polish regions as well (World Bank, 2017b).

Skills upgrading and training for businesses

Rural areas in Poland have more limited access to professional training opportunities and it has been reported that the educational system is not adequately flexible in meeting labour market needs (Sienkiewicz, 2009). Where professional training has been supported by post-secondary institutions in Poland, this support is not always in line with employers expectations and as such, the need for retraining can disproportionately fall on to business owners (Sienkiewicz, 2009). There are several options for business training in Poland, such as on-the-job training offered through the formal system of vocational education, training provided by employers and training provided by private training institutions which tend to be located in regional cities. Employers can finance or co-finance training and education, including vocational education training; 15% of Polish employers use public funds for such purposes (Turek and Worek, 2015). Are Participation in continuing

education in Poland is low and according to 2010 Eurostat data, only 22% of Polish firms provided continuing vocational education and training compared to 66% in the EU-27 (European Commission, 2014b).

The OECD has noted that Poland tends to focus on supporting the "hard" skills of entrepreneurs, necessary to operate a business, and that more could be done to support management skills (OECD, 2016a). There are a number of new instruments to support skills development in Poland such as the National Training Fund (operated by powiat labour offices), which supports in-house training in companies. Rural firms have a lower rate of technology adoption and as such, targeted training to support innovation diffusion is important (Wasilewski, Floriańczyk and Wigier, 2013). Active face-to-face support in terms of mentoring, training, advisory services and counseling are critically, important – particularly for smaller firms looking to take the next step to expand their operations.

Enhancing the export capacity for small and medium-sized enterprises

Recent OECD research has demonstrated the importance of the tradeable sector for rural regions that face distance to markets (OECD, 2016f). It can be a struggle for rural firms, particularly smaller ones, to develop export markets. Poland is characterised by a large share of small rural firms, many of which are based on local markets. Increasing the scope of the non-agricultural rural economy will rely in part on enhancing the export capacity of rural firms.

Italy has adopted a unique approach to helping SMEs overcome barriers to accessing foreign markets through a programme that supports the costs of hiring a temporary export manager (as part of the 2015-17 Special Plan for the Made in Italy Promotion) (OECD, 2017f). The programme helps SMEs to hire a full-time or part-time temporary employee to work in the small business in order to help them establish marketing, sales, accounting, information technology and other processes needed to export to a new market. There is an element of training involved in the programme as well. Once the individual has developed systems to support or enhance a firm's export capacities, this knowledge is passed on to existing staff in the business and the temporary export manager goes on to support other small businesses. The programme entails two components: a training programme for temporary export managers and a voucher for SMEs to partially cover the cost of employing a temporary export manager (OECD, 2017f). This programme serves to both help firms access new markets and build their internal capacity to continue to do so through employee training.

Fostering entrepreneurial attitudes

While there are multiple models of how to support new start-ups, a bigger challenge is in finding ways to motivate individuals to consider opening a business and to take the first steps in getting ready to do so. Until a potential entrepreneur can be identified it is difficult to provide any form of support. In principle, farmers should be a natural source of entrepreneurial activity. They are already owners and operators of a small business so they do not have to make the large leap from either unemployment or wage labour to self-employment. Farmers also have a wide range of skills that can be applied in other types of work and they have some underlying net worth – mainly in the form of farmland. However, small farmers in Poland seem either reluctant or unable to expand their sources of income, other than through direct marketing of farm products. Changes in this attitude will be required to increase the number of new business starts to a level that can absorb the large number of underemployed individuals in many rural labour markets. While there is considerable potential for in-migrants or expats to start businesses in rural regions, this tends to be more common in areas close to urban centres and in areas with high amenity values that attract new residents. Rural places lacking these geographic advantages are almost certain to have to rely on their existing population for new entrepreneurs.

Supporting entrepreneurial networks and social enterprise

Entrepreneurial networks support businesses through access to joint marketing, access to larger markets, new technology and know-how, and improved practices. A commonly recognised barrier to the development of rural entrepreneurship is the reluctance to co-operate and to create institutions on a bottom-up basis, lack of confidence and generally weakness of so-called social capital (FAPA, 2016). This is particularly relevant in rural areas, where there is a preponderance of social networks as opposed to formal networks and associations.

LAGs play an important role in this regard – they are the mainstay for the implementation of the LEADER-CLLD approach. LAGs identify and implement a local development strategy and take decisions about how to allocate and manage financial resources. LAGs are formed by a partnership of public and private and civic/voluntary sectors. They develop collective projects and multi-sectoral actions in order to enhance an area's competitiveness. Poland now has over 300 LAGs which cover around 90% of the country's territory. These associations serve several functions and can support local entrepreneurship in a variety of ways, including territorial and or sectoral marketing, product development and business incubators.

LAGs are key institutions to support endogenous, bottom-up development in rural Poland. In elaborating a local development strategy, LAGs identify an area's key strengths and help to establish both partnerships, skills and facilities to promote entrepreneurship. Common areas of activity include rural tourism, protection of culinary heritage, entrepreneurship development and local product promotion. In particular, LAGs in Poland tend to focus on supporting micro-entrepreneurs and small businesses, which are the dominant forms of entrepreneurship in rural areas. The strategies of many LAGs across Poland are similar – focused on supporting local heritage, tourism and culture often associated with local food products. These are important activities, but embrace only one aspect of the rural economy. Many LAGs focus on promoting local products entailing small-scale production of high-quality products (e.g. Lokalna Grupa Działania "kitchen incubator" in Małopolskie; Box 2.9). Co-operatives are very important for these incubators and often employ women with little or no labour market participation. Women have much lower rates of entrepreneurship and employment in rural areas and as such, these types of activation measures supported by LAGs are valuable (Szczygieł and Piecuch, 2014). If this is a going to be a viable economic development strategy in the longer term, there needs to be much stronger and more effective co-operatives to support this work. Most rural enterprises operate in the services sector and are based on local markets and have limited opportunities for growth. An ongoing issue is how to help small firms reach the next level, expand their products and access new markets.

Social entrepreneurship is an underdeveloped activity

The OECD identifies social enterprise as "any private activity conducted in the public interest, organised with an entrepreneurial strategy, but whose main purpose is not the maximisation of profit but the attainment of certain economic and social goals and which has the capacity for bringing innovative solutions to the problems" (OECD, 1999). Social entrepreneurship is not a well-developed activity in Poland and EU funds have been instrumental and in instigating social enterprises. Since the 2007-13 programming period,

ESF programmes have included social entrepreneurship in their funding priorities. For example, the Human Capital Operational Programme includes start-up grants for entrepreneurs setting up social co-operatives and other non-financial support specifically aimed at social economy initiatives. Currently, the Operational Programme Knowledge Education Development and regional operational programmes support social enterprises through, for example, repayable financial instruments and subsidies for job creation (both are co-financed by the ESF). The Operational Programme Fund for Civic Initiatives also specifically refers to social enterprises among its beneficiaries. All the funds for this initiative come from the national budget. The leading ministry for the social economy and social enterprises in Poland is the Ministry of Family, Labour and Social Policy. Poland's state development bank (BGK) has also supported the social economy through its EU-funded financial instruments

Box 2.9. Local action groups: Profile of Lokalna Grupa Działania, Małopolskie

The local action group "Welcoming Limanowska Lands" (Lokalna Grupa Działania "Przyjazna Ziemia Limanowska", est. 2006) in Małopolskie has 86 members in total, including 9 gminas. The group supports rural development and is presently focused on two main areas of action: 1) entrepreneurship and tourism development (tourism amenities, cultural heritage and the natural environment); and 2) social capital development (traditional folklore, supporting local identity and customs). The area in which the LAG operates has limited employment opportunities; it is a largely agricultural and tourism-based economy and has low levels of entrepreneurship. The group supports a range of soft and hard projects, including initiatives to make the area more attractive to children and youth, efforts to establish a stronger town centre, support for traditional products including cultural and culinary heritage events.

One such initiative to support rural entrepreneurship is a "Kitchen Incubator" in Zakrzów by the Foundation for Environmental Partnership in Kraków in partnership with the LAG "Gościniec 4 żywiolów" (LAG established by four gminas). This is the first initiative of this kind in Poland. The Kitchen Incubator was established in response to membership demands to help them move traditional produce and products from farm to table. Community members expressed an interest in increasing their knowledge of food processing in order to meet sanitary requirements. The LAG aspires to be a model region for kitchen incubators and to – together with a local sales system - promote local products and link this to the tourism economy. Beyond the kitchen and foodprocessing facilities, the Kitchen Incubator also provides training for gastronomy and promotion and seeks to engage students of vocational schools and unemployed individuals in its initiatives.

This approach to local development is based on the tradition of fairs and markets – involving direct contact between farmer, producer and consumer with a focus on high-quality, small-scale local products. Co-operatives are an important customer of these incubators because they employ unemployed women. Given the small size of farms in the region, the possibility of added value for these farms can be an important source of income. Farmers in Poland can process and sell food from their own farm with a tax of 2%; but it still has to be processed in official conditions and checked for health and safety standards. A key issue for LAG initiatives such as the Kitchen Incubator is to support those individuals developing local products to eventually expand their enterprises should they so wish as it is these types of activities that will generate employment in the future (as opposed to small home-based microenterprises).

The local action group "Welcoming Limanowska Land's" development strategy is similar to that of other LAGs operating in the region, such as the local action group "Beskid Gorlicki", whose focus is on developing tourism, cultural heritage, infrastructure, respect for history and diversity of culture. Tourism is the most important target. The group supports the creation of two incubators in order to help farmers to start processing agricultural products and get them to market. This work also promotes local traditional foods and is connected to tourism strategies. Given the similarities of these and other groups operating in the region, there should be efforts to share best practices and, potentially, link up activities. LAGs are presently focused on meeting the parameters of EU funding and adjust their activities accordingly; however, there is a need to think about their longer term viability and group associations and collaboration may strengthen that possibility.

There are many local groups that promote initiatives in this area, such as the Foundation for Entrepreneurship in Suwałki (Podlaskie), which is working to create a loan fund to support continuing education to finance training and post-graduate studies for social enterprise development. They work with persons with disabilities and try to activate them in workshops to involve them in social life. An example of rural social enterprise is Siedlisko (Opolskie region) which offers vocational training and employment opportunities to youth with intellectual disabilities and to long-term unemployed people from rural areas. The social enterprise offers full-time care for seniors and people with chronic illnesses, and delivers catering and laundry services to local companies, individuals and public institutions. This successful business model is now being replicated in other rural municipalities in Poland (Przybysz, Orzechowska and Cichowicz, 2017).

Beyond such social welfare functions, social enterprises in many OECD countries have fulfilled an important role by maintaining essential private services in rural communities by, for example, taking over ownership and operation of local supermarkets. For example, social enterprises have been established in rural areas in the United Kingdom in order to provide community transport, village shops, post offices and child care, where neither the private nor public sectors find it economically viable to provide such services (OECD, 2014b).

In Poland, it has been suggested that government agencies could better promote social enterprises by relaxing some of the long-standing rigid procedures in public procurement and financial schemes which can present a barrier to them (OECD/EU, 2017). Further, it is noted that state institutions do not support the social economy sector through public works, as is common in the United States for example (Praszkier, Zabłocka-Bursa and Jozwik, 2014). Foundations in Poland have expressed that while they support social enterprise through direct financing, they have limited resources to promote their activities and services, which can lead to limited uptake of these supports. Box 2.10 offers suggestions of policies to support social enterprise development.

Tourism and the preservation and valorisation of natural and cultural assets

Tourism-related services and amenities are an increasingly important strategy for economic diversification in many rural areas. The areas of Poland with the greatest potential for the development of tourism are mountainous and coastal areas as well as with lake belt areas, e.g. Małopolskie, Pomorskie, Zachodniopomorskie and Warmińsko-Mazurskie *voivodeships*. In rural areas near cities, there is also the potential to develop services related to natural and cultural amenities. In 2015 there were 4 400 tourist accommodation establishments in rural areas with 10 or more accommodation places (45% of the total number of such facilities) offering 271 600 accommodation places (39% of the total number) (CSO, 2015b). Tourism establishments located in rural areas in 2015 provided nearly 16 million overnight stays (22.4% of night stays in the country) for 4.7 million of tourists (17.4% of the total number of tourists) (CSO, 2015b). Poland has seen particular growth in agritourism in recent years, with nearly 8 000 farms providing such services and around 120 agritourism associations across Poland.⁴⁷

The LEADER, CLLD and the regional development programme have all been important in supporting the tourism economy. These programmes have been used to support tourism-oriented LAGs, entrepreneurs and *gminas* in developing tourism services and amenities. Community-based groups together with local governments and entrepreneurs have developed tourism strategies related to the key cultural and natural assets of the region, including culinary traditions and local food production. Building on

Box 2.10. Public policies to support social enterprise development

Social enterprises play an important role in addressing social, economic and environmental challenges; in fostering inclusive growth; and in increasing social inclusion because they aim to pursue the general interest and to benefit communities. The jobs created in the social economy present important features; they usually stay in the local community, as social enterprises rarely delocalise; they support vulnerable individuals – for those social enterprises which pursue this statutory mission; and they contribute to local economic development by creating opportunities, for example, in remote rural areas. Social enterprises are important not only for their capacity to create jobs, but as central players in fighting social exclusion, enhancing local social capital and supporting democratic participation, delivering good quality welfare services and furthering more inclusive economic development. The benefits of social enterprises are increased when they are adequately supported by public policies. OECD work in several member countries to analyse the conditions and pre-conditions needed to set up social economy and social enterprise organisations has highlighted the following key areas for national and local policy action.

Promote social entrepreneurship. Promoting positive attitudes towards social entrepreneurship is a preliminary step towards social enterprise creation. One of the ways to achieve this, and to attract young talent into the sector, is through inserting social entrepreneurship within entrepreneurship education activities in schools, vocational education and training, colleges and universities. An example of the broad approach that can be taken is the Jeun'ESS initiative, launched in France in June 2011 as a public-private partnership between a number of ministries and six enterprises and foundations from the social economy sector. Jeun'ESS promotes the social economy through the education system; and helps to integrate young people in the enterprises of the social economy. Another way to promote social entrepreneurship is to embed it as a key element in local or regional economic development strategies. This strategy was adopted the Provence Alpes-Côte d'Azur region in France, where regional poles for innovation and socio-economic development ("PRIDES") have been created in areas such as social tourism.

Build enabling legal, regulatory and fiscal frameworks. A priority for policy in the field of social enterprise development is to establish clear legal definitions of social enterprises in order to govern issues such as their tax treatment, access to markets and access to public business development support. Regulatory measures should be designed to allow social enterprises to meet their social and economic goals and develop medium- and long-term sustainability on the market. An enabling fiscal framework is also required. While many social economy organisations, such as charities, may enjoy fiscal relief, social enterprises frequently find themselves excluded from such benefits. Fiscal incentives can contribute to overcoming some of the difficulties confronted by social enterprises when working with disadvantaged people (such as low skills, requirement for intensive support, etc.) and also recognise their positive social benefits. Indirect fiscal measures can also be used to help support investment in social enterprise development. For example, in the United Kingdom, social enterprises can access Community Investment Tax Relief for those who invest in accredited community development finance institutions which focus on disadvantaged spatial areas and social groups; tax relief of 5% of the amount invested per year if given for up to five years.

Provide sustainable finance. Another key role of public policy is to stimulate the emergence of a strong financial marketplace for social enterprises. For example, the public sector may provide loan guarantees to banks for their lending to social enterprises in order to offset the perceived risk and increase the familiarity of banks with the opportunities and demands of the social enterprise sector. In parallel, more innovative institutional arrangements between governments and financial institutions may be encouraged, for example through policy measures that co-invest with the private sector and that seek social returns as well as financial ones (e.g. fiscal incentives for investors in social enterprises and direct injection of public funds into financial vehicles). Seed funding is also critical in the early phases of a social enterprise start-up through small loans or grants. For example, the federal government in Australia established the Social Enterprise Development and Investment Fund in 2010 to provide finance (through loans rather than grants) and support capacity development (e.g. start-up and incubator fund). In Belgium, there are government schemes that support social enterprises in each of the country's three regions; they provide start-up assistance and grants for the employment of disadvantaged jobseekers. The Brussels Capital Region also makes grants available to social integration enterprises.

Box 2.10. Public policies to support social enterprise development (continued)

Offer business development services and support structures. Social enterprises require business support. However, a one-size-fits-all approach to business support that expects social enterprises to require the same services as entirely commercial enterprises is likely to be suboptimal if the offer of information, advice, consultancy and so on fails to acknowledge the social dimensions which are central to the creation of social enterprises. "Braided support", which incorporates both general business support and support specifically tailored to meet the needs of social enterprise, can be more effective for the start-up and development of social enterprises (Daniele et al., 2009). Examples of such "braided support" include incubators such as NESsT incubators which operated in several countries, including Poland, to provide start-up support or social enterprises.

Source: Adapted from OECD/EU (2013), Policy Brief on Social Entrepreneurship, https://www.oecd.org/cfe/leed/Social%20entrepreneurship%20policy%20brief%20ENFINAL.pdf.

the success of these initiatives, it will be important to develop more value-added activities and to link up strategies in order to extend stays and make the most of the tourism economy. Regions such as Małopolskie have significantly expanded in agritourism in recent years. The challenge for the sector now is to develop higher quality tourism experiences. This will require skills upgrading and vocational training. As Poland further develops its tourism industry, the focus should progress from the primary use of promotional instruments to maximise visitor numbers and tourism receipts, to creating the necessary conditions for competitive tourism enterprises. Improvements on the supply side should focus on enhancing the competitiveness of the tourism industry by increasing productivity and quality, and encouraging innovation (see, for example, rural tourism in Germany, Box 1.7).

Another increasingly important strategy to support rural tourism is improving co-ordination between transport and tourism policy in order to enhance visitor mobility (OECD, 2016h). Rural areas often face obstacles to improved co-ordination due to the fact that transport services are generally administered, purchased and financed by different authorities or are very limited in scope. While there is significant potential for savings and economies of scale through improved co-ordination, a range of institutional and management systems can limit opportunities for improved efficiency. Poland could also further develop its tourism routes by further developing branding and identity; wayfinding strategies and signage; and marketing and communications strategies. Some areas are more advanced than others in undertaking such activities. The development of rest areas or points of interest, or sub-route experiences can help to invigorate villages and towns in those rural and regional areas with limited or no transport access other than by road through increased demand for tourist services such as hotels and restaurants, and the wider supply chain opportunities to support these services.

Smart specialisation in rural regions

Smart specialisation refers to national and regional strategies that combine industrial, educational, and innovation policies and investments to support a limited number of priority areas for knowledge-based investments. Concentrating on certain domains of knowledge or expertise can lead to more effective use of public resources and can help to eliminate the fragmentation and duplication of policy interventions. The smart specialisation approach has been promoted through European Structural and Investment Funds; however, its uptake in economies with less-developed research and innovation systems such as Poland has not always been smooth. For example, in an assessment of

smart specialisation strategies in Poland, Miller, Mroczkowski and Healy (2014) find that sector-based thinking in traditional industrial branches has dominated and that an emphasis on developing domestic research and innovation capacity has led to an underutilisation of external (national and international) knowledge sources. More generally, it is noted that the private sector has not been adequately engaged in priority setting.

Box 2.11. Strengthening rural tourism in Germany

A central goal of the German federal government's tourism policy is to boost the performance and competitiveness of the tourism industry. The focus is on supporting tourism small and medium-sized enterprises to develop their competitive position and fully unlock potential for growth and employment, particularly in rural areas, which account for 60% of Germany's territory and 32% of holiday accommodation capacity, but only 12% of tourism value added. They are structurally weak in terms of providing employment and income, but opportunities exist for rural enterprises to gain business from the growing tourism sector.

In response, the "Tourism Prospects in Rural Areas" initiative aims to strengthen tourism in regional areas. Outcomes have included a practical guide and 10 complementary detailed short reports presented at 20 local events in 2015, as part of a nationwide roadshow. Key players from the tourism industry, public tourism professionals, and representatives from the political and administrative arena have discussed and improved upon the project results in workshop sessions. Cultural tourism is a trademark for Germany as a travel destination but to date has predominantly benefited the larger cities. Building on the experience gained from the Tourism Prospects in Rural Areas project, the federal ministry commissioned a project in August 2015 entitled "The destination as a stage: How does cultural tourism make rural regions successful?". The project is exploring the potential to use culture to generate tourism in rural areas. It looks at how the various actors can be better networked, and what impact the marketing of natural landscapes and regional cultural assets – including cuisine and crafts – can have. For example, the 500th anniversary of the Reformation, "Luther 2017" (commemorating Martin Luther nailing his 95 theses to the door of the Castle Church in Wittenberg) is a significant cultural event, with the potential to promote rural tourism in Germany.

Source: OECD (2016h), OECD Tourism Trends and Policies 2016, http://dx.doi.org/10.1787/tour-2016-en.

Poland's current partnership agreement places a particular focus on smart specialisation measures that are implemented under the Operational Programme for Innovative Development and Eastern Poland and regional operational programmes. Regions may freely choose an area for smart specialisation and 9 of 16 Polish regions have chosen support for high-quality food production. There are ongoing debates about the utility and effectiveness of employing smart specialisation approaches in rural areas where there is a lack of critical mass (Box 2.12). As summarised in Table 2.5, low-density economies have unique characteristics that can require a different type of strategy than those employed in urban areas. Rural Poland has lower rates of R&D and business networks can be weak. Smart specialisation has the potential to help overcome these barriers by focusing networks in strategic areas. However, the manner in which such networks are approached matter and some strategies may be more appropriate than others. For example, foresight and strategic research and development programmes tend to be dominated by the research community and embody a research-oriented and top-down approach, while sectoral research programmes are more bottom-up and demand-driven and as such, entrepreneurs play a larger role in shaping the latter (Mieszkowski and Kardas, 2015). The need to strengthen innovation systems in Poland is well-acknowledged and in rural areas the latter approach may be more appropriate to meet the specific needs or local entrepreneurs.

A critical challenge for rural areas is to identify key actors and establish meaningful partnerships through which to pursue co-ordinated strategies across government, the research community and businesses. This takes time and often comes down to investments in human resources, i.e. funding for co-ordinator positions to build and support nascent networks.

Table 2.6. Implementation of smart specialisation in low-density economies

	Theoretical underpinnings	Key issues
Entrepreneurial discovery	Prominent role of entrepreneurial actors. Iterative process (trial-and-error). Cyclic process and evolving prioritisation. Structural evolution of the whole regional economy.	Lack of middle-range innovative firms. The role of intermediary organisations for innovation support. Distributed network arrangements supporting innovation outside university-towns. Distance slows down the organisation of multi-actor processes but may be eased as process evolves. Alignment between design and implementation of the strategy.
Related variety	Cognitive relation between existing sectors. Economic transformation across sectors highlighting the spatial dimension of innovation processes.	Thinner and more porous sectoral boundaries in small regions facilitate readiness for domain emergence. Large commodity firms are key agents for the emergence of a high degree of relatedness. Developing novel approaches to optimise physical connectivity in smart specialisation strategies is a joint concern.
Domains and lead markets	The targets for activities extend over multiple sectors. Focus on market creation, not single projects. Realise economies of scope and scale in knowledge application across sectors.	Role of regional universities and research institutes as brokers between science-based knowledge and local know-how. Large firms and trade associations are the main brokers of market intelligence necessary for supporting entrepreneurial endeavours. Digital and physical connectivity are crucial for better positioning actors in global networks. The demise of local banking institutions changes how entrepreneurs connect with such institutions, less in terms of loans and more in terms of financial and market intelligence.
Broadened view of innovation	Technical development integrated into local know-how. Applying technical knowledge developed elsewhere. Not only technological products, but also service and social innovation. Increased role of market intelligence.	Socially innovative and collective initiatives may provide novel, sustainable responses to long-standing rural challenges. Digital technologies can trigger novel applications in the service sector. Broadened view of use of natural resources: Better harnessing of the potential for natural resources processing may lead to more diversified regional economies.

Source: Adapted from Teräs, J.et al. (2015), "Implementing smart specialisation in sparsely populated areas", https://ec.europa.eu/jrc/sites/jrcsh/files/JRC98691.pdf.

Box 2.12. Rural smart specialisation

A smart specialisation strategy in rural regions is conceptually different from the usual approach, which is based on expanding formal research in high-technology industries to increase the role of these fast-growth sectors in the local economy. Rural regions in general are not ideal candidates for this approach. Most lack a university or any other formal research centre. Very little of their economic base could be characterised as being high-tech, advanced manufacturing or ICT-related. A relatively small share of the local workforce has an advanced degree or even a tertiary education. Low population density. small and dispersed settlement over a large geographic area limit interaction among people and firms. Similarly, small local markets and a small labour force make diversification and the opportunity for "related variety" innovations limited.

However, in a rural context smart specialisation can become a way to facilitate a stronger exogenous growth process. In a broad sense, smart specialisation is really a process that searches for evolving comparative advantage, as such it is useful in all regions. It is fundamentally a "bottom-up" development approach where the region determines its strategy on the basis of local capabilities. If the scope of the opportunities for support is expanded beyond the usual format of export-oriented high-technology products and formal research then the concept becomes more generally applicable. As noted by Charles, Gross and Bachtler, "Smart specialization should not be seen as being about technologies as such but about knowledge and its application, and this applies to all sectors, even agriculture and craft-based industries "(2012: 6). A large share of the firms in rural regional economies are small and medium-sized enterprises with no formal R&D activity, but in some cases considerable ability to innovate, although in ways that are not easily detected, since no patent is filed. Process innovations or innovations protected by trade secrets, or innovations that remain hidden because the firm is far from competitors, can be locally significant but do not neatly fit into a smart specialisation strategy. Innovations in the delivery of services or in goods that are not export-oriented are also not captured, but can lead to increased productivity and an improved quality of life.

Strategies for rural smart specialisation

Charles, Gross and Bachtler provide five important reminders when developing regional smart specialisation strategies that are particularly relevant for rural regions (2012: 45-46). These are summarised below. The importance of their points is that they reinforce the idea that smart specialisation has to do with expanding the competiveness of regions through investments that increase productivity in those sectors that are ongoing regional strengths.

- 1. It is important not to focus on the level of technology when identifying target sectors but on sectors that have future growth potential in the region. This could be in primary industries, such as forestry, fishing, mining or agriculture; in manufacturing, whether it is traditional heavy industry, boat building or specialised components; or in services including tourism, healthcare delivery or job training.
- 2. The selection has to reflect an existing competence, not simply an aspiration. It is also important that the projected demand for a particular good or service be large enough that providing it will have a noticeable impact on regional output and employment. There need not be an immediate increase, but there should be clear potential for significant growth over time.
- 3. Regions should look for synergies that build on existing capabilities. By extending the local demand for an input, or by using a byproduct from the production of a current output, the local economy can grow organically without having to establish a completely new production process.
- 4. Fostering innovation is a key function of smart specialisation strategy, but support for innovation should be applied where the potential benefits occur broadly and are not restricted to one or two specific firms. If an innovation is valuable to multiple firms in an important sector of the regional economy, then there will be stronger contributions to regional growth than is the case if the innovation only benefits a few firms with a narrow and small niche market.

Box 2.12. **Rural smart specialisation** (continued)

5. In choosing sectors or activities to support, regions must be aware not only of their capability, but also the potential of other regions. The underlying logic of smart specialisation is to support activities that result in tradable goods or services and while each region focuses on its opportunity to export, it must also assess the possibility that other regions may be better positioned, and are more likely to capture market opportunities.

Beyond technology-driven innovation

While national governments largely continue to emphasise technology-driven innovation as the core of smart specialisation strategies, academic research is increasingly arguing for a more nuanced approach that includes "demand-driven" innovation in the form of: applications, entrepreneurship, user-driven innovation, and innovation in services and organisations (Wintjes and Hollanders, 2010). The shift includes a recognition that while the production of inventions may continue to be concentrated in a small number of metropolitan regions, all regions can benefit from adopting these inventions in the form of regional innovations. It is the ability to adopt and adapt new knowledge that separates higher growth regions from slower growth ones (Wintjes and Hollanders, 2010: 17-19).

Wintjes and Hollanders also report the results from surveys of experts on the most important sectors for future regional economic development and the most important technologies. Of the 38 sectors mentioned, hotels and restaurants; health and social work; and agriculture, forestry and fisheries were the 5th, 6th and 7th highest ranked, ahead of computer and data services, pharmaceuticals, software, and aircraft and spacecraft (p. 29). The authors note that the high rank of traditional industries suggests that the experts believe that innovation in these sectors can have a much larger impact across regions than is the case for the more advanced industries because they are so pervasive in many countries (Winties and Hollanders, 2010: 28). Similarly, when the experts were asked to pick the most important technologies for the future the most mentioned was ICT, but alternative energy was second and process control and agricultural and food technologies were in the top 20 (Wintjes and Hollanders, 2010: 30). The larger point made in the study is that there is considerable opportunity in traditional industries for future economic growth and that regions where there is a strong comparative advantage in these industries should carefully assess how they can invest in increasing the competiveness of local firms as a central element of their smart specialisation strategy. While these sectors may not benefit from the push effect of formal R&D investments, they can benefit from the demand for product or process improvement, and there are opportunities for small-scale innovations by entrepreneurs and existing SMEs based on local knowledge. Finally, the importance of regions importing inventions and knowledge developed elsewhere and using it for local innovations cannot be overemphasised as a way to increase the competiveness of local firms.

A broader understanding of what constitutes innovation, and the extension of what causes the innovation process from only technology – push to including demand – pull forces provides a way to see how smart specialisation policy can be applied in low-density areas. Almost by definition, low-density areas lack vital parts of the usual way that smart specialisation processes are described. They are too small and open to trade effects to have an endogenous growth process. They lack formal research capability in the form of large universities, government research facilities and corporate research centres. They lack the dense networks of firms, organisations and other institutions that are thought to be central to innovation. However, when innovation is extended to include a broader range of activities, including public service provision, government organisations and administration, tourism and the creation of "third-sector" solutions to social concerns, there are obvious examples of these forms of innovation occurring in large metropolitan regions and in small remote rural regions.

Source: Charles, D., F. Gross and J. Bachtler (2012), "Smart specialisation and Cohesion Policy: A strategy for all regions?", www.eprc-strath.eu/public/dam/jcr:ca04731c-2d7b-490f-a51e-3e368b7ecfb6/ThematicPaper30%25282%2529Final.pdf; Wintjes, R. and H. Hollanders (2010), "The regional impact of technological change in 2020", wintjes, R. and H. Hollanders (2011), "Innovation pathways and policy challenges at the regional level: Smart specialization", United Nations University, Working paper series 2011-027.

Spatial, land-use and environmental policies

Spatial and land-use planning in rural Poland

How land is used has a wide-ranging impact on economic development and quality of life in rural communities. Spatial and land-use plans are often thought of in urban contexts where population density is higher, pressures on land use are typically strong and there are many types of uses (e.g. business, residential, manufacturing and infrastructure) in close proximity to one another. In rural areas, the concerns are different, yet no less important. The types of land-use issues faced by rural communities depends a great deal on the nature of their local economy, their natural endowments, and proximity to urban centres and major roads. Rural communities may, for instance, need to balance the demands of industry in proximity to agricultural and forestry activities; the demand for natural amenities and tourism facilities; protection of biodiversity; the often conflicting mix of these activities with residential uses; and the growing need for climate-change mitigation and adaptation (e.g. flood water management). Managing these diverse uses is not just a technical endeavor, it requires community buy-in and sensitivity to historical and culturally embedded ideas about rural landscapes and their functions by residents, and "external" stakeholders, e.g. investors, regional policy makers. Rural municipalities, being land-rich with lower population densities, also need to consider how best to provide infrastructure and services to citizens in a cost-effective way while maintaining accessibility. This includes providing connections and access to waste, sewage and water systems, which in urban locales are often more established. Good land-use planning is therefore critical – it brings spatial order to individualised decisions about where to live, work, grow food and manufacture products and helps manage environmental risks.

Land-use planning in rural Poland faces a number of challenges. The rapid peri-urban growth experienced by many rural communities (particularly around medium-sized and large cities) has increased demand for new infrastructure and services and can also create conflicts with exiting land uses such as agricultural activities and industry. In other rural communities, trends of deconcentration and depopulation demand new ways to manage infrastructure and service delivery and to maintain high-quality environments despite decreasing local revenues. As noted in the proceeding section on agriculture, the small and fragmented nature of farms in some areas of rural Poland is impeding agricultural modernisation. In this case too, land-use policies have an important role to play in consolidating land. Spatial planning is also important for the revitalisation of economically and socially marginalised communities, such as the areas of former collective farms. Furthermore, economic change generates new land-use and infrastructure requirements. For example, fostering the growth of the tourism industry may require new transport and communications linkages, and the protection of environmental assets and amenities. Conflicts can emerge through competing interests for land use. For example, the needs of traditional industries such as forestry and emerging ones like renewable energy differ from recreational uses associated with tourism. Spatial planning undertaken in a collaborative way at the right scale can provide an effective way of managing these issues.

Poland benefits from a balanced settlement structure with a number of small, mediumsized and large cities as opposed to the dominance of just one or a few large cities (see Chapter 1). This settlement structure raises the importance of rural-urban linkages and co-ordinated spatial planning. Finally, rural gminas are simply smaller than their urban and mixed counterparts and as such, have more limited internal capacity to undertake the technical aspects of planning activities. As such they can face power asymmetries in negotiations or collaboration with larger urban governments and may require additional support to develop and implement spatial plans and land-use regulations. The new Strategy for Responsible Development (SRD) ushers in a departure from previous approaches (the Strategy for Regional Development) by placing a greater emphasis on coherence and cohesion and support for smaller places – improving the links between small and medium-sized cities and rural areas – and not just the largest urban centres. In the government's assessment, the previous model, which concentrated investment in larger cities, has not led to the anticipated diffusion economic growth to smaller places. Under the SRD, the proposed strategy is to target support to both leading and lagging areas in order to support to all types of rural areas. Effective spatial management practice and the appropriate governance frameworks will be critical to realising these objectives. Poland does not presently have an effective policy framework to realise the benefits of spatial planning for rural areas.

The system of spatial and land-use planning

Like many OECD countries, Poland has a nested hierarchy of spatial development strategies wherein strategies of higher levels of governments are meant to inform those of the government below (Box 2.13). The national government sets the overarching legal framework that regulates land use and building law in the country and has also developed a national spatial strategy that provides an assessment of key challenges and puts forward a vision for the country's spatial development to the year 2030. In turn, there are regional plans which describe general development conditions and demarcate the regional settlement system. However, it is at the level of local government where the most detailed decisions about how land is used are taken through spatial studies, local spatial development plans and planning (or development) decisions. The elaboration of local spatial development plans is a key function of local government and a process which ideally should be achieved with the engagement of the local community and in co-ordination with surrounding ones which are functionally connected. It is critical that spatial policies are well-aligned to both infrastructure/transportation and economic development strategies and that land-use/spatial policies effectively manage land-use conflict and anticipate and react to changing conditions.

The frameworks, rules and regulations for land use and spatial planning are relatively new, having changed significantly since 1989. There are a number of regulations that have detracted from the effectiveness of spatial policies and incentives for inter-municipal co-ordination are quite limited (though they have increased with the introduction of the EU's integrated territorial investments). One of greatest obstacles to co-ordinated spatial planning has been the very low coverage of spatial plans across the country and recourse to planning decisions instead (one-off building permissions that are not linked to land-use plans). Further, while agricultural land consolidation is taking place, it is a slow process and recent restrictions on trading agricultural land place limits on consolidation. Poorly managed peri-urbanisation has resulted in the loss of agricultural land with high-quality soil. The national government has long recognised that additional reforms to the framework of spatial planning in the country are needed and some incremental changes have been made; however, more remains to be done (Government of Poland, 2007; 2011). Poland needs to adopt a comprehensive approach to land-use planning that can meet the challenges facing different types of rural communities. The remainder of this section discusses these issues in turn.

Box 2.13. The framework for spatial planning in Poland

National spatial planning: The overarching framework

The 2003 Spatial Planning and Development Act (along with its secondary legislation) regulates the development of spatial policies and spatial plans (concepts, plans, studies) and divides various powers among the administrative tiers of government. The spatial plan prepared and adopted at the national level is the National Spatial Development Concept 2030 (NSDC). It presents an assessment and analysis on the state of spatial planning in the country and puts forward a vision for the country's spatial development to the year 2030. The NSDC is a basic co-ordination measure of spatial policy at the national level in Poland that involves checking the compliance of a regional spatial development plan for each voivodeship with the NSDC. However, it is not an internally binding document. It is the purview of the Council of Ministers to decide the extent to which the NSDC will inform government programmes (and be binding upon them). At present, the planning documents of lower level governments should be compliant with higher level plans but the criteria of such compliance are ambivalent and there is no legal basis for harmonisation between thematic plans. The NSDC offers a signal to local governments of best practices that should be adopted, with no regulatory ability to shape land-use practices. Poland has adopted a number of so-called "special infrastructural acts" (specustawy inwestycyjne) pertaining to different types of infrastructure development – e.g. railroads, public roads, airports, liquefied natural gas terminals and anti-flood buildings. Investments made under special acts do not need to conform to the Spatial Planning and Development Act, thus making it possible to develop a project that is contrary to local plans. A new law is presently being drafted (named the "Strategic Public Investments Act") that would revoke six of the special infrastructural acts, establish expropriation and administrative decision rules, and create an end date of 2023 for the acts. There are a number of other acts and regulations which also affect the local planning and regulatory environment, such as the Building Law (1994), the Real Estate Management Act (1997) and the Environmental Protection and Management Act (2001). The Metropolitan Association Act in Ślaskie voivodeship (9 March 2017) was recently to address the need for public transport across functional urban areas as was the Revitalization Act (9 October 2015), which specifies the legal basis for the revitalisation of degraded areas.

Regional spatial planning

The regional level (voivodeship) has a somewhat limited role to play in spatial planning. The regional spatial development plan is, in form, much like the National Spatial Development Concept 2030. There are no legal tools at the regional level to establish land-use planning regulations. The regional plan outlines investments of national and regional importance and general development conditions. It also demarcates the regional settlement system, protected areas and functional areas important for the whole region and defines closed (e.g. military) areas, areas with the potential to flood, and grounds with mining resources, all of which require special treatment. The regional level acts mostly as an advisory body in planning; it may give opinions on local spatial development plans and reconciliation on regional self-government tasks. Regional spatial planning is developed through a formal and largely closed process and there are no advisory bodies which inform its development. This limited consultation reduces buy-in to the resulting plan. The voivode - the legal representative of the central government in the region – is responsible for controls and audits and for some policy functions. Taken together, the regional level offers strategic advice and analysis through the marshal and control and audit of legal procedure for land-use plans through the *voivode*.

Box 2.13. The framework for spatial planning in Poland (continued)

The planning system at the local level

Local governments are the main actors in Polish land-use planning. Three tools presently shape land-use planning at the local level: spatial studies, local spatial development plans and planning (or development) decisions. **Spatial studies** form a kind of master plan for development in a municipality or local government (*gmina*), but they are not an act of law. These spatial studies are referred to in the Planning Act as "Study on the conditions and directions of spatial development". They are a legislated (obligatory) framework study used to guide local planning policy in municipalities in the preparation of local spatial development plans. Local spatial development plans should be consistent with spatial studies, but the study itself is not a legally binding document on local spatial planning. Spatial studies provide an analysis and commentary on a range of social, economic and demographic issues that affect local planning and cover the entire municipal area.

Local spatial development plans are legally binding documents; they are an essential planning document for an area. They prescribe particular permissible assignment of land uses and detail the size and volume of permitted development, rules for property division, and the protection of cultural assets and heritage buildings for a given area in a municipality. The plans also estimate infrastructure costs (e.g. roads) and detail property expropriation that would result from their development. Since 2008, plans also require a strategic environmental assessment. The ordinances outlined in local spatial development plans are the only legal mechanism that local governments have to determine development boundaries and direct permitted uses. By law, all members of the public have the right to participate in the process of developing local plans; basic participatory procedures in the preparation of the plans are legally prescribed. There is no right to develop associated with land ownership. Enforcement powers related to the local spatial development plan and compliance with building codes falls on the district or country level (powiat).

Planning decisions are a simplified administrative mechanism for building approvals, change of land use and for the location of a public investments used in areas for which there is no valid land area development plan. Planning decisions are not required to be consistent with a local government's planning study, which sets out the conditions and directions for development. Planning decisions are a controversial measure. They can create an incentive for disjointed development and are a procedure that runs parallel to the planning system as a whole, and often with contrary aims. In many municipalities, planning decisions are credited with leading to poorly co-ordinated developments and sprawl (Radzimski, Beim and Modrzewski, 2010; Halleux, Marcińczak and van der Krabben, 2012).

The influence of European Union policies

While the European Union gives member states a free hand in their spatial planning systems, it does forward strategic documents about infrastructure and nature preservation that can inform local planning. For example, the EU's **Natura 2000** has established a network of protected bird and habitat sites that are identified as special areas of conservation or special protection areas by member states. This includes both lands that are considered nature reserves and thus limit human activities and those which allow them within a sustainable management regime. Natura 2000 designated lands are identified in local spatial development plans. The EU's classification for high nature value land also affects land use. The EU also influences land uses through environmental measures, such as land-use management practices to promote biodiversity which are part of **Common Agricultural Policy** and support for reforestation and through support for investments (e.g. community revitalisation).

Sources: OECD (2016b), Governance of Land Use in Poland: The Case of Lodz, http://dx.doi.org/10.1787/9789264260597-en; Radzimski, A., M. Beim and B. Modrzewski (2010), "Are cities in Poland ready for sustainability? Poznań case study"; Halleux, J.M., S. Marcińczak and E. van der Krabben (2012), "The adaptive efficiency of land use planning measured by the control of urban sprawl: The cases of the Netherlands, Belgium and Poland", http://dx.doi.org/10.1016/j.landusepol.2012.01.008.

Policies to consolidate and preserve agricultural land

Land-use policies serve multiple functions, one of which is to consolidate and protect agricultural land. The high degree of land fragmentation in some parts of rural Poland creates economic inefficiencies as a result of farmers having to travel further in order to manage their farms or forestry activities (e.g. Małopolskie, Świętokrzyskie, Lubelskie and Podkarpackie regions). Land consolidation is one of the main methods by which to overcome this inefficiency - it entails decreasing the number of separate and non-adjacent plots and improving the spatial configuration and location of these plots relative to dwellings and service structures. The consolidation and management of land in this way can also help to establish larger plots, thus reducing the number of small-scale and inefficient farms. Land consolidation and exchange can also be used to counteract the ongoing fragmentation of the agrarian structure of Poland – thus offering the opportunity to create diverse landscapes with conditions for multifunctional development of rural areas, including recreation and tourism (Kupidura et al., 2014). Land consolidation can have considerable benefits. It has been shown to improve the living and work conditions of local inhabitants and enhance their quality of the environment (Leń and Król, 2016).

There are two acts related to agricultural land in Poland: one relating to state-owned agricultural land and the second on the trade of land in the private market. Both acts prioritise family farms and their extension. Local authorities (the marshal or *voivodeship*) are responsible for the merging of plots of land at the *voivodeship* level. However, they have very limited instruments by which to undertake such work. Until recently, in terms of state-owned land, Poland's Agricultural Property Agency (Agencja Nieruchomości Rolnych, ANR) was the primary state agency in charge of land consolidation; on 1 September 2017 the National Center for Support of Agriculture (Krajowy Ośrodek Wsparcia Rolnictwa, KOWR) was launched, and accordingly, the ANR ceased to exist (along with the Agricultural Market Agency). The ANR was established in 2003 with the main goal of acquiring agricultural land from former state farms (encompassing approximately 4.7 million hectares) and restructuring it for privatisation through sale or long-term lease. 48 Between 2003 and 2016, the agency held the right of pre-emption to buy agricultural land; over this time 17 500 hectares were acquired in this manner and 9 800 hectares were sold to farmers to enlarge their land. The ANR focused its efforts in recent years on acquiring property to improve the structure of farming in regions where agriculture is the most fragmented (southern and eastern Poland).⁴⁹ While land consolidation has been taking place in Poland, it remains slow and in many cases, the practice of land leases serves to preserve the structure of land ownership (Rowiński, 2014). For example, the region of Małopolskie has some of the smallest and most fragmented farms in Poland, and in many areas mountainous terrain. While the average size of farms in the region has doubled since the early 1990s, they remain too small and unproductive to provide a living for a family.

Creating markets for the exchange of fields among farmers in a community is a complex process. Options to address this include establishing co-operatives to amass this land and cultivate it jointly or to facilitate long-term leases between parties that have land with adjoining borders as a first step to assemble large contiguous parcels of land.

Recent reforms to the sale of agricultural properties are biased against large farms

In April 2016 a new act suspending the sale of properties from the agricultural property stock of the state treasury introduced new conditions on the sale of agricultural land. Under the new act, the agency cannot sell agricultural land for five years with the exception of small plots of land that do not exceed 2 hectares. Under the new rules there are additional requirements that: land purchasers need to be a qualified farmer or alternately, a relation of the seller, or a public authority or church; the total land owned by the farmer cannot exceed 300 hectares; and the farmer must pledge to work the land for a decade. Any exceptions to these rules require approval by the KOWR. The new rules serve to increase small to medium-sized family farms and thus enhance the productive potential of agriculture. However, they are biased against farms larger than 300 hectares. As such, this rule detracts from the goals of agricultural modernisation and increasing competitiveness and should be revisited. The European Commission has ruled that similar laws in other Central and Eastern European member states violate the free movement of capital and freedom of establishment and should be changed (European Commission, 2016b).

Stronger regulations are needed to protect high-quality agricultural soils

Like most OECD countries, Poland has a law to protect high-quality agricultural soil and forest lands. Change of use of such land is limited in order to prevent soil erosion and degradation, rehabilitating degraded soils and managing natural water reservoirs. In the case of the highest grade soils, any change of use on agricultural land requires permission from the Minister of Agriculture and Rural Development. Changing the use of forested land requires permission from the Minister of Environment, in the case of property stock of the State Treasury, and from the marshall of the *voivodeship* in other cases. However, agricultural land with high-quality soil is not subject to the protection of the Agricultural and Forestry Land Protection Act if it is within the boundary of an urban *gmina* and there are financial incentives for *gminas* to convert agricultural land to residential or businesses uses because they stand to gain more from the property tax (OECD, 2016b). Further, a lack of multiannual zoning plans in many *gminas* results in *ad hoc* decisions about land management which undermine soil quality protections.

Poland has one of the highest rates of agricultural land conversion in Europe (Ustaoglu and Williams, 2017). Since the political transition in 1989, there has been a decrease in the surface area of arable land and pastures, and concurrently, an increase in the surface area of wastelands and forests, and an expansion of residential areas (Hernik, Chen and Gawroński, 2015). Polish municipalities converted 545 000 hectares of agricultural land to non-agricultural uses between 2004 and 2012 (Kowalewski et al., 2013). Furhter, some areas have experienced agricultural land abandonment (Dzun and Musiał, 2013). This is not a universal trend; regions such as Podlaskie have a strong agricultural sector and the share of agricultural land has increased. The conversion of agricultural land is not in and of itself problematic, depending on the grade of the agricultural soil and the economic rationale (e.g. the need for land for new homes and businesses). It is, however, problematic when high-quality agricultural land is converted to other uses or where land uses are incompatible (e.g. animal husbandry next to residential zones) or otherwise inefficient in their allocation. The scope of these issues are difficult to gauge, in part because there is poor co-ordination between the regional and local levels in terms of monitoring land-use change. There are, for instance, no data on planning appeals and the regional government does not assess the impact of land-use planning in communities. The Ministry of Agriculture and Regional Development does not have numeric data on how much agricultural land is lost in rural areas. More effective legal regulations are required to protect high-quality soil from being used for non-agricultural purposes and monitoring should be enhanced. Further, the KOWR could be more active in purchasing and consolidating land, akin to the role of SAFER in France (Box 2.14).

Box 2.14. National institutions to manage agricultural land: The French example

The French national programme - the Society for Land Development and Rural Settlement (Société d'aménagement foncier et d'établissement rural, SAFER) – was established in 1960 to purchase farmland when it comes up for sale to help existing farmers increase the size of their farm to boost efficiency and to facilitate new entrants into farming. SAFER is a non-profit agency with a mandate to assist in farm reorganization, make farmland more productive and encourage young people into the profession. Today its mandate is a bit broader, with a focus on protecting farmland and the natural environment and supporting the development of the local economy. The organisation purchases agricultural land for resale to farmers or public authorities in order to maintain a specific pattern of land use in an area. It can also rent land for agricultural purposes, take on projects to maintain local landscapes and conduct studies on agricultural land prices. By law, SAFER is offered the right of first refusal to purchase agricultural land in order to maintain farms of a specific desired size (Articles L 143-1 and L 143-2 of the Rural Code). SAFER has regional offices throughout France. Agricultural land management is regulated by the state through regional départements of agriculture together with SAFER.

Source: OECD (2017h), The Governance of Land Use in France: The Cases of Clermont-Ferrand and Nantes Saint-Nazaire, http://dx.doi.org/10.1787/9789264268791-en.

Rural spatial and land-use planning

There is no specific separate framework for rural land-use planning in Poland; rural municipalities follow the same framework legislation as their urban counterparts. This is in contrast to some other OECD countries, such as France or the Netherlands, where there are separate land-use plans for rural areas with low levels of development.⁵¹ In Poland, municipalities conduct spatial studies which guide local planning policy, most importantly local spatial development plans which are legally binding documents that prescribe allowable land uses and the protection of certain assets (e.g. cultural assets and heritage buildings). These plans also estimate infrastructure costs and include strategic environmental assessments (as of 2008). Local spatial development plans are a critical tool to ensure that a community's spatial development is well-aligned with demographic patterns and infrastructure needs and aim to reduce the likelihood of land-use conflict and environmental degradation. Beyond this, they are an important reflection of a community's aspirations for its future development and are elaborated through a process of public engagement that is prescribed by law. However, active participation in the elaboration of spatial plans tends to be limited and more needs to be done to build a culture of civic engagement (Ociepa-Kubicka, 2015).

The low coverage of land-use plans in rural communities detracts from the ability to manage spatial processes

Local spatial development plans have very low coverage across Poland. In 2003, Poland adopted a much needed Spatial Planning and Development Act, which did not prolong the binding force of all development plans prior to 1994 since they had been established under a markedly different environment. Consequently, a wide swath of gminas no longer had a valid local spatial development plan and adoption of new plans has proceeded very slowly, particularly in rural areas which have the lowest plan coverage. Only 30% of the national territory falls within an applicable local spatial management plan, and in seven *voivodeships* this share of territory is below 20%. Further, some legal requirements embodied in the Spatial Planning and Development Act, such as the requirement that compensation be paid to landowners if they are negatively affected by a local spatial development plan, inhibits the adoption of new plans. Some limits should be introduced to mitigate this effect, such as reducing the timeframe in which owners can apply for compensation, which is currently unlimited (OECD, 2016b). Further, the adoption of a land-use plan results in additional costs for *gminas* because they are obligated to purchase land for the provision of new local roads included in the plan.

Planning fees can be collected for financing the costs of roads and the provision of technical infrastructure. However, these are often appealed by landowners and *gminas* report that they are not an effective tool to gain financing to provide infrastructure. One measure which could mitigate this is to extend the timeframe for the obligation for *gminas* to pay for the land dedicated to roads. The pace by which new land-use plans have been adopted in Poland has slowed, indicating there is an urgent need for action on this front (Jaworski, 2014). In order to ensure that new developments could proceed in the absence of valid land area development plans, a planning decision mechanism was introduced which allows *gminas* to approve new development and land-use changes on a project-by-project basis. This leads to uncoordinated spatial development that is not necessarily well-aligned to overarching spatial goals of environmental management concerns. For example, it is not uncommon for new houses to be built in flood zones or other such uncoordinated actions (Matczak et al., 2016).

This lack of local plan coverage together with the widespread use of the planning decision mechanism is one of the greatest challenges to coherent spatial development in Poland. Substantively, it has facilitated rapid peri-urbanisation and uncoordinated developments. Peri-urbanisation can impose significant costs on both public and private actors – and this is an issue that is well-recognised in both Poland's National Urban Policy 2023 and the new Strategy for Responsible Development (2017). A 2013 study by Kowalewski et al. on the economic and social costs of uncontrolled developments in Poland finds that the current regulatory, plan-based system is increasingly incapable of managing spatial processes – in the words of the authors, the present system "results in "spatial chaos and a waste of space and capital". The aggregate result from a series of uncoordinated land-use changes lead to a pattern of development that imposes high travel costs, with people living far from where they work and shop, or where spillover effects from farming make living in the country unpleasant. Further, lower densities in such places can make infrastructure and service provision more costly, reducing a municipality's fiscal sustainability. Areas seeing population growth and/or with high investment needs are high priorities for land-use plan coverage. The lack of land-use plan coverage in many rural gminas matters most urgently in those where land uses are changing and/or new developments are occurring or where there is proximity to protected areas.

Peri-urbanisation is not inherently bad, as considerable evidence shows that a large share of the population, when presented with an opportunity to live in a semi-rural environment, will choose to do so. The obvious challenge is how to best manage the process and balance the interests of individuals against that of the community as whole. A critical issue is that residents who choose to live in these locales typically do not bear the full costs associated with these locational choices, even though there are obvious costs associated with them that the broader public bears. It bears noting that, while land-use plans are an effective way of managing future developments, they are not effective in areas where there is a lack of investment coupled with population decline, in which case a different set of tools are needed (i.e. revitalisation strategies).

The need for integrated land-use planning and increased local capacity

Rural gminas, as inherently small administrations, have more limited capacity to undertake the elaboration of both spatial and land-use plans. A requirement for a separate type of land-use plan in low-growth rural areas may be one way to increase planning coverage in order to meet the needs of the community. Other OECD countries have adopted such a system for this reason. Beyond this, both the national and regional governments could play a stronger role in supporting rural planning efforts. There is a need for more effective tools for rural areas to monitor and analyse land-use changes for both their own communities and that of surrounding ones and to provide the relevant information in an accessible format for both rural communities and residents to make use of. There is also a need to include the management of cultural landscape within spatial planning practices. The importance of including cultural landscapes in spatial plans has been largely neglected by rural gminas (Hernik, 2012).

Many countries lack the structures to achieve the required co-ordination on spatial development between levels of government. Poland has recently established national and regional territorial observatories and forums to address this issue. The territorial observatories were created to evaluate and monitor regional policy and the forums convene public authorities, scientists and experts to improve spatial planning processes. For example, the Regional Territorial Observatory in Podlaske is an organisational unit within the Department for Regional Development. It works together with the Territorial Forum of Podlaskie, which includes representatives from the university, social partners, gminas/towns, representatives of key businesses, etc. (approximately 50 members in total). The observatory presents the research results to the forum and, based on comments received by the members, completes its conclusions and makes recommendations for regional policy.

These observatories are a repository of data and information on spatial trends as well and could be used more effectively to support rural land-use planning. The effectiveness of these networks needs to be further developed. As noted in the new Strategy for Responsible Development (2017), there is a need to: develop a system to co-ordinate actions across ministries in charge of spatial issues and sectoral ministers in charge of particular sectors of the economy; and strengthen the role and significance of regional territorial observatories operating at marshal offices, especially in the scope of spatial planning and knowledge translation. These are important policy initiatives that deserve concerted action, including reflection on the specific needs of rural communities to enhance their spatial management. See Box 2.15 for examples of vertical co-ordination on spatial planning from Austria and France.

Integrated spatial planning has arisen as a new orthodoxy. It stems from the recognition that effective spatial management is connected to a broader range of considerations such as economic and social development and well-being and that sectoral policies have spatial dimensions that need to be co-ordinated, e.g. the location of services and transportation infrastructure. Poland's NSDC encompasses this perspective in its sixth objective, which describes "introducing an integrated (coherent and hierarchical) socio-economic and spatial planning system at different governance levels, reorganisation of regulations ensuring efficiency and universality of the spatial planning system, strengthening of institutions and improving the quality of spatial planning" (Government of Poland, 2012). It advocates that local government studies should be binding, not only for the local spatial development plan, but for all administrative decisions related to development, and that local governments should be obliged to develop plans for areas undergoing intense development and adopt provisions to prevent "scattered development". It further recommends the implementation of a system of ongoing monitoring and evaluation.

Box 2.15. **Mechanisms for vertical co-ordination on spatial planning: Examples from France and Austria**

Currently, many countries lack the structures to achieve the required co-ordination between levels of government on spatial planning issues. Both France and Austria have established regular conferences that provide such structure, but at different scales and for different topics. France's territorial conferences for public action focus on dialogue between regions and local authorities and are open to a range of thematic areas whereas the Austrian Conference on Spatial Planning assembles representatives from all levels of government and is specifically targeted to address spatial planning issues.

France's territorial conferences for public action (Conférences territoriales de l'action publique, CTAP)

The CTAP are a relatively new institutional mechanism. They were established (mandated) as part of the 2014 Law on the Modernisation of Territorial Public Action and Affirmation of Metropolises (Modernisation de l'action publique territoriale et d'affirmation des métropoles) and are intended to strengthen dialogue between local authorities (including public establishments for intercommunal co-operation, EPCI) and the region and to co-ordinate responsibilities. The CTAP in each region is chaired by the president of the regional council. Its membership includes: presidents of the departmental council and EPCI with more than 30 000 inhabitants; a representative of the EPCI with less than 30 000 inhabitants for each department; an elected representative of the communes with 3 500-30 000 inhabitants for each department; an elected representative of municipalities with fewer than 3 500 inhabitants for each department; and a representative of the local authorities in mountain areas. Each CTAP organises its work around thematic topics. The state representative in the region (prefect) is informed of meetings of the CTAP and participates, at its request, or when a community asks a state delegation of authority. The CTAP determine arrangements for co-operation actions through the adoption of draft conventions of agreements between parties and are reported yearly. The objective is to support an integrated and cross-disciplinary planning process, instead of a sector-specific one.

The Austrian Conference on Spatial Planning (Österreichische Raumordungskonferenz, ÖROK)

The ÖROK was founded in 1971; it assembles representatives from all levels of government to discuss spatial policies. As it is located at the centre of government (within the Office of the Chancellor), it is also able to carry out the necessary cross-sectoral policy co-ordination between different branches of the national government. It is dedicated to co-ordinating spatial planning policies between the three levels of government in Austria (the national level, the states and the municipalities). Its decision-making body is chaired by the Federal Chancellor and its members include all federal ministers, the heads of all federated states and representatives of associations of local governments. Furthermore, business and labour organisations are represented on the body as consulting members. The work of the decision-making body is supported by a permanent secretariat with a staff of approximately 25-30. One of the central tasks of the ÖROK is the preparation of the Austrian Spatial Development Concept, which covers a planning period of approximately ten years and provides a vision and guidelines for spatial development that is shared by all levels of government. Beyond the preparation of the Spatial Development Concept, the ÖROK also monitors spatial development across Austria. It has developed an online tool that provides a mapping function of a variety of important indicators at the municipal and regional levels and releases a report on the state of spatial development every three years.

The ÖROK is also co-ordinating body for structural funds provided by the European Union. It manages the integration of structural funds into broader spatial strategies and was directly responsible for the programming work related to one of the 11 thematic objectives of the 2014-20 programme period. The ÖROK also serves as National Contact Point within the framework of European territorial co-operation.

Sources: OECD (2017h), The Governance of Land Use in France: Case studies of Clermont-Ferrand and Nantes Saint-Nazaire, http://dx.doi.org/10.1787/9789264268791-en; Österreichische Raumordnungskonferenz ÖROK, http://www.oerok.gv.at/fileadmin/Bilder/1.Reiter-Uber_die_Oerok/OEROK-Geschaefststelle/OEROK_Folder.pdf (accessed 1 June 2016); Vie Publique (2016), "Que sont les conférences territoriales de l'action publique ?", www.vie-publique.ft/decouverte-institutions/collectivites-territoriales/intercommunalite-cooperation-locale/que-sont-conferences-territoriales-action-publique.html.

Some regions have undertaken initiatives involving integrated and functional planning (Małopolskie, Ślaskie, Pomorskie, Zachodniopomorskie). For example, Małopolskie has included the subregional level in its strategic planning (the Development Strategy of the Małopolska Region for 2011-2020); the region conducted research and collected public input, elaborated functional plans at the subregional level and created subregional forums involved in the preparation of regional operational programmes. Such initiatives are promising, but implementation of these concepts remains at the level of gminas. There is an appetite by regions to play a greater role in integrated and functional planning, but they do not have the tools to undertake such a role (e.g. the statutory authority or incentives to require gminas to adopt functional or integrated planning). For example, the region of Zachodniopomorskie aims to establish functional areas where smaller gminas co-operate with each and are supported by both the regional and national governments in a range of strategic areas (e.g. attracting investment, developing transport, enhancing vocational education). Małopolskie is interested in encouraging villages to develop a town centre in order to more efficiently deliver services to residents; however, they too have no tools with which to implement such an approach. This lack of tools to link up sectoral investments in a spatially co-ordinated manner is a missed opportunity. As a final point, the planning framework does not allow of the possibility of joint land-use plans. In countries such as France, joint land-use plans have been used to co-ordinate investments across small communes (*Plan local d'urbanisme intercommunal*).

Environmental policies

Polish environmental policy started in the early 1980s. The first act for environmental protection (adopted in 1980) introduced a "polluter pays" principle and following from this provision a variety of environmental policy instruments were adopted, such as penal provisions, fees for economic use of the environment and fines for not keeping the environmental requirements set up in environmental permits.⁵³ At that time, the National Fund for Environmental Protection and Water Management was also established. Building on these earlier efforts, in the early 1990s Poland made considerable progress in strengthening environmental policies and institutions. Membership to the EU has supported improved environmental management and has also directed funds to environmental measures in rural areas, including direct support to farmers for environmental stewardship practices and measures to increase biodiversity. Environmental policies extend across a number of sectoral areas, including the spatial planning system, energy policies, water management and sewage, waste management, transportation and infrastructure planning, forestry management, fisheries and agriculture. There are environmental provisions across all of these domains which impact rural areas. In 2009, Poland adopted an Energy Security and the Environment Strategy (one of Poland's nine strategic policies), which serves to integrate environmental policies into the government's overall development strategy. The strategy is overseen by Ministry of Investment and Economic Development in co-operation with the Ministry of the Environment.

Transposing EU environmental directives in Poland has not always been effective and there have been a number of infringements, with water and wastewater being the most common (OECD, 2015b). In 2017, a new law on the management and protection of water resources entered into force which aims to increase the system of national compliance through 22 water directives. The 2015 OECD Environmental Performance Review of Poland noted that there is a need to simplify and streamline the environmental governance system, including enforcement (OECD, 2015b). While there have been considerable efforts to strengthen environmental legislation in Poland and to improve co-ordination across government, there have been some inconsistencies in the government's approach to environmental policies that detract from their effectiveness. Poland has an exceptionally rich natural landscape, including the last primeval forest in Europe – the Białowieża forest in north-eastern Poland which is a UNESCO World Heritage site and a Natura 2000 protected area. Recent actions by Polish authorities to permit a three-fold increase in logging operations in the Białowieża Forest district have contravened EU directives and are being challenged by the Court of Justice of the EU. As another example, in 2016 Poland passed energy legislation that favours coal over wind farms. The law imposes onerous minimum distance requirements for new wind farms, and raises the property tax burden for all wind energy investments. In effect, it makes Poland a less attractive place to invest in wind power and will damage the profitability of existing investments (IEA, 2017).

Local governments are key actors for the implementation of environmental policies in Poland. *Powiats* and *gminas* are responsible for development and pollution permits and *gminas* are responsible for municipal waste management. *Voivodeship* self-governments are responsible for the environmental inspection of large polluters, and deal with large generators of waste through a permit system. The scope and role of local governments in implementing environmental policies and managing environmental challenges has increased greatly since the 1990s; many more functions have been devolved to them, and yet, these have not kept pace with fiscal decentralisation (OECD, 2015b). Local governments are also on the frontline of climate change. A recent survey of Polish municipalities indicates that they are increasingly experiencing the effects of climate change, including an increasing propensity of floods and droughts (Jóźwiakowski and Siuda, 2017). For rural *gminas*, this presents a great challenge as they have larger areas, smaller tax bases and more limited specialist expertise with which to address mitigation and adaptation efforts.

Environmental policy has generally not been informed by economic evaluation in Poland and there is a lack of capacity to conduct *ex ante* and *ex post* economic assessments at the subnational level (OECD, 2015b). Some regions of Poland, such as Podlaskie, have far more protected areas than others. Rural *gminas* sometimes express that these environmentally protected areas can hamper development efforts and lead to increases in the costs of providing infrastructure. Some *gminas* have articulated a desire for special state subsidies for *gminas* that have a larger share of protected land in order to compensate for these effects. There are also tensions between environmental objectives and farming, wherein through the biodiversity and reforesting initiatives of the CAP some agricultural lands lose production. At the same time, natural environments are viewed by rural *gminas* as an important asset that enhances the quality of life for local residents and has important potential for economic development and the diversification of the local economy (e.g. ecotourism). Enhanced economic evaluation and cost-benefit analysis can promote a better understanding of these dynamics. The design of conservation measures should consider wider economic benefits, including ecosystem services.

Policies for rural infrastructure development

Investments in physical and knowledge infrastructure – from ICT to transportation facilities – support the growth and development of rural communities. ⁵⁵ They are vital to the delivery of and access to important services such as healthcare and education and play a critical role in linking farmers and rural businesses to markets, reducing food waste, boosting agriculture productivity, raising profits, and encouraging investment in innovative techniques and products. Strong infrastructure is one of the key enabling factors of growth and development. In Poland, public investment in infrastructure is particularly high, representing 4.2% of GDP in 2015 (versus 3.1% for the OECD on average), i.e. 10.1% of

public expenditure (versus 7.6% in OECD countries on average). Subnational governments, mainly the regions and municipalities, play a major role, accounting for 46.5% of public investment, which is, however, lower than the OECD average (59.3%). A great share of subnational investment is for economic affairs and transportation (44% versus 40% in the OECD) followed by environment protection (12% versus 6% in the OECD).

Rural Poland has seen major investments in various types of infrastructure over the past two decades. Infrastructure for sustainable growth is one of the main priorities of Poland's national development strategy and there have been national and EU-funded investments in all types of rural infrastructure, including transport, the energy sector, telecommunications and social infrastructure. 56 Despite these investments, rural infrastructure in much of the country remains underdeveloped. A lack of adequate roads in many rural areas presents a major barrier to businesses (e.g. as reported in Podlaskie). Further, a considerable number of rural and urban-rural gminas have limited or no access to the rail network or other forms of collective transport. These transportation limitations present a major constraint to economic development and quality of life in rural areas.

The ongoing investment demands for infrastructure in rural Poland are great and there is a need to prioritise those investments that will have the greatest economic and social impact. At the same time, it is important to consider the ongoing operational costs of infrastructure investments. As rural infrastructure of all types is ungraded and expanded, there are growing fiscal pressures for ongoing maintenance and operation. While municipalities are often able to access co-funding for capital investments, they typically are not able to access external funds for ongoing operational costs associated with infrastructure, instead relying on own-source revenues. This creates risks for the future, especially in places that are seeing population decline.

Infrastructure investments should be closely integrated with spatial development polices. As noted in the previous section, policies for the spatial management of Polish municipalities are inconsistently applied and encourage peri-urbanisation, which in turn increases the costs of delivering infrastructure. The two issues are thus linked, and more effective spatial management policies will help better prioritise and manage infrastructure investments in rural areas.

Investments in transport and accessibility

Transportation infrastructure investments take place across each level of government – e.g. responsibility for the road network is divided across national, regional and local (powiat and gmina) governments. At the national level, there is a transport development strategy, which is one of Poland's nine integrated strategies for national development.⁵⁷ The strategy applies to all sectors of transport – road, rail, air, sea and inland waterways, urban and intermodal transport – and takes into account EU policies for transport, regional development, innovation and environmental protection. EU Structural and Investment funds have been a major source of funding for infrastructure investments across the country.⁵⁸

There have been major investments in the system of national highways and regional roads; however, more peripheral regions remain less connected to the national network (e.g. Podlaskie in the north-east). Further, a large part of the rural local road system remains underdeveloped. This undermines the effectiveness of the overall road system. For example, there have been regional road investments in eastern Poland, but the reduced scope of investment in local roads in some areas means that local road connections to the regional system are underdeveloped. It was reported that some rural communities in eastern Poland have such poor road accessibility that they are only reachable by horse in the winter months. Under ROP programmes, local road investments cannot exceed more than 15% of the total funding envelope; enhancing the local road networks requires investments from domestic schemes which are in part financed by the state budget. According to the EU Partnership Agreement, the construction and reconstruction of sections of *voivodeship* roads that link with the trans-European transport network are a priority for the extension of inter-regional and intraregional transport infrastructure (i.e. secondary connectivity). Local roads, according to the partnership agreement, are not a priority for support from the ROP.

The system of transport planning in Poland categorises roads and their sources of financing. Rural *gminas* can access road financing from the Financial Property Agency; the national programme for reconstruction and modernisation of rural roads; and funding from the county (including for joint projects). Local roads for agriculture that have been identified in a *gmina's* local spatial development plan can receive funding from the rural development programme. At present, Poland's EU Partnership Agreement underlines the need to extend the interregional and intraregional transport infrastructure (so-called secondary connectivity). As such, the construction and reconstruction of sections of *voivodeship* roads that connect to the TEN-T are a priority. The European Commission has recommended narrowing the scope of support, with clear guidance and priority setting, which should exclude from the ERDF co-financing of rural areas in this respect and avoid vague references to connectivity to regional and subregional centres (European Commission, 2014b). It is further noted that, as rural *gminas* enhance their local road network, there are considerable costs for their maintenance that rural *gminas* can be concerned about bearing.

An *ex post* evaluation of changes in road accessibility in the first decade of Polish EU membership found that while EU funds have improved the general efficiency of the road network during the last decade, there was less of a focus on equity-directed investments (Rosik, Stępniak and Komornicki, 2015). An exception to this is eastern Poland, where major investments (e.g. through the Operational Programme Eastern Poland) have significantly improved the accessibility of the region. In the present period, there should be a concerted focus on how to improve the transport links between subregional centres and rural areas.

Infrastructure for water, sewage and waste disposal

Collective water supply and sewage disposal treatment is the responsibility of *gminas* in rural Poland. The National Programme for Municipal Waste Water Treatment and the National Fund for Environmental Protection and Water Management are implemented at the regional and national levels. Sectoral water and waste treatment policies are largely based on the implementation of the national and regional operational programmes. The length of water and sewage network connections per households in rural Poland are much higher than in urban areas and as such, there are higher operating costs per person, which translate into higher water fees for residents (Pawełek, 2016). Appropriate sewage and waste disposal is a critical issue for rural Poland. Inappropriate sewage and waste management can lead to ground water contamination and the contamination of lakes and rivers. This can, in turn, negatively impact ecology, human health and detract from such activities as tourism.

The share of the Polish population with access to the water supply network has increased significantly in the past two decades. As evidence of this, investments associated water supply infrastructure in rural areas have increased by 33% over the past decade

(Pietrucha-Urbanik, Nogaj and Stecko, 2016). However, as noted in Chapter 1, this is one of the areas for which rural areas remain far behind their urban counterparts and moreover, certain rural areas in eastern and southern Poland continue to have much lower rates of access. In a similar vein, there have been major investments in sewage treatment and disposal facilities in rural areas and rural municipalities have experienced an improvement in the availability of the sewage network, but a significantly poorer sewage system exists in the rural areas of central and eastern Poland. In some rural areas (e.g. part of Małopolskie) where sewage and other such services are offered, the costs can be high and rural residents do not take them up. As such, in some cases, sewage services are subsidised. In recent years, there has been progress in inter-municipal co-operation to provide infrastructure for water treatment, often involving joint applications for EU funds or other external finance, which is a positive trend (OECD, 2015b).

There is evidence that a large share of rural water supply and sewage systems have been improperly designed (e.g. improperly sized and poorly constructed), leading to water loses, insufficient water quality and higher costs (Bergel, 2012). Further, rural areas where there has been scattered residential expansion further increases the costs of sewage systems (Pawełek, 2016). This reinforces the need for more effective spatial management policies. Poland has committed to significantly reduce the amount of landfill waste by the year 2020. This will require investments by rural *gminas* to improve their waste management systems. There are almost 2 000 illegal waste sites across rural Poland despite efforts to improve the system of solid waste management (Malinowski, Wolny-Koładka and Jastrzębski, 2015). Progress has been made in reducing the number of illegal dumps in recent years; their number was reduced by approximately 16% between 2014 and 2015. However, this reduction was much higher in urban areas than in rural ones.⁵⁹

Poland requires clear guidance on inter-municipal co-operation in the wastewater treatment sector. In many cases, setting up inter-municipal enterprises is a difficult and turbulent process (OECD, 2013: 60). Smaller municipalities (with minor shares) are often concerned about entering a disadvantageous position when delegating services to an inter-municipal company. This can result in, for example, "black spots" in the system, whereby some municipalities decide to not join common enterprise. France has established very successful models for inter-municipal co-operation, including in the water and sanitation sector, spurred in part by recent administrative and institutional changes. For example, revenues from local taxes are earmarked for the budgets of intermunicipal institutions and certain types of inter-municipal institutions have the power to raise revenues by levying a single business tax that is not set by the member municipalities but by the inter-municipal institution itself (communautés urbaines and communautés d'agglomeration) (OECD, 2013). Further, additional subventions for inter-municipal co-operation can help spur their adoption.

Enhancing energy infrastructure and supporting renewable energy

Poland's National Fund for Environmental Protection and Water Management and a wide range of instruments offered under the programmes specified in the Partnership Agreement are focused on enhancing energy infrastructure. Despite a gradual improvement, Poland continues to be energy-intensive with a heavy reliance on coal for power. This in turn detracts from environmental objectives to improve air quality. As in the case of water and sewage infrastructure, longer lines for the provision of energy infrastructure increases costs in rural areas. There is a tendency for domestic energy deprivation to be concentrated in rural and peripheral regions with poor-quality housing and decreased access to affordable fuels (Bouzarovski and Tirado Herrero, 2017). In general, rural areas possess much poorer energy supply infrastructure compared to their urban counterparts, which is an impediment to rural development. Some rural areas of Poland have surprisingly poor air quality due to domestic solid fuel combustion (Umlauf et al., 2010). The supply and generation of energy is largely carried out by large regional electricity companies or other privatised utilities; energy prices are regulated by the state authority (Energy Regulatory Office).

Dispersed renewable energy resources offer a chance to improve energy accessibility in rural areas and support for investments in energy infrastructure with local distribution should be strengthened. National strategies set the framework conditions for individual project decisions and it is important to consider the place-based impacts of these policies and their impact on regional economic development. At present, national efforts to support renewable energy are mixed. The Rural Development Programme (2014-20) provides support for renewable energy production and notes the importance of increasing production and use of renewable energy sources, including energy crops and the use of agricultural waste, in order to reduce greenhouse gases. However, as noted in a recent IEA report, despite progress over the past decade, the future of renewable energy in Poland looks uncertain due to recent changes to framework legislation (IEA, 2017).

With large agricultural lands and a strong cattle- and pig-raising industry, agricultural biogas plants have strong potential in Poland, comparable to that of Germany (Jezierska-Thöle, Rudnicki and Kluba, 2016). Biofuels and waste are the largest renewable energy source in Poland; wind power is the second (IEA, 2017). Some Polish regions have identified this as a development opportunity. For example, Podlaskie, which supports agricultural biofuel production as long as it does not lead to competition for agricultural production space and will make a significant contribution to reducing greenhouse gas emissions, is improving energy security and economic conditions in the region.

At present, the biogas industry faces several limitations in Poland, including economic barriers (i.e. deficiency of financial aid programmes for construction of agricultural biogas plants) and legal barriers such as a lack of clearly defined economic and tax mechanisms in the state budget and financial policy (Igliński, 2011; Piwowar, Dzikuć and Adamczyk, 2016). A combination of low demand and low biomass prices led to a collapse of the Polish biomass market in late 2012. Farmers have shown decreased willingness in providing biomass for energy production - a hesitancy which some experts assess as stemming from the current chaotic biomass market situation (Zyadin et al., 2017). Germany's well-developed biogas industry has been supported by institutional and legal provisions, such as the Act on Renewable Energy Sources, that promotes tax relief for investors, technological solutions for the production of biogas from various sources at the same time, and the formation of associations of small farmers producing biogas (Szymańska and Lewandowska, 2015). Local policies and engagement in local and regional innovation platforms around the bioeconomy can also help propel such developments (see Box 2.16 for Nordic examples). Biomass should be used locally to reduce transportation costs, but under current Polish regulations, biomass is shipped to power plans, leaving rural areas reliant on coal (Gradziuk, 2016). More could be done at the national level to support this industry. This is a missed opportunity.

Box 2.16. Making the bioeconomy work for rural development: The Nordic experience

The bioeconomy is an economy that relies on renewable natural resources to produce food, energy, products and services. The bioeconomy will reduce our dependence on fossil fuels, prevent biodiversity loss, and create new economic growth and jobs in line with the principles of sustainable development. Across the European Union the bioeconomy accounts for approximately 9% of employment. In Nordic countries this figure is higher, at approximately 18% for Iceland and 16% for Finland. Norway is an exception; the bioeconomy accounts for 6% of employment. In some rural regions this figure is much higher. For example, in the Örnsköldsvik region of Sweden, the bioeconomy provides an estimated 25% of employment.

Nordic countries see considerable scope of bioeconomy development, but there are challenges to its development. For instance, there can be competing demands for bioresources and the extraction costs of raw materials can be too high. Further, existing regulations can create impediments to some developments or institutional arrangements may get in the way of the use of raw materials ("waste"). Public policies have been highly instrumental in helping to overcome some of these challenges and support innovation in the sector. Investments in these areas are important for the countries' transition to a "low-carbon economy" and for rural and regional development. Locational clustering has been found to be advantageous for such projects. Local policies and engagement in local and regional innovation platforms around the bioeconomy are critical to the success of these developments.

Table 2.7. Examples of bioeconomy policies and strategies

Country	Policy/strategy	Example	
Sweden	 National Bioeconomy Strategy VINNOVA (Public agency for innovation systems) via VINNVAXT programme for regional specialisation 	Biofuel Region platform for four northern counties. - Local municipal adoption of ethanol buses. - Development of local vision and "brand". Municipal and national support for the Biorefinery of the Future Cluster, with quad helix form. - Est. regional pilot process plants in Umeo and Örnskoldsvik.	
Finland	 National Bioeconomy Strategy 2014 Key national funding support bodies, SITRA and Tekes 	Started in 1990s with new municipal dump and waste management company LHJ. Local company first biogas from waste and food processing by-products. – Eco-industrial park; Forssa Envitech club (2006). – Forssa Cluster co-operation. – Brightgreen Forssa concept, as a brand. – Bioeconomy and sustainable use of natural resources one of five strategic foci in Hame Regions NorwayStrategy 2013-14.	
Norway	 Carbon tax National bioenergy targets Innovation Norway and ENOVA support for small as well as large investments Policy environment has been unstable in terms of biofuels 	Municipalities active in all four cases: as customers; as investors; as local regulators (e.g. of building regulations) and in some cases as infrastructure providers (district heating pipe network); as member of grounded innovation platforms; as "branders"; as legitimisers of the industry; and as co-ordinators, link agencies with sources of expertise.	
Denmark	 Focus on green and sustainable development since the 1990s Vestas (wind turbines) a world leader 	 Lolland Community Testing Facility (CTF) developed in 2007. Development of innovative partnerships including community (quadruple helix). Co-creation with cluster development, Industrial Synergy. Innovation platforms, meetings and networking. Regional Advisory Group developing ideas for the bioeconomy. Membership of National Innovation Networks. Green Centre, Lolland (est. 1988), started Algae Innovation Centre with Aalborg and Roskilde Universities. 	
		peconomy work for rural development: Some Nordic experience",	
www.oecd.	org/cte/regional-policy/Making-bioecor	nomy-work-for-rural-development-JohnBryden.pdf.	

In some cases national legislation has detracted from the development of renewable energy infrastructure and related commitments. For example, recent revisions to Poland's Act on Renewable Energy Sources (amended in June 2016) create prohibitive conditions for establishing new wind farms. The amended act imposes costly administrative requirements for existing installations and creates legal uncertainty regarding the taxation of wind installations (IEA, 2017). Consequently, while Poland has committed to a binding national target to 2020 to increase the share of energy generated from renewable resources up to 15%, it is at risk of not meeting these objectives. This policy should be realigned to support national commitments.

Digital infrastructure in rural Poland

Strong digital infrastructure is important for the diversification of the rural economy, enhancing firm productivity and supporting the delivery of e-service in rural locals. There is a digital divide in Poland; residents in larger cities have greater access to digital services and a higher frequency of use than in rural areas. Compared to countries such as Germany and Lithuania, the availability of the network in rural areas in Poland is poor. Despite this, Poland has made a great deal of progress in increasing Internet access in rural areas in recent years. At the national level, the main support for digital infrastructure in rural Poland is through the EU Operational Programme Digital Poland for 2014-2020. The strategy recognises the specific needs of rural areas for digital infrastructure and includes targeted funds to support their development.

Digital infrastructure in rural Poland faces two key challenges. The first is the need to increase the quality of digital systems as many communities may have Internet access but not necessarily broadband. The second challenge is connecting "the last mile" – the smallest villages where there are few Internet users and higher connection costs. The vast majority of villages in Poland without Internet access (99%) are those with a population of 100 or less (Janc and Siłka, 2016). ESI funds support infrastructure investments to increase the coverage of fast broadband Internet, with a target of reaching 100% of households in 2023.

Government subsidies and tax incentives to expand and enhance digital infrastructure in rural and remote areas are critical to fill gaps in where private financing had not been attracted based on an assessment of likely returns (OECD, 2015c). Sweden has adopted a unique solution to enhancing rural local fibre networks. The "Fibre to the Farm" programme targets last-mile digital connections by offering a subsidy to farmers in order to establish their own connections to the main fibre network. Municipal co-operation between different villages and between rural municipalities close to cities can help to expand the digital network, as can community-based models of collaboration (see Box 2.17 for examples). National rural policies can promote such partnerships by structuring incentives for collaboration through digital infrastructure programmes.

Public services – Education, health and social services

Rural areas face particular barriers in terms of service delivery of all types – not just public services. Publicly provided services along with private and collective or joint services tend to be less prevalent in rural areas due to a lack of economies of scale; increased travel costs; higher communication costs; and poorer access to training, consultancy and other support services (OECD, 2010). Service delivery is particularly challenging in rural remote communities with dispersed settlement patterns; in communities where there is a large senior population which requires specific supports; and in areas where there is a combination of remoteness and persistent social problems (e.g. areas of former state farms). Rural areas require unique and flexible approaches to service delivery in order to best gear service needs to "place".

Box 2.17. Deployment of fibre optical networks through collaborative approaches: Some OECD good practices

As an increasing amount of economic and social activity is undertaken over communication networks it becomes more challenging to be restricted to low-capacity broadband when living in some rural or remote areas. Given that most countries have regions that are sparsely populated, it raises the question of how to improve broadband access in these areas.

There is a growing "grass roots movement" in Sweden to extend optical network fibre coverage to rural villages. There are around 1 000 small village fibre networks in Sweden, in addition to the 190 municipal networks, which on average connect 150 households. These networks are primarily operated as co-operatives, in combination with public funding and connection fees paid by end-users. People in these communities also participate through volunteering their labour or equipment as well as rights of way in the case of the landowners. The incumbent telecommunication operator, as well as other companies, provides various toolkits and services for the deployment of village fibre networks in order to safeguard that these networks meet industry requirements. As the deployment cost per access in rural areas can be as much as four times what it cost in urban areas, such development may not attract commercial players and rely on such collaborative approaches. Aside from any public funding, Sweden's experience suggests that village networks require local initiatives and commitment as well as leadership through the development of local broadband plans and strategies. They also require co-ordination with authorities to handle a variety of regulatory and legal issues and demand competence on how to build and maintain broadband networks. The most decisive factor is that people in these areas of Sweden are prepared to use their resources and contribute with several thousand hours of work to make a village network a reality.

In the United Kingdom, Community Broadband Scotland is engaging with remote and rural communities in order to support residents to develop their own community-led broadband solutions. Examples of ongoing projects include those in Ewes Valley (Dumfries and Galloway), Tomintoul and Glenlivet (Moray), which are inland mountain communities located within the Moray area of the Cairngorm National Park. Another example of a larger project can be found in Canada and the small Alberta town of Olds with a population of 8 500, which has built its own fibre network through the town's non-profit economic development called O-net. The network is being deployed to all households in the town with a number of positive effects reported for the community.

Source: Mölleryd, B. (2015), "Development of high-speed networks and the role of municipal networks", http://dx.doi.org/10.1787/5jrgd17rvns3-en.

This section focuses on core public services important to rural residents' well-being. such as education, health and long-term care and social services. This is by no means an exhaustive list. Such services may be provided directly by the government or indirectly, wherein the government regulates the activity and finances in whole or in part. Since the political transformation in 1989, public services have been progressively decentralised, and in some cases outsourced to private (e.g. public utilities) and non-profit providers in Poland, often with mixed results (Kordasiewicz and Sadura, 2017). Table 2.8 outlines the distribution of local public service responsibly across levels of government, which highlights the important roles played by *gminas* and *powiats* in this regard.

Table 2.8. Distribution of local public service responsibilities across government

Cities with	county status	Domina	Central government
Municipalities	Counties	- Regions	
Spatial planning Local roads Local public transit (tram, bus, metro) Water supply and sewage systems Waste collection and management Nurseries Kindergartens Primary and middle schools Social assistance Local libraries Green areas Sport and leisure facilities	County roads Secondary schools Special and art schools General hospitals Social welfare housing Personal social services Employment support Local museums and theatres Building permits Car and driver registration Consumer protection	Strategic planning Regional roads Regional public transport (rail, coach) Water management Higher vocational schools Teachers training Special hospitals Regional museums, theatres, libraries Landscape parks	Motorways, express and national roads Inter-regional railway Public universities Educational supervision Police Fire protection National cultural institutions National parks

Source: adapted from: Mikuła, Ł. and M. Walaszek (2016), "The evolution of local public service provision in Poland".

Investing in people – Education and skills

Two critical changes have increased the importance of improving human capital in Poland. These are: the rapid pace of modernisation across all parts of the economy that demands workers with higher levels of formal education and strong technical skills; the other is the imminent decline in the size of the workforce that will require increased productivity from the remaining workers in order to maintain current levels of output. These changes will have a bigger impact on rural areas, because rural Poland is more exposed to external economies, which means it has to be competitive to be successful, and because the ongoing level of outmigration of young people from rural areas to urban ones is likely to continue.

While a territorial approach to development focuses on finding ways to improve places, a key part of the process is to improve the capabilities of people in these places. Investments in people can be justified on three grounds. The first is that society at large is improved if all the people in it have better knowledge and skills in the sense that a better educated and skilled society tends to be a more harmonious and inclusive. The second reason is that a key factor in enhancing the level of development is the presence of a well-skilled labour force – without this it is impossible to attract and retain firms that will improve levels of income and employment. The third reason is that even if people cannot find adequate employment in a place, there is greater opportunity for them to move somewhere else and obtain this employment if they have a strong set of skills.

Some aspects of education are established through national standards, while others are more specific to local conditions. In general, nations establish minimal levels of schooling and broad knowledge standards for basic education. In Poland a range of national exams, including a school leaving exam, provide a way to monitor performance. From the results of this exam it is clear that students in rural areas, on average, perform at a lower level than do urban students, but that there is considerable variability across rural Poland (Rosner and Stanny, 2017: 67-69). Students in rural areas can face multiple disadvantages relative to those in larger urban places. For example, it can be harder to attract good teachers; schools are smaller, making the range of course options more limited; students

have little or no choice in what school they attend; and some rural students can face long travel distances to school.

Similarly, providing technical training or skills is inevitably harder in rural areas. Local economies can only absorb a limited number of people with any skill, which means that training programmes are more expensive on a per person basis because economies of scale or size cannot be achieved. The mix of skills needed in a small rural labour market can change quite rapidly because there are few employers at any point in time, making some current skills unneeded and some other skills undersupplied. In many rural areas a structural barrier impedes employment options for relatively well-skilled women, in that only a limited number of positions that fit their skills exist. This can lead to either underinvestment in education and training by women, or a high rate of youth outmigration by females who leave to take advantage of their investment in skills.

In Poland, a significant skill problem is associated with farm workers. This includes previous workers at state farms who had only limited formal education and a single job-specific skill that is no longer needed. While many of these individuals are now exiting the labour force as they age, relatively few have found a high-quality job in the intervening years since the state farms were closed. Moreover, many of their children are now in precisely the same situation, creating ongoing pockets of poverty and making it important to develop targeted intervention strategies to break the cycle. The condition of those living on small private farms is significantly better, but many of these individuals are under-employed in farming. In most farming-dependent communities, the returns from education were limited because there were few local employment options off the farm and because the farm itself was too small to require upgraded farming skills. Incentives to leave the farm and relocate were weak, in part because of low skills, but also because for many years national polices created incentives to remain in farming as a way to slow outmigration to urban areas.

Some of these problems are inherent to rural places. Others can be addressed through better public policies that are more sensitive to rural conditions and opportunities. Some countries have tried to provide financial incentives to young teachers to induce them to choose a rural school. Where the local tax base is low, supplemental funding may be useful to offset the higher costs of providing education. The Internet clearly offers the possibility of using non-traditional teaching methods that can be effective for a small number of students. In general, it is the case that those places that are providing employment and a reasonable quality of life also have a strong local education and training system. The direction of causality is not clear, but it probably runs in both directions. This means that local economic development and educational development have to be tackled together.

Public education – Primary and secondary schooling

Poland's education system is a shared responsibility of central and local authorities. There is a centrally developed national education policy and regions act to supervise and implement this policy. Gminas bear responsibility for running primary and lower secondary schools, while counties (powiat) run schools above the lower secondary level. Expenditure on educational institutions in Poland as a percentage of GDP (for all education levels combined) is below the OECD average; however, at the same time, Poland had one of the greatest increases in expenditure per student among OECD countries over the period 2005-12, indicating a catching-up trend (OECD, 2015d). Primary and lower secondary schools are funded through educational subsidies from the central budget and from a gmina's own-source revenues. Gmina local governments are responsible for funding and delivering pre-school education from own-source revenues. Local and regional governments have a high degree of autonomy over how they wish to use the funds allocated to them by the national government and national funding allocations are based on a number of needs-based factors, including remoteness, which matters for rural areas.

Enhancing access to early childhood education in rural areas

Poland has adopted a number of family-friendly policies, including those that aim to increase the birth rate, such as the 500+ programme (a financial incentive for two and more children). It is important that these financial incentives for families are coupled with access to services, including early childhood education. Rural children are much less likely to participate in early childhood education than their urban counterparts. For example, in the 2016/17 school year, only 61.6% of children aged three to five took part in kindergarten classes in rural areas versus 95.3% in urban ones (CSO, 2017). There have been gains in recent years in terms of the number of kindergartens in rural areas and further strengthening and expending this system is an important strategy to support female labour force participation. The national government has made access to pre-school education a policy priority and financial resources under the European Social Fund are used to support this agenda.

Managing schools amidst population decline

Demographic changes (low birth rates and outmigration) are challenging schools, and local and regional authorities in Poland to maintain existing infrastructure and resources. Between 2003 and 2011, local authorities closed 1 424 rural schools and the number of rural primary schools fell by 9.3% (Polish Rural Areas, 2014). While the number of students has decreased substantially in the past decade, there has not been a proportional decrease in teachers due to labour protections under the "Teacher's Charter" Act. This led to higher costs for many schools which were difficult to cover with the existing funding envelope. As a strategy to maintain rural schools, local associations have taken over their administration from the *gmina* in some cases (leading to a different type of teacher labour contract). Rural *gminas* are interested in adopting more flexible and smaller scale forms of service delivery themselves, such as small day care centres for children. However, they often encounter regulatory barriers to doing so such as sanitary and public safety regulations that are geared to larger buildings.

Local governments need consistency in their operating environments in order to adequately plan for the future. They need stability in laws and regulations. A new national educational reform to the system of primary and secondary schools places significant infrastructure costs on rural *gminas* without any additional funding. As of 1 September 2017, students will attend eight years of primary school and four years of secondary school (or five years of vocational school) and middle school enrolments will be phased out.⁶² It is anticipated that middle schools will stop enrolling new students in 2017 and will be phased out entirely in 2019. Local governments will need to bear the costs of new infrastructure requirements and there are concerns that it will lead to job losses for teachers. The reform also replaces general vocational schools with a two-tier system closely linked to the national qualifications framework.

As another example, rural municipalities report policy changes related to the structure of significance factors in education subventions as leading to unpredictable funding. For example, the significance factors have changed in recent years from having larger funding

allocations for small schools (of less than 70 students), while previous government policies favoured merging schools. A particular concern for rural gminas is the timeframe for determining educational subventions on a year-to-year basis. More upfront communications on these changes will help communities better plan.

Vocational education and training

Vocational education serves a critical role in rural development by preparing young adults and adults for professional vocations and trades. Education policy is formulated and implemented centrally by the Ministry of National Education in co-operation with ministers from other branches supervising vocational schools, such as the MARD in the case of agricultural schools. There are two national consultation bodies – the Tripartite Commission on Socioeconomic Issues and the Central Employment Board - with representatives from employers' organisations, trade unions and local government representatives and others. The management of upper-secondary education, including vocational education, is the responsibility of powiats in Poland with the exception of some agricultural schools that are managed directly by the MARD. The MARD presently runs 45 agricultural schools, with around 12 000 students enrolled. Powiats also manage practical and continuing education centres. At the post-secondary level, vocational training is often provided by specialised trade or technical schools and community colleges. Rural youth and adults have higher rates of participation in vocational education than their urban counterparts in Poland (CSO, 2014).

The OECD has noted that the Polish education system does not respond sufficiently to labour market needs, contributing to lower productivity and wages (OECD, 2016c). Vocational schools create over-supply in some professions, for which unemployment and inactivity rates are high (Górniak, 2014), and shortages in others, including in transport and storage (Lis and Miazga, 2014). The government has taken action to make Polish graduates more versatile and the education system more responsive, yet, despite improvements, 35% of students at basic vocational schools still obtain their practical training in workshops dedicated exclusively to educational purposes, rather than in the workplace (OECD, 2016c). Encouraging employers to offer greater practical training, in particular small firms through their craft associations, would help align vocational education more with labour market needs and address employers' complaints that graduates lack job-specific skills and experience (OECD, 2016c).

The Ministry of Development together with the MARD enable farmers to be trained in non-agricultural skills under the ESF 2014-20 scheme, but only if they are registered as unemployed, which limits the availability of this training. In order to support the diversification of the rural economy, the government should recognise farmers' vocational skills/qualifications in non-agricultural professions within the vocational recognition system.

Recent reforms to continuing vocational education should make it easier for adults to obtain new qualifications. Rather than attending full-time vocational schools, adults can now obtain new qualifications by attending shorter, often part-time and modular courses, or by confirming practical work experience. These are important reforms and could be complemented by more diverse education providers and pathways beyond upper-secondary vocational programmes and could be supported by active labour market policies (Boxes 2.18 and 2.19).

Box 2.18. Mechanisms for flexible and adaptive vocational education and training

Public funding for diverse education providers

Restrictions on public providers mean that adults seeking part-time and modular provision receive little public support. A public purchasing system would allow government to "buy" priority courses from the market – public or private. The government could enforce high-quality standards as an informed buyer of education services and guarantee value for money. This would clearly involve toughened quality assurance for the private sector. If bidding parameters are set right, competition among providers could provide incentives for quality and cost-effectiveness, while allowing for student choice between courses. This would allow public authorities to "buy" provision in a form suitable for adults through the private sector. Implementing such a system would clearly have to be handled carefully, recognising the risks that in education markets where quality is not transparent and insufficiently regulated, price competition may also drive down quality. For example, in Switzerland, each canton determines its own priorities for funding post-secondary professional education and training (i.e. which courses are funded) typically reflecting local economic structure, but delivery is left mainly to the market, allowing public as well as private providers to compete under the same conditions (Fazekas and Field, 2013).

Pathways beyond upper-secondary vocational programmes

Upper-secondary vocational tracks in some countries can be dead ends, with few opportunities for further upskilling – both a waste of potential for those held back and a threat to the status of the entire vocational track, since able students will not choose a vocational track that locks them out of further education opportunities. When students choose among different vocational and academic tracks, future upskilling opportunities influence their decision (Ordovensky, 1995). So a clear route of upward mobility is essential to a high status vocational track. Across OECD countries, vocational education and training (VET) systems face the challenge of ensuring that graduates of the initial VET system have access to further learning opportunities. Such opportunities are desirable because growing technological complexity is increasing the demand for higher level skills, because students themselves are aspiring to higher level qualifications and because the absence of such opportunities tends to leave initial VET pathways as low status dead ends. There is evidence that students are more willing to pursue shorter VET programmes if they know that such programmes offer a route to more advanced studies (Dunkel and Le Mouillour, 2009).

In different countries graduates of upper-secondary vocational programmes often pursue two sorts of upskilling – first higher level or more specialised professional training, such as the master craftsman qualifications often offered to qualified apprentices and linked to the ability to run a small business and manage staff; second, more academic qualifications at bachelors or masters level that may open up different or wider career opportunities. While it is not realistic or necessarily desirable to imagine that a large proportion of initial VET graduates will enter academic tertiary education, the steady increase in the level of skills required in modern labour markets implies that efforts should be made to open up tertiary institutions to the greatest extent possible.

Sources: Fazekas, M. and I. Litjens (2014), A Skills beyond School Review of the Netherlands, http://dx.doi.org/10.1787/9789264221840-en; Fazekas, M. and S. Field (2013), A Skills beyond School Review of Germany, http://dx.doi.org/10.1787/9789264202146-en; Kuczera, M. and S. Field (2013), A Skills beyond School Review of the United States, http://dx.doi.org/10.1787/9789264202153-en; Field, S. et al. (2012), A Skills beyond School Review of Denmark, http://dx.doi.org/10.1787/9789264173668-en; Ordovensky, J.F. (1995), "Effects of institutional attributes on enrolment choice: Implications for post-secondary vocational education", https://doi.org/10.1016/0272-7757(95)00013-A; Dunkel, T. and I. Le Mouillour (2009), "Through the looking-glass: Diversification and differentiation in vocational education and training and higher education".

Box 2.19. Active labour market policy

Active labour market policy (ALMP) is a mechanism to improve outcomes for both unemployed workers and firms looking for new employees. The main focus is to improve the matching process (market function) in a job market through three activities. The first is to develop workforce training programmes that provide workers with new or improved skills that are in short supply. The second is to increase the demand for workers by providing support to employers to increase hiring through; wage subsidies or investments that lead to new job creation, encouraging new entrepreneurs or by providing temporary public sector employment. The third function is to improve the matching process by improving job-search mechanisms. ALMP is seen as being important when unemployment is structural, that is, it is due to a fundamental shift in the labour market that has altered the number and types of jobs in ways that no longer match current worker skills. ALMP policies are usually introduced and managed by national governments in periods of high unemployment when simple passive income replacement programmes are not felt to be effective.

For rural areas, where local labour markets are small, specialised and fragmented, the issues of structural unemployment are endemic. In these areas there are often major issues in terms of: many of the available workers having skills that have been made redundant either by technological change or the lack of competiveness of former large employers, firms not being willing to take on new workers due to rigid employment contracts that make it hard to lay workers off, or the perception that opportunities for firm growth are limited, and poorly functioning labour markets, where individuals do not know what jobs are open and firms do not know where the workers with the skills they need can be found. All of these are the core reasons ALMP was developed. The underlying basis for ALMP is essentially the idea that the local labour market is failing because the structure of the local economy has changed for the worse. This is also the motivation for a region to undertake economic development strategies to improve its economic situation. This means that there is a clear connection between local economic development strategies and ALMP. Moreover, improving employment conditions, in terms of the number of jobs, employment participation rates and wage levels, is a fundamental objective of both ALMP and most local economic development strategies.

In practice, ALMP has had mixed success. Most national evaluations find at best limited positive effects (Card, Kluve and Weber, 2010). In particular, subsidised employment is mainly seen as being ineffective, while support for targeted training and job search is more useful. For low-density areas, the main idea is that efforts to improve labour market outcomes should not focus on short-term boosts to employment from public sector job creation. Instead, it is important to strengthen local private sector firms so they can absorb more workers, provide local workers with training programmes that are appropriate for the structure of the local economy and establish local job matching services that help connect those seeking work with available openings. These approaches are both effective ALMP actions and effective local economic development strategies.

Source: OECD (2017e), OECD Territorial Reviews: Northern Sparsely Populated Areas, http://dx.doi.org/10.1787/9789264268234-en; Card, D., J. Kluve and A. Weber (2010), "Active labour market policy evaluations: A meta-analysis", http://dx.doi.org/10.3386/w16173.

Healthcare delivery in rural Poland

Healthcare in Poland is delivered through the publicly funded National Health Fund for eligible insured persons - e.g. employees, the self-employed, the unemployed receiving benefits, retired persons, disabled persons, farmers, the unemployed who do not receive benefits, people on leave to raise young children and soldiers, resulting in a system that has wide coverage. The National Heath Fund covers the cost of medical services while local governments are responsible for the everyday operational costs of hospital facilities (gas, electricity, water), the maintenance of buildings, repairs and renovations, and investments in medical equipment. Despite the public system, individual out-of-pocket expenditures account for a large share of pharmaceutical spending, and spending on specialist medical services (Boulhol et al., 2012). For lower income individuals, this can create a barrier to the accessibility of such services.

In sparsely populated rural areas, health services are usually provided by one general practitioner and a nurse. Some areas only have branches of public healthcare centres, where services are only provided for few hours per day. While rural areas in general have more limited access to healthcare services (especially hospitals which tend to be located in cities), these travel inconveniences are compensated by short waiting lists and access to consultation with a doctor (including healthcare and nursing care at home as well as phone contact with a doctor). Rural residents also self-report a lower rate of personal health conditions, such as long-lasting health problems or health and physical activity limitations.

Health service co-ordination and preventative community-based care

Health services in Poland are delivered by multiple stakeholders and as such, a need for efficient co-ordination and sharing of responsibilities. While occupational health services are under the responsibility of Poland's Ministry of Family, Labour and Social Policy, general health services are partly the responsibility of the Ministry of Health and partly that of the local authorities. Meeting the health challenge represented by population ageing is one of the themes of both the National Development Strategy (adopted in 2012) and the Human Capital Development Strategy. Key objectives across these strategies include: increasing access to high-quality health services; helping people develop healthy lifestyles; reducing the incidence of accidents; placing more focus on rehabilitation; and improving support to people with mental disorders and chronic mental illnesses. This requires a multifaceted approach across a range of stakeholders and in rural communities; where there are fewer services, voluntary/non-profit sector and social enterprises can play an important role. Many of the aforementioned objectives in Poland are supported by the European Social Fund.

One of the key issues for Poland to address is helping seniors stay healthier longer and to "age in place" (e.g. supporting older adults to live independently). Prevention is an important tool for health improvement and can help reduce the incidence of lifestyle- and work-related diseases. But in Poland, curative activities predominate (Boulhol et al., 2012). In rural areas, community-based care models can help to tackle the multiple dimensional aspects of health. For example, in the Netherlands, neighbourhood care models have been created to deliver care in the home, in conjunction with the patient's general practitioner (i.e. the Buurtzorg model). Self-managed nursing teams provide domestic help, child care, palliative care, psychiatric home care, temporary residential care (e.g. post-surgery) and maternity care. It is found that this form of client-centred care is costlier per hour, but requires fewer hours of intervention (thus reduced cost overall) and has led to improve quality of care and higher employee satisfaction (Gray, Sarnak and Burgers, 2015). This type of flexible home-based model could prove useful in rural areas of Poland where mobility presents a barrier to service accessibility for seniors.

Improving support for family carers and creating age-friendly communities

Long-term care services in Poland are provided both within the healthcare system and within the social assistance system. Residential facilities within social assistance systems are run and financed by local governments while the cost of an individual's stay in such facilities is financed by the individual, their family and/or by local government. Apart from residential long-term care services, the social assistance system offers also wide range of semi-residential and community care – e.g. family care homes (rodzinne domy pomocy), supervised dwellings (mieszkania chronione), community self-help centres (środowiskowe domy samopomocy), as well as care services and specialised care services provided at the person's place of living (in their own homes).

Compared to OECD countries, Poland has very low rates of long-term care and individuals disproportionality rely on families for caregiving; family caregivers are disproportionately female (Colombo et al., 2011). With elder dependency ratios increasing across rural Poland, family carers will face increased pressure to balance the demands of raising a family while working and providing elder care. In recognition of the important role played by family carers, many OECD countries have implemented policies that directly or indirectly support them – e.g. cash and in-kind services (e.g. respite care), or initiatives to reconcile work and care (e.g. flexible work arrangements). Support networks have found to be important in order to help reduce the burnout of family carers. For example, "Caring for Carers" in Ireland developed a comprehensive network of support institutions for carers, which offers 13 skills training courses called "Caring in the Home". The Netherlands uses a preventive counselling and support approach (Preventieve Ondersteuning Matelzorgers), wherein, once enrolled in national care plans, individuals are contacted by trained social workers who carry out house visits (OECD, 2011).

Rural communities in Poland are increasingly interested in tackling the multidimensional aspects of health and well-being which includes opportunities to be active and mobile into older age and opportunities for social engagement to reduce risk of isolation. In interviews, rural gminas expressed an interest in doing more in this area, including an interest in multi-generational housing. Policies to support aging in place can help communities achieve this. Canada has supported such an initiative by creating a guide for rural and remote communities to support healthy aging across a range of areas - the design of outdoor spaces and building, transportation, housing, and social policies including and health services (PHAC, 2006). This guide helps communities adopt best practices and has been supported by dedicated funding for age-friendly community initiatives in most Canadian provinces.

Delivering social services in rural communities

Rural areas in Poland face a wide range of social issues and often have a more limited array of supports with which to address them by sheer virtue of their smaller size. Poland's system of social assistance targets support to those living in poverty, those experiencing homelessness, unemployed persons, those living with a disability or prolonged illness, and other vulnerable individuals.⁶⁴ These supports generally entail a mix of cash benefits, integration services, care services, shelter and purpose-based benefits where appropriate. The national government (Ministry of Family, Labour and Social Policy) sets the overarching regulations and defines service standards and voivodes assess conditions and standards at the local level. It is at the regional, powiat and gmina levels that these services are delivered to individuals in co-operation with foundations, church groups and others. Gminas run social assistance centres; powiats run centres for

family support, and regions and *voivodeships* run regional social policy centres. NGOs play an important role in delivering social assistance and run a range of support centres (e.g. day-care homes).

One of the major social service-related challenges for rural areas is how to address areas in economic decline where residents experience persistent multi-generational poverty. This challenge is faced in parts of Zachodniopomorskie, for example, where there are deprived zones with concentrated social issues including weaker social ties and higher rates of violence and alcohol abuse. These issues are further cemented where there is poorer service accessibility - e.g. long travel times for pupils to reach schools. The Zachodniopomorskie Regional Center for Social Policy has developed a classification of gminas according to social issues in order to target social support where it is needed the most and has established special inclusion zones and a revitalisation strategy for marginalised areas. This is a good example of how the social sector can target support to place. The centre sees service accessibility as one of the key challenges to tackle social issues and has expressed an interest in developing village schools (a smaller scale, more flexible educational model) and a mobile healthcare unit, but has not as yet been able to implement these ideas for lack of funds and resources. The centre reports a marked improvement in social conditions in areas that have successfully implemented projects with EU funds.

The challenge of providing social services to the areas for former state farms

One of the most persistently challenging issues is how to provide social support to residents in areas of former state-owned farms. These areas located in north-western Poland experience the highest rates of poverty along with the so-called "Eastern Wall" and rural areas in central Poland where land is fragmented and there is a lack of industry and financial capital (Tarkowska, 2008). The population of these areas tends to have lower rates of educational attainment and poorer literacy and numeracy and are not landowners or property owners. Many young people have left these communities and there is a larger share of elderly and hence, high dependency rations. The areas of former state farms are generally located at a distance from public services (e.g. schools, hospitals) and where there is a weak labour market. The types of labour activation supports that have been successful in other rural areas tend not to work well in these conditions and the prospects of a social co-operative model to generate self-employment are also limited.

Establishing functional areas where smaller gminas co-operate with each other and with the support of the regional and central government (Ministry of Labour) has been one strategy employed in order to help attract investment to these areas, develop transport networks, enhance services and provide vocational education. Zachodniopomorskie is one of the voivodeships in Poland with a large number of former state farms which has employed such a strategy. There are an estimated 200 000 individuals living in these areas in the voivodeship. The region is presently conducting a pilot project with 18 gminas in order to conduct local revitalisation projects (Box 2.20). It is too early to assess the outcomes of this pilot; however, it is a promising approach. Inter-municipal co-operation together with strong support from both the regional and national government are critical in order to tackle the multiple complex challenges facing these communities and their residents. It is important to recognise that the gminas in these areas may have much more limited capacity to identify investment priorities, attract funds, collaborate with other local actors, and deliver services and infrastructure. Given this, a closer relationship between governmental actors at all levels is needed, including allocated co-ordination at the regional and national level that can provide targeted support.

Box 2.20. The revitalisation of former state-owned farm communities in Zachodniopomorskie

State-owned agricultural holdings formed the basis of the agricultural economy in Zachodniopomorskie until the early 1990s, until their liquidation in 1991. On a national scale, this meant that 400 000 employees lost their jobs, which together with their families accounted for around 2 million people. The population lived in about 300 000 apartments, located in the area of 6 000 special settlements that set the framework for the existence of state farm employees. The specific micro-world, artificially maintained for decades, broke in a day. Former employees were granted a severance payment and land and apartments were purchased on a preferential basis. Yet, this was not enough to prepare many of these inhabitants for the new economic reality. The socio-economic costs of this decision are felt in many environments today, 25 years after the liquidation of state-owned farms.

In Zachodniopomorskie, out of 1 762 statistical units that are not cities, almost half are so-called post-state farms. In over 45% of former state farms there is an accumulation of social problems; every fifth municipality in Zachodniopomorskie is a post-federal village characterised by the compilation of social problems. Earlier attempts to stimulate the development of former state farms undertaken as part of the programmes of the Agency for Restructuring and Modernization of Agriculture as well as by local self-governments or non-governmental organisations have not brought the expected systemic change. These areas remain characterised by the variety of social and economic problems. This generates low development indexes in areas where state-owned farms prevailed, such as: a low level of education and health conditions of inhabitants, a low participation rate in culture, a high unemployment rate (excluding subregional capitals of the voivodeship), or professional and social inactivity. This makes it difficult to pursue an active policy for equalising interregional disparities and social cohesion.

In an effort to address these challenges, Zachodniopomorskie created special inclusion zones – a spatial definition which indicates the types and scale of challenges facing gminas in these areas. On this basis, the region's authorities have planned to launch an intervention tailored to the real needs of these localities. The special inclusion zone is therefore the receiver of spatially and thematically focused strategic actions co-financed by the Regional Operational Program of the West Pomeranian Voivodeship 2014-2020 in order to overcome barriers and at the same time to awaken and develop previously dormant capital.

One of the effects of regional operational programme support is a project strengthening the potential of local communities in revitalised areas, which included problem-oriented post-state farms. As part of this programme, 18 municipalities were provided a comprehensive support path including preliminary animation (diagnosis), local animation (stimulation), in-depth animation - inclusion (implementation and programming) and advisory support. An individualised approach to each municipality has enabled the inclusion of 720 inhabitants in a multi-stage process of creating a local revitalisation programme. These efforts focus on improving the quality of life for residents and in facilitating bottom-up, community-driven development and social change. Local revitalisation programmes can obtain financing from the regional operational programme, both for investment activities and strengthening the social and professional activity of the inhabitants. Persons classified as inactive receive support enabling them to return to the labor market. At every stage, residents are actively engaged in dialogue and action.

Source: Own elaboration.

Social workers in the areas of former state farms speak about a culture of "learned helplessness" and, as such, have found that programmes focused on rebuilding the self-esteem of younger people and also family mediation services can have a positive

impact. In their estimation, there are too few such programmes and they are not tied into the formal school system. In Zachodniopomorskie, the regional government commissioned NGOs in a number of *powiats* in 2015-16 to develop a family academy which provided assistance to families in order to help prevent social breakdown (e.g. children being removed from families for negligence). Another initiative is parent cafés – this is a community hall in villages where there is a large share of single mothers. Meetings are organised with dietary and legal assistance to support those facing domestic violence. This project was deemed successful and the social connections endured once the project ended.

Given the persistence of social issues in these areas, a range of supports are needed that are geared to place and much depends upon changing local attitudes. For example, accessibility is a major challenge for these areas and yet it is reported that when one *gmina* in Zachodniopomorskie set up a bus service to help people access employment opportunities, it was little used. Community embedded supports are needed to help shift attitudes and promote local leadership and this is a role best played by bottom-up development. At present, ESF funds are used at the regional level to provide services to residents; however, local governments should play a greater role in providing community-based supports in tandem with training and support.

Many countries struggle with how to address areas that have persistent multigenerational poverty. Canada has adopted an approach that may be of interest to Poland through its Community Employment and Innovation Project (Box 2.21). In exchange for foregoing employment insurance or social assistance benefits, project participants were offered wages to work on community projects for up to three years, giving them a significant period of stable income as well as an opportunity to gain work experience, acquire new skills and expand their network of contacts.

Enhancing service accessibility

Consolidation and collocation of services

Poland is not alone in facing the tandem trends of population aging and shrinking – many rural communities across the OECD are grappling with similar trends. It is a real challenge to maintain high-quality accessible public services that are adapted to changing demographic contexts amidst reduced public finances. One of the key strategies to address this issue is the consolidation of services. In 2016, Poland's Act on Local Government was amended so that local authorities could create so-called shared service centres. Under this framework, schools, kindergartens and social welfare centres in one *gmina* can share common accounting, information technology services, human resource systems and so on. Such local service centres also enable one *gmina* to act as a co-lead for others. For example, it enables the adoption of one accounting service for schools and kindergartens across several *gminas*. This is a very new mechanism for shared service delivery and, as such, cannot yet be assessed. However, in general, it makes a great deal of sense and has the potential to reduce costs.

Beyond the consolidation of some aspects of service delivery, a strategy for their collocation should also be considered where appropriate. Collocation of services can reduce basic overhead costs – energy, security and administrative expenses – and similar or substitute services can be combined into a single entity. Governments across the OECD are increasingly realising policy complementarities by concentrating service delivery. This often includes administrative services, healthcare, shopping and so on, in specific places

with transport networks organised so as to make them as accessible as possible to the rural population of the surrounding areas. Some examples are Japan's "small stations initiative" and France's Maisons de service au public (Box 2.22). They can vary in scale: some are quite basic and limited to essential functions, while others, where population and resources permit, come to act as local centres of innovation, playing a role in supporting efforts to bridge primary, secondary and tertiary activities in rural areas and in promoting renewable energy generation. In some communities, the proximity of these services can help them be more integrated with one another, as practitioners have more opportunities to interact and learn about each other's work – including across levels of government.

Box 2.21. Encouraging work and supporting communities: **Canada's Community Employment Innovation Project**

There are still regions in Canada where the unemployment rate exceeds twice the national average. Job-seekers in these communities run the risk of experiencing unemployment for a long period of time. For these unemployed workers, the Employment Insurance (EI) system offers temporary relief but when jobs are scarce and the local economy lacks diversity, job-seekers often end up exhausting their benefits and having to rely on income assistance. Extending the period of EI benefits is not a viable solution as individuals experiencing long periods of unemployment run the risk of seeing their skills deteriorate, and their employability being reduced. The longer they rely on government income transfers, the more difficult it becomes to find a job. What should governments do then to help these workers and communities? This issue prompted Human Resources and Social Development Canada to conceive the Community Employment Innovation Project (CEIP) — a long-term research and demonstration project that is testing a form of income transfer payment for the unemployed in areas of chronic high unemployment.

The CEIP is an active re-employment strategy which takes the form of a "community wage" paid to unemployed individuals who volunteer to work on locally developed community-based projects. Beyond fulfilling the need for immediate employment, the CEIP hopes to influence participants' longer term employability by helping them preserve and possibly improve their human and social capital. At the same time, the CEIP aims to facilitate community development by supporting the "third sector" and encouraging activities that are meaningful for both the participant and the community. Although the CEIP represented a promising approach, there was considerable uncertainty about how it would actually work. Its effectiveness was unproven, as various forms of job creation programming had been tried, but few had been carefully evaluated. The CEIP was implemented in the Cape Breton Regional Municipality in Nova Scotia in 1999. Industrial Cape Breton is one such area where the closure of the coal mines and a declining steel industry have resulted in double-digit unemployment rates over a decade, even during a period when the national economy has been thriving.

The evaluation of the CEIP found that during the eligibility period, the programme led to substantially higher rates of full-time work, increased employment duration, and a larger number of jobs held, often in higher skilled positions, thereby providing more substantial and varied work experience. It was also found that the programme increased household income substantially, reducing poverty and improving well-being during the programme, while imposing no significant hardship at the end of eligibility. The uptake of the CEIP by project participants was higher for those on Income Assistance than Employment Insurance benefits due to the higher benefits associated with the latter.

Source: Gyarmati, D. et al. (2008), "Encouraging work and supporting communities: Final results of the Community Employment Innovation Project", www.srdc.org/media/8508/CEIP finalrpt ENG.pdf.

Box 2.22. Maintaining service delivery amidst population decline: Examples from Japan and France

Japan's compact and networked approach and "small stations" initiative

In Japan, the need for innovative and cost-effective service delivery is driven in large part by demographics. The country has both an ageing population and overall population decline. Based on current projections, the government anticipates that Japan's population will fall by about 22-23% between 2010 and 2050, with the elderly (ages 65+) share of the population standing at roughly 40% at the end of the period. To meet these challenges, Japan's National Spatial Strategy has adopted a vision based on "compact" and "networked" cities and villages.

In order to ensure effective service delivery, the settlement of Japan should become more compact. At a national scale, the National Spatial Strategy acknowledges that some areas will become effectively depopulated, though it seeks to sustain a broad settlement pattern throughout the national territory. At smaller scales, the policy addresses the restructuring of urban and rural settlements that will be needed to maintain their cohesion and the efficiency of service delivery. A Japan in which cities and towns are shrinking will also need to be networked: improved connectivity will be critical to maximising the potential economic benefits of agglomeration. Better connectivity among towns and cities, as well as within them, is meant to offset to some extent the loss of agglomeration potential that will occur as a result of a shrinking population (and, even more, as a result of a shrinking workforce). This applies to both transport and communications connectivity. Better networking of people and firms should help encourage innovation and the exchange of ideas as well as goods and services.

These concepts - "compact" and "networked" - are to be applied differently at different scales and in different circumstances. In smaller towns and rural areas the emphasis is on creating basic service-delivery hubs that will help sustain rural communities around small, multifunctional cores (the so-called "small stations"). Networking will entail improved connections between very small hamlets and nearby service hubs (small stations). These "small stations" will concentrate basic service delivery, including administrative services, healthcare, shopping and so on, in specific places with transport networks organised so as to make them as accessible as possible to the rural population of the surrounding areas. These, too, are to vary with scale: some will be quite basic and limited to essential functions, while others, where population and resources permit, may come to act as local centres of innovation, playing a role in supporting efforts to bridge primary, secondary and tertiary activities in rural areas and in promoting renewable energy generation. These and similar initiatives are intended to promote a degree of de-urbanisation, in an effort to deconcentrate the economy and the settlement pattern and help revive rural areas and non-metropolitan regions. Indeed, promoting migration to rural areas is an explicit aim of the National Spatial Strategy, as well as a central priority for the government's new Headquarters for Overcoming Population Decline and Revitalising Local Economies.

The creation and maintenance of small stations will largely be left to prefectures and local authorities, although the funds involved will often come from the central government. This is clearly an area where prefectures can play a central role: the ministries in Tokyo lack the local knowledge and information needed to plan the location of small stations, but leaving it to municipalities alone risks triggering a race to invest public funds into too many small stations in an effort to stem local population decline. Even the prefectures may be inclined to over-supply them, though. For example, Kochi prefecture, on the south coast of the island of Shikoku, plans to create 130 small stations over the next decade. This implies a catchment area for each small station of about 54 km², meaning that one would never be more than 4-5 kilometres from a small station. On a nationwide basis, this would imply the construction of around 7 000 small stations.

Box 2.22. Maintaining service delivery amidst population decline: **Examples from Japan and France** (continued)

France's Maisons de service au public

Japan's small stations initiative is similar to approaches to service provision undertaken in some other OECD countries, such as France's Maisons de service au public. France's "one-stop shop" for citizens offers access to such public services as post offices, public transport ticketing, energy utilities, unemployment insurance and welfare services (pensions, family allowances, health insurance, etc.). The purpose of the "maisons" initiative is to guarantee public service delivery in low-density or isolated territories by sharing costs and employees as far as possible. For technical and statutory reasons, the sharing of employees has proved more complex than the sharing of costs or premises. The "maisons" are usually financed by local authorities (50%), public operators (25%) and the national government (25%). Beyond subsidising them, the French government plays an important role in promoting this policy, harmonising the services provided and giving them a common label. It has also set up a partnership with the French postal service, La Poste, to transform some post offices with low activity (mainly in rural or mountainous territories) into Maisons de services au public in order to make them more profitable and to avoid financing specific buildings. In March 2015, the government's Interministerial Committee for Rural Development set a goal of increasing the number of "maisons" threefold, up to 1 000, by the end of 2016, in accordance with the departmental schemes for the accessibility of public services that are enshrined in legislation for a new territorial organisation of the French Republic adopted in the summer of 2015.

This initiative is similar to those observed in places like Australia (rural transaction centres) and Finland (citizen service offices), to name but two others. These and other one-stop shops can cut provider costs and increase access by rural dwellers to necessary services. The range of services offered by one-stop shops in OECD countries can include anything from education, childcare, government information, referrals and advice, health and elderly care, social support services (rehabilitation and housing support), to cultural and recreational activities. Driven largely by community need and involvement, these "all-purpose" service centres are expected to continue to grow in rural areas because they allow governments to provide rural services on the basis of cost-efficiency (OECD, 2010). Japan's small station initiative looks in some ways even more ambitious than one-stop shops found in most other OECD countries, since small stations are to play a role in concentrating the delivery of private as well as public services, in reshaping the settlement pattern over time and in some cases acting as centres of innovation.

Sources: **OECD** (2016g), OECD**Territorial** Reviews: Japan 2016, http://dx.doi.org/10.1787/9789264250543-en; CGET (2016), Maisons de services au public, www.cget.gouv.fr/maisons-de-services-public; OECD (2010), Strategies to Improve Rural Service Delivery, http://dx.doi.org/10.1787/9789264083967-en.

Flexible public transport

Service delivery is linked to accessibility, which can present a real challenge in rural areas due longer distances and hence higher costs – e.g. transportation services for children to attend school. The budgets of lower income gminas (e.g. traditionally agricultural municipalities with lack of non-agricultural businesses, and often more remotely located municipalities) have difficulties financing such services while wealthier suburban municipalities are more able provide public services of a high standard, as they can afford to subsidy these tasks from their own budgets. The main problem of rural areas, in the context of accessibility to services located outside the municipality (local and regional towns), is the instability and uncertainty of public transportation connections that induces individual forms of transport (e.g. private cars). There is increasing interest in flexible and demand-responsive transport services such as taxis. These approaches can, however, be difficult to implement and more could be done to help communities asses the conditions required to make such flexible transport services successful (Velaga, 2012).

For rural areas close to cities, co-ordination of public transport policy has proven problematic. For example, Poznań, the capital city of Wielkopolska *voivodeship*, has a clear need for co-operation between the neighbouring municipalities to deliver effective public transport within the functional urban area, yet in practice, reaching agreement has proven difficult due to contradictory interests and lack of institutionalised mechanisms for inter-municipal co-operation (OECD, 2016d). To overcome such barriers, actors have to engage in *ad hoc* and unofficial consultations to avoid conflicts and overlaps. Local governments need stronger financial incentives and legal institutional frameworks to encourage rural-urban partnerships (see Chapter 3 for further discussion). Despite challenges, there are positive examples of communities that have been able to develop co-ordinated approaches to public transport, such as the town of Środa Wielkopolska (near the regional capital of Poznań, Wielkopolskie), which provides a free bus service linking the town to its surrounding rural communities.

The potential of e-services

Digital infrastructure has been greatly enhanced in rural Poland in recent years (as noted in the previous section on infrastructure). The expansion of ICT networks opens up the potential of e-services to help overcome the disadvantages of remoteness. While Poland has greatly enhanced e-services in some areas, such as business services, other aspects remain underused, such as e-health. While telemedicine could be a cost-effective strategy to increase access to health services for rural residents, such services are uncommon and there are concerns that just 40% of the Polish seniors surveyed declared a willingness to use telemedical services (Buliński and Błachnio, 2017). Lower rates of use make investments in such services less economical.

Expansion of e-health services in Poland would need to be combined with public education and training programmes to promote their use. Portugal has adopted a novel approach to enhance e-literacy; its "Net on Wheels" project uses vans equipped with notebook computers to provide access to the Internet and professional training.

Aligning rural policies for integrated development

The preceding sections have detailed the wide range of policy interventions and supports that have led to improved social and economic conditions in much of rural Poland over the past two decades. Rural Poland demonstrates a lot of potential and there are many examples of dynamic communities that offer a high quality of life to their residents. But in too many places, this potential has yet to be unlocked. Inequalities remain and the modernisation of agriculture has proceeded slowly. Far too many rural dwellers live in poverty and as the aging of the population intensifies, many risk being further marginalised. A shrinking working-age population means that Poland needs to make the most of all of its labour force and in rural areas, where labour is underutilised (e.g. hidden unemployment in agriculture). The proceeding sections have pointed to a number of recommendations to improve rural policy, from the need to tackle the reform of the farmers' social insurance system to more effective land-use management and the need for a consistent regulatory framework to support investment.

One of the key issues that multiple actors have remarked on is the need to better align regional development and rural development programmes. It is hard to find the right framework for European policy and to make Cohesion Policy more targeted for rural areas. On the other hand, the Ministry of Agriculture and Rural Development's main focus is on agriculture, with less of a focus on economic diversification. Regions have a great deal of interest in making the two funds complementary to one another; there is, for example, an interest in having functionally connected areas co-operate with one another to undertake joint investments and pool resources. But both the governance frameworks and instruments to encourage this are deemed weak by the actors involved. Furthermore, subnational governments find the rural development fund too centralised and would like to see the local scope for action increased. This pertains also to the community level – LAGs report a lack of trust and excessive reporting requirements. Programmes like LEADER demonstrate the importance of having social development alongside economic development. And yet, social funds tend to be siloed by target area, e.g. there are different funds for rural versus urban children. All of these issues present a barrier to developing more integrated strategies.

Governments need to look for the best mix of bottom-up and top-down measures in order to tackle structural disadvantage. It is found, for instance, that EU regional policy is maximised when its expenditure is complemented by rural development funds within the Common Agricultural Policy (Crescenzi and Giua, 2014). The top-down funding of the CAP concentrates some benefits in the most deprived areas and conversely, only the most dynamic rural areas are capable of leveraging the bottom-up measures of the EU Rural Development Policy. This demonstrates how the local socio-economic environment conditions the success of rural policies. Some parts of Poland are simply more able to take part in certain policies due to enabling framework conditions and stronger institutions. EU regional policy has a stronger impact in the most socio-economically advanced regions (Crescenzi and Giua, 2014). This presents a challenge in policy design.

A critical role for national policy is to provide additional supports in those territories that are most disadvantaged. Poland has adopted a number of targeted programmes for territories that face lower levels of social and economic development, e.g. the Operational Programme for Eastern Poland. Under the new Strategy for Responsible Development, such targeted programmes will be expanded to include Silesia, medium-sized towns losing economic and social functions, and areas threatened by permanent marginalisation (e.g. areas of former state-owned farms). A package of actions will be implemented through local partnerships. This is a very promising approach that will require new ways of working between levels of government to be successful. The SRD articulates such a commitment with its call for a more decentralised system of development policy alongside a strengthening of the co-operation mechanisms between and among all levels of government.

The SRD further stresses the importance of development processes encompassing all territories by enhancing their endogenous potential. In contrast to the former national development strategy, the SRD addresses all rural areas (not only marginalised ones), and the development potential of regions is no longer attributed only to cities, but also to endogenous factors in rural areas. Accordingly, the SRD's objective to promote socially responsive and territorially balanced development includes two intervention measures dedicated to rural development: rural development based on endogenous economic potential and activating the areas at risk of permanent marginalisation.

As will be discussed in the following chapter, enhanced vertical and horizontal inter-institutional co-operation is much needed. In rural areas, the national government has proposed to support such integration through a Pact for Rural Areas (within the SRD). Activities that serve to develop rural areas will be defined in one document and will include initiatives that are financed from the national budget alongside EU funds. The purpose of the rural pact is to build a co-ordinated approach to development involving national, regional, local and community-based actors. This approach aims to help overcome the acknowledged silos between regional development polices and rural development and agriculture. This is laudatory approach; and yet, in an effort to provide overarching co-ordination, it will be critical that policy actions are meaningfully grounded in community-based needs.

Notes

- 1. The objective of rural mainstreaming is to ensure that people in rural England have access to the same policies and programmes as those available in urban England (OECD, 2011). "Rural proofing" is the methods that are used to implement this policy while "rural champions" reflect the lead departments to carry out this activity.
- 2. Collective farms had excessive costs and were not resolving the problem of food shortages (Kowalski, 1993: 349).
- 3. Amidst these changes, three stages can be identified: an initial period of major policy changes including trade liberalisation, a dissolution of the former systems of market support and the privatisation of state enterprises gave way to the prevalence of private initiatives (roughly mid- to end-1990s) involving foreign investment (Dries et al., 2011: 220). In the final stage (since 2000), public policy was dominated by the EU accession process (Dries et al., 2011: 220).
- 4. SAPARD was created to support the efforts being made by the Central and Eastern European applicant countries in the pre-accession period as they prepared for their participation in the Common Agricultural Policy and the single market. The programme delegated substantial responsibility to Poland for the management of EU funds for rural development and decentralised programming. In Poland, SAPARD pre-accession funds were directed towards the priority axes of: improvement of the market efficiency of the agri-food sector and improvement of conditions for economic activities and job creation. For a discussion of the SAPARD programme in Poland see Nurzyńska (2012).
- 5. For an overview of the impact of EU accession on Poland see Hykawy (2005).
- 6. As noted by Nurzyńska "when Poland became an EU member state in 2004, it did not participate in the implementation of a full seven-year programming period (2000-2006) and had a limited access to the EU budget. Yet, in order to have access to the EU funds, Poland had to develop a strategy on the use of structural funds (National Development Plan 2004-2006, NDP 2004-2006), a strategy on the use of Cohesion Fund and a rural development strategy for the purpose of CAP instruments implementation. This was a heavy administrative work carried out over a very short period of time" (2012: 179).

- 7. EU actions are subject to the principle of subsidiarity; the European Union only acts where action will be more effective at EU level than at the national level.
- 8. Poland's National Reform Programme is the basic instrument for the implementation of the Europe 2020 Strategy. It was adopted by the Council of Ministers of Poland in 2011 and is updated in April each year. The National Reform Programme details how Poland will fulfil its national commitments under Europe 2020.
- 9. Initially, Cohesion Policy was envisaged to promote equitable development such that there would be convergence in terms of development across regions. This notion of equity has since been supplanted by efficiency; Cohesion Policy continues to support regional development but to a level of socially and politically acceptable differentiation (see Faludi [2006]).
- 10. The CAP's market measures are administered through paying agencies appointed by national authorities.
- The European Agricultural Guarantee Fund primarily finances direct payments to 11. farmers and measures to regulate agricultural markets while the European Agricultural Fund for Rural Development (EAFRD) is co-financed by the rural development programmes ofthe member states See: https://ec.europa.eu/agriculture/cap-funding/funding-opportunities en.
- 12. As measured by the total support estimate.
- EPRS calculation based on Eurostat 2013 data and Annex II of EU Regulation 13. No. 1307/2013 on direct payments to farmers (year 2020). The calculation is based on 2020 national allocations, because from 2014 to 2019 the data are affected by the net transfer to and from the rural development and by the external convergence between member states (Tropea, 2016).
- 14. For a description of Agenda 2000 see European Union (1997).
- 15. The first multiannual financial framework that Poland participated in in full took place between 2007 and 2013. Upon Poland's accession to the EU in 2004, it engaged in a shortened funding programme for the 2004-07 perspective.
- Thematic objectives are translated into priorities that are specific to each of the ESI 16. funds and are set out in the fund-specific rules (European Union, 2013).
- 17. The amount of co-financing varied by fund type. For example, the co-financing amount is 95% for some ESF funds, while for EAFRD funding it is 63.63% (European Commission, 2017d).
- 18. The supraregional Operational Programme for Eastern Poland 2014-2020 covers Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie voivodeships.
- 19. One purpose of these reforms was to shift from a sectoral approach towards programmes that are based on overcoming key challenges in an integrated and cross-cutting manner. One outcome of adopting this approach is that the number of sectoral strategy papers was reduced in 2009 from 42 to 9.
- 20. Poland's long-term national development strategy to 2030 is entitled "The Third Wave of Modernity"; the medium-term strategy to 2020 is entitled "Active Society, Competitive Economy, Efficient State". The nine integrated strategies include: the Strategy for Innovation and Efficiency of the Economy; the Human Capital Development Strategy; the Transport Development Strategy; the Energy Security and

- the Environment; the Efficient State; the Social Capital Development Strategy; the National Strategy of Regional Development 2010-2020; the Strategy for Development of the National Security System; and the Strategy for Sustainable Development of Rural Areas, Agriculture and Fisheries.
- 21. Poland's operational programmes for 2014-20 are for: Eastern Poland; Digital Poland; Infrastructure and the Environment; Smart Growth; and Technical Assistance (http://ec.europa.eu/regional_policy/en/atlas/programmes).
- 22. The regional level includes both regional self-government and central government representation. The central government is represented at the regional level by a governor (*voivode*), who is appointed by the prime minister. The regional governor is responsible for the administration of central government institutions and property and has powers in the areas of environmental protection, public safety and emergency preparedness. The central government-appointed governor acts as a check on the lawfulness of subnational government undertakings region, county and municipality (*voivodeship, powiat* and *gmina*). The regional assembly (*voivodeship sejmik*) is directly elected for four-year terms. The elected regional assembly can adopt and pass bylaws associated with its devolved responsibility and also elects a marshal (*marszalek*), deputy marshals and board members. These positions form the executive of the regional government (referred to as the *zarząd województwa*).
- 23. In the 2004-06 period, regional governments implemented a centrally managed EU regional operational programme of the national government, but in 2007, Polish regions became managing authorities for EU regional operational programme funds. In the 2014-20 perspective, regional governments managed EUR 10.4 million of the ESS and EUR 22.5 million of the ERDF.
- 24. Around half of all resources for the investment for growth and jobs goal have been allocated to less-developed regions under the 2014-20 funding perspective. Just over 15% of the resources for investment in growth and jobs is allocated to more developed regions, i.e. those regions with GDP per capita is above 90% of the average GDP of the EU-28 (European Commission, 2015).
- 25. Counties have an elected council who elect a board, headed by the *starosta*. *Gminas* are local government units with a directly elected council and a mayor.
- 26. This includes including collective transport, roads, water supply, wastewater and waste collection and small waste management facilities through a permitting system.
- 27. These decentralised functions include: pre-school and primary education (for children up to 15 years old); "communal services" such as water and sewage, solid waste collection and disposal, street lighting, local parks and green areas, central heating; local road and street maintenance; local public transport in cities; communal housing; voluntary fire brigades; various social services; cultural and recreation facilities; and local (spatial) planning.
- 28. Examples include the Polish Federation of Cattle Breeders and Dairy Farmers; the National Union of Farmers, Agricultural Circles and Farm Organizations (KZRKIOR) (and the sub-organisations of Agricultural Circles and Farmer Wives Circles); the Federation of Large Scale Farm Producers; and the National Council of Agricultural Chambers (NCAC).
- 29. The CLLD outside of rural areas takes the form of urban-rural linkages and RURBAN, DG Regio; Implementing CLLD in cities, URBACT and co-operation between LEADER LAGs and Fisheries LAGs, FARNET.

- 30. The capping and redistribution payment under the direct support scheme pertains to the basic payment part of the direct payments which has the function of income support. Furthermore, while the FADN database indicates that agricultural incomes in small farms amount to only a part of non-farm incomes, agricultural incomes in the largest farms may exceed manyfold the average non-farm incomes.
- 31. Subsidies to KRUS as a proportion of GDP amounted to 0.9% in 2016. The state subsidy to the KRUS pension system has declined over time; the subsidy paid to the pension was 95% in 1991, 86.1% in 2014 and 84.8% in 2016 (Source: KRUS).
- 32. Data for Q1 2017 in Kwartalna informacja statystyczna. I kwartał 2017 r., KRUS: https://www.krus.gov.pl/fileadmin/moje_dokumenty/dokumenty/statystyki-BE/KIS/2017/KWARTALNA INFORMACJA STATYSTYCZNA -I kwartal 2017 r..pdf.
- For example, in 2015, farmers paid PLN 126.00 whereas an entrepreneur pays 33. PLN 757.76 (excluding health insurance), i.e. six times more than a farmer (Hajduga, 2015: 96).
- 34. Since 2009 there are thresholds in terms of farm size (number of hectares and not economic size or output sales), which oblige larger farms to pay additional premiums expressed as a percentage of basic pension, thus the level of subsidies diminishes in line with growing farm size, but does not disappear completely.
- 35. Some reforms to the KRUS system have proceeded. For example, in 2015 healthcare contribution rates for so-called special agricultural production activities were increased, but remain small; the possibility to benefit from early retirement (women at age 55, men at 60) will be gradually eliminated; and the disincentive to undertake a non-farm job for farmers receiving disability benefits is being reduced (OECD, 2014a: 61).
- 36. By law, a person who owns or jointly owns 2 hectares of agricultural land or who is subject to KRUS insurance as a spouse or household member cannot register in a district labour office as unemployed. Note that workers on agricultural co-operatives can qualify for unemployment benefits.
- 37. Modulation (capping) of direct payments is obligatory in the current CAP and has been introduced by other countries in various forms.
- 38. This estimate is based on the premise farms in the Farm Accountancy Data Network (FADN) of the European Commission can be considered analogous to commercial farms.
- 39. European size unit, abbreviated as ESU, is a standard gross margin of EUR 1 200 that is used to express the economic size of an agricultural holding or farm (Eurostat, 2017).
- 40. For example, these objectives are articulated in the Polish government's new/forthcoming Strategy for Responsible Development.
- 41. In 2015, a new EU Programme for Employment and Social Innovation was established in Poland. The fund will cover a loan portfolio of EUR 45 million disbursed to over 6 000 microentrepreneurs. The fund is managed by the European Investment Fund (European Investment Fund, 2016).
- 42. This annual payment is limited to the number of payment entitlements activated by the farmer or to the number of eligible hectares declared by the farmer up to 90 hectares. That limit shall not be below 25 hectares or above 90 hectares.

- 43. These supports form 5% of Poland's total RDP allocation 2014-20 (OECD, 2017a).
- 44. The core network encompasses the Agricultural Advisory Centre in Brwinów (CDR) and the provincial agricultural advisory centres, which form a network in each *voivodeship*. The Network for Innovation in Agriculture and in Rural Areas facilitates knowledge transfer between farmers, entrepreneurs, advisory bodies and scientific institutions in order to promote the exchange of expertise and best practices in the field of innovation in agriculture.
- 45. New initiatives to support entrepreneurship as part of the Europe 2020 Strategy include: the European Digital Agenda, Union Innovation, Youth Mobility, Industrial Policy in the Globalization Era, the New Skills and Employment Scheme, and the European Program for Combating Poverty and Social Exclusion.
- 46. VET education is jointly funded by employers and the Labour Fund, a special fund under the jurisdiction of the Ministry of Labour.
- 47. www.warsawvoice.pl/download/special/20130425 ruraltourism.pdf.
- 48. The precursor organisation to the ANR was the Agricultural Property Agency of the State Treasury (*Agencja Własności Rolnej Skarbu Państwa*), which was established in 1991.
- 49. Under this system, a large number of conditional contracts were established, even for small property of a few hundred metres. Between 2003 and 2007, up to 130 000 conditional contracts were created each year. In 2010, the act governing this process was modified to apply only to property larger than 5 hectares; this modification reduced the number of conditional contracts issued by the agency for agricultural land. With a reduced administrative burden for managing contracts, the agency shifted at this point towards acquiring property to improve the structure of farming in a given region or commune.
- 50. Pursuant to the provisions of the Act on Formation of the Agricultural System, a purchaser of the agricultural property may be, in principle, an individual farmer. The area of the acquired agricultural property along with the area of agricultural land forming the family farm of this farmer must not, however, exceed the area of 300 hectares of the utilised agricultural area. Apart from the individual farmer, agricultural properties may also be acquired by: relatives of the seller (i.e. descendants, ascendants, siblings, siblings' children, spouse, adopter and adoptee); the State Treasury; local government units; church legal persons and religious associations; national parks for purposes related to environmental protection. The acquisition of the property is also possible by succession and in other cases set out in the act. Other entities may acquire agricultural properties by consent of the general director of the KOWR. The general director gives consent upon request of the seller where; there are no individual farmers interested in the acquisition; the seller potentially gives a guarantee of appropriate pursuing of the agricultural activity; as a result of the acquisition, there will be no excessive concentration of agricultural land. The consent for the acquisition of the agricultural property may also be obtained by a natural person intending to create the family farm if this person: holds agricultural qualifications or, provided that s/he improves professional qualifications, has been granted aid from the European Union funds (Young Farmer); guarantees appropriate pursuing of the agricultural activity; undertakes to reside for a period of five years from the date of the acquisition of the property in a municipality, where one of the agricultural properties forming the farm being created is situated. If the consent for

the acquisition of the agricultural property is not given, the KOWR, upon request of the seller, is obliged to acquire this property against payment of the market price.

In the period from 1 January to 31 May 2017, the General Director of the KOWR issued in total 6 719 administrative decisions on the acquisition of agricultural properties (with a total area of 21 019 hectares), including: 6 209 positive decisions regarding a total area of 19 174 hectares; 103 negative decisions regarding a total area of 568 hectares; 407 decisions on discontinuation regarding a total area of 1 276 hectares.

- 51. In France smaller rural communes can prepare a carte communale as opposed to the more complex plan local d'urbanisme. In the Netherlands there are rural development plans for areas with low development pressure.
- 52. The special secretariat in the unit responsible for programming services the forum.
- 53. Poland's first environmental act was adopted on 31 January 1980 for the protection and shaping of the environment (Journal of Laws 1980, No. 3, pos. 6).
- 54. Wind turbines in the past only had to pay property tax on the value of the foundation and tower. Under the new regulations they have to pay property tax on the whole value of the turbine and the tax burden it anticipated to increase three to fourfold.
- 55. Public infrastructure is defined as facilities, structures, networks, systems, plant, property, equipment or physical assets – and the enterprises that employ them – that provide public goods, or goods that meet a politically mandated, fundamental need that the market is not able to provide on its own. This definition thus ranges from the direct provision of military installations to privately owned and operated utilities under government regulation, such as energy. The nature of the asset also varies from traditional fixed assets such as bridges and buildings to ICT architecture (OECD, 2017d).
- 56. As identified in the Poland's National Reform Programme for the implementation of the Europe 2020 Strategy.
- The transport development strategy falls under the purview of the Ministry of 57. Infrastructure and Construction. Detailed recommendations regarding the organisation of subregional and local transport are the National Strategy of Regional Development 2010-2020: Regions, Cities, Rural Areas; and the Strategy for Sustainable Rural Development, Agriculture and Fisheries. The Municipal and Powiat Road Infrastructure Development Programme for the years 2016-19 focuses on enhancing the safety of road users and the effectiveness of the transport sector and to improve the transport accessibility (the total amount of PLN 4 billion in the years 2016-19).
- Over the 2007-13 programming period Poland received 31% of the total EU Cohesion 58. budget allocated to transport, i.e. about EUR 23 billion out of a total of EUR 75 billion, targeting investment primarily at its road network. Motorways and trunk roads increased by 13% in Poland between 2004 and 2012 (European Parliament, 2014).
- 59 At the end of 2015, in Poland there were 1 978 illegal dumps, i.e. 16.6% less than in the previous year. In urban areas, there were 483 such dumps (a drop of 35.2% in comparison to 2014), and in rural areas 1 495 (a decrease of 8.1% as compared to 2014) (CSO, 2015).

- 60. For example, in 2015 it was reported that 67.5% of respondents in rural areas had access to the Internet while this figure stood at 82.3% in cities of 500 000 or more inhabitants (Janc and Siłka, 2016).
- 61. In such cases, teachers are pursuant to the Labour Code, and not the Teacher's Charter Act, which has stronger labour protection and higher rates of compensation.
- 62. Previously, the educational system was based on five years of primary school; three years of middle school; three to four years of high school, technical high school or general vocational schools.
- 63. Information provided by Institute of Rural and Agricultural Development of the Polish Academy of Science.
- 64. Social assistance is granted to persons and families, in particular for the following reasons: poverty, orphanage, homelessness, need to protect motherhood, unemployment, disability, prolonged illness, incompetence in childcare matters likewise in running a household, particularly in case of incomplete and large families, alcoholism or drug addiction, difficulties in adjusting to life after discharge from penitentiary institution, natural or ecological disasters (www.mpips.gov.pl/en/social-assistance).
- 65. State-owned farms operated as a type of closed community in the past, with all services provided on the farm. Upon their dissolution, many of these services were closed and a large portion of the population moved to other parts of the country to take up new employment.

References

- Baer-Nawrocka, A. and W. Poczta (2016), "Polish agriculture vs. agriculture in the European Union", in: Wilkin, J. and I. Nurzyńska, *Rural Poland 2016*, Foundation for the Development of Polish Agriculture.
- Bergel, T. (2012), "Awaryjność sieci wodociągowych małych wodociągów grupowych w Polsce" [Failure of water supply networks of small group waterworks in Poland], *Gaz, woda i technika sanitarna*.
- Biczkowski, M. and M. Biczkowska (2016), "Impact of the EU funds on the diversification of economic activity (of farms) and their role in multi-functional development of rural areas", *Studia Obszarów Wiejskich*, Vol. 43, pp. 23-44.
- Boulhol, H. et al. (2012), "Improving the health-care system in Poland", *OECD Economics Department Working Papers*, No. 957, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k9b7bn5qzvd-en.
- Bouzarovski, S. and S. Tirado Herrero (2017), "Geographies of injustice: The sociospatial determinants of energy poverty in Poland, the Czech Republic and Hungary", *Post-Communist Economies*, Vol. 29/1, pp. 27-50, https://doi.org/10.1080/14631377.2 016.1242257.

- Bryden, J. (2015), "Making the bioeconomy work for rural development: Some Nordic experience", presentation at the OECD Rural Policy Conference, Mempis, May, www.oecd.org/cfe/regional-policy/Making-bioeconomy-work-for-rural-development-JohnBryden.pdf.
- Buckwell, A. et al. (2017), "CAP: Thinking out of the box: Further modernisation of the how?". why, what and **RISE** Foundation, www.risefoundation.eu/images/files/2017/2017 RISE CAP Summarv.pdf.
- Buliński, L. and A. Błachnio (2017), "Health in old age, and patients' approaches to telemedicine in Poland", Annals of Agricultural and Environmental Medicine, Vol. 24/2, p. 322, http://dx.doi.org/10.26444/aaem/74200.
- Campos, M., T. Jaklic and L. Juvancic (2010), "Factors affecting farm productivity in Bulgaria, Hungary, Poland, Romania and Slovenia after the EU accession and likely structural effects", conference paper presented at the 118th EAAE Seminar, August, http://ageconsearch.umn.edu/record/95315/files/Campos-Factors affecting farm productivity in Bulgaria Hungary Poland Romania an d Slovenia after the EU-accession.pdf.
- Card, D., J. Kluve and A. Weber (2010), "Active labour market policy evaluations: A meta-analysis", TheEconomic Journal. Vol. 120/548. pp. http://dx.doi.org/10.3386/w16173.
- Cervantes-Godoy, D. and J. Brooks (2008), "Smallholder adjustment in middle-income countries: Issues and policy responses", OECD Food, Agriculture and Fisheries Papers, No. 12, OECD Publishing, Paris, http://dx.doi.org/10.1787/228583166164.
- CGET (2016), Maisons de services au public, webpage, www.cget.gouv.fr/maisons-deservices-public.
- Charles, D., F. Gross and J. Bachtler (2012), "Smart specialisation and Cohesion Policy: A strategy for all regions?", IQ Thematic Paper, Vol. 30/2, pp. 1-51, www.eprcstrath.eu/public/dam/jcr:ca04731c-2d7b-490f-a51e-3e368b7ecfb6/ThematicPaper30%25282%2529Final.pdf.
- Chaplin, H., S. Davidova and M. Gorton (2005), "Impediments to employment and enterprise diversification: Evidence from small-scale farms in Poland", conference paper presented at the 11th Congress of the EAAE, Copenhagen, August.
- Chmieliński, P. and B. Karwat-Woźniak (2105), "Changes in population and labour force in family farming in Poland", Studies in Agricultural Economics, Vol. 117, pp. 140-146, http://dx.doi.org/10.7896/j.1511.
- Colombo, F. et al. (2011), Help Wanted?: Providing and Paying for Long-Term Care, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264097759-en.
- Crescenzi, R. and M. Giua (2014), "The EU Cohesion Policy in context: Regional growth and the influence of agricultural and rural development policies", LSE "Europe in Question" Discussion Papers, No. 2014/85, London School of Economics, London, www.lse.ac.uk/european-institute/Assets/Documents/LEQS-Discussion-Papers/LEQSPaper85.pdf.
- Csaki, C. and Z. Lerman (2002), "Land and farm structure in transition: The case of Poland", Eurasian Geography and Economics, Vol. 43/4, pp. 305-322.

- CSO (2017), Oświata i wychowanie w roku szkolnym 2016/2017 [Education in the School Year 2016/2017], Central Statistical Office, Warsaw, http://stat.gov.pl/obszary-tematyczne/edukacja/edukacja/oswiata-i-wychowanie-w-roku-szkolnym-20162017,1,12.html.
- CSO (2016), "Oświata i wychowanie w roku szkolnym 2015/2016" [Education in 2015/2016 school year], Central Statistical Office of Poland, https://stat.gov.pl/obszary-tematyczne/edukacja/edukacja/oswiata-i-wychowanie-w-roku-szkolnym-20152016,1,11.html.
- CSO (2015a), "Municipal infrastructure in 2015", https://stat.gov.pl/en/topics/municipal-infrastructure-municipal-infrastructure-in-2015,1,13.html.
- CSO (2015b), "Turystyka w 2014 r.", https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/turystyka/turystyka-w-2014-r-,1,12.html.
- CSO (2014), "Rocznik demograficzny 2014", http://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2014,3,8.html.
- Czemiel-Grzybowska, W. and A. Skowronek-Mielczarek (2017), "Entrepreneurship research in the Poland", *Technological and Economic Development of Economy*, Vol. 23/3, pp. 504-519, https://doi.org/10.3846/20294913.2015.1070770.
- Daniele, D., T. Johnson and F. Zandonai (2009), "Networks as support structures for social enterprises", in: Noya, A. (ed.), *The Changing Boundaries of Social Enterprises*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264055513-5-en.
- Directorate-General for Internal Policies (2015), "Implementation of the first pillar of the CAP 2014-2020 in the EU member states", European Commission, Brussels, https://www.europarl.europa.eu/RegData/etudes/STUD/2015/563386/IPOL_STU(2015)563386 EN.pdf.
- Dries, L. and J.F.M. Swinnen (2002), "Institutional reform and labor reallocation during transition theory and evidence from Polish agriculture", *World Development*, Vol. 30/3, pp. 457-474, https://doi.org/10.1016/S0305-750X(01)00118-8.
- Dries, L. et al. (2011), "Public policies and private initiatives in transition: Evidence from the Polish dairy sector", *Post-Communist Economies*, Vol. 23/02, pp. 219-236, https://doi.org/10.1080/14631377.2011.570051.
- Drost, S. (2013), "The agricultural sector in Poland and Romania and its performance under the EU influence", Working Paper, No. 2013/21, Otto-Strammer-Zentrum, Freie Universitat Berlin, Berlin, Germany.
- Dunkel, T. and I. Le Mouillour (2009), "Through the looking-glass: Diversification and differentiation in vocational education and training and higher education".
- Dzun, W. (2016), "Wpływ rozdysponowania Zasobu Własności Rolnej Skarbu Państwa na strukturę gospodarstw rolnych w latach 1996-2010" [The impact of the distribution of the State Treasury Agricultural Property Reserve on the structure of agricultural holdings in the years 1996-2010], *Zagadnienia ekonomiki rolnej* Vol. 2, pp. 26-51.
- Dzun, W. and W. Musiał (2013), "Zagospodarowanie ziemi rolniczej w Polsce w okresie przed-i poakcesyjnym w ujęciu regionalnym" [Development of agricultural land in Poland in the pre-accession and post-accession period in a regional perspective], *Wieś i Rolnictwo*, 4.

- ERDF (2011), "Bariery instytucjonalne rozwoju przedsiębiorczości na obszarach wiejskich" [Institutional barriers to entrepreneurship development in rural areas], Fundacja Europejski Fundusz Rozwoju Wsi Polskiej, Instytutem Rolnictwa i Rozwoju Wsi PAN, Fundacja Europejskie Centrum Przedsiebiorczości, Fundacja Europejski Fundusz Rozwoju.
- European Commission (2017a), "The Youth Employment Initiative in Poland", European Commission, Brussels, http://ec.europa.eu/social/BlobServlet?docId=13481&langId=en.
- European Commission (2017b), "Total EU allocations of European Maritime and Fisheries Fund 2014-2020 (unit €, current prices)", https://ec.europa.eu/fisheries/sites/ fisheries/files/docs/body/overall-table-2014-2020.xls.
- European Commission (2017c), "European Maritime and Fisheries Fund (EMFF) Poland", European Commission, https://ec.europa.eu/fisheries/fishe /body/op-poland-fact-sheet en.pdf.
- European Commission (2017d), ESIF Finance Implementation Details (database), https://cohesiondata.ec.europa.eu/dataset/ESIF-2014-2020-Finance-Implementation-Details/99is-gm52.
- European Commission (2017e), "Country report Poland 2017", http://eurlex.europa.eu/legal-content/NL/TXT/?uri=CELEX%3A52017SC0086.
- European Commission (2016a), "Country report Poland 2016", working document, Brussels, http://ec.europa.eu/europe2020/pdf/csr2016/cr2016 poland en.pdf.
- European Commission (2016b), "Financial services: Commission requests Bulgaria, Hungary, Latvia, Lithuania and Slovakia to comply with EU rules on the acquisition of agricultural land", press release, 26 May, http://europa.eu/rapid/press-release IP-16-1827 en.htm.
- European Commission (2016c), "European Structural and Investment funds", European Union, Brussels, http://ec.europa.eu/regional policy/sources/policy/what/investmentpolicy/esif-country-factsheet/esi funds country factsheet pl en.pdf.
- European Commission (2016d), "Statistical factsheet Poland", European Union, Brussels, https://ec.europa.eu/agriculture/sites/agriculture/files/statistics/factsheets/pdf/pl en.pdf.
- European Commission (2015), European Structural and Investment Funds: 2014-2020: Official Text and Commentaries, European Union, Brussels, http://ec.europa.eu/region al policy/sources/docgener/guides/blue book/blueguide en.pdf.
- European Commission (2014a), "Summary of the Partnership Agreement for Poland, 2014-2020", Brussels, 23 May, https://ec.europa.eu/info/sites/info/files/partnership- agreement-poland-summary-may2014 en.pdf.
- European Commission (2014b), Education and Training Monitor Poland, Publications Office of the European Union, Brussels, http://ec.europa.eu/dgs/education_culture/rep ository/education/library/publications/monitor14 en.pdf.
- European Commission (2014c), "Observations on the Partnership Agreement with Poland", https://ec.europa.eu/info/sites/info/files/partnership-agreement-polandobservations-mar2014 en.pdf.
- European Investment Fund (2016), "First EaSI microfinance deal in Poland to support over 6,000 micro-enterprises", press release, 19 January, www.eif.org/what_we_do/mi crofinance/news/2016/easi inicjatywamikro%20.htm.

- European Parliament (2014), "EU road surfaces: Economic and safety impact of the lack of regular road maintenance", European Union, Brussels, www.europarl.europa.eu/RegData/etudes/STUD/2014/529059/IPOL_STU(2014)529059_EN.pdf.
- European Union (2013), "Regulation (EU) No. 1303/2013 of the European Parliament and of the Council of 17 December 2013", *Official Journal of the European Union*, http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013R1303&from=EN.
- European Union (1997), *Agenda 2000, for a Stronger and Wider Union*, Bulletin of he European Union, Supplement 5/97, European Communities, Brussels, https://ec.europa.eu/agriculture/sites/agriculture/files/cap-history/agenda-2000/com97-2000 en.pdf.
- Eurostat (2017), "Glossary: European size unit", webpage, http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:European size unit (ESU).
- Eurostat (2013), "Agricultural statistics", *Eurostat statistical database*, http://ec.europa.eu/eurostat/web/agriculture/data/database.
- Eurostat (2005), "Agricultural statistics", *Eurostat statistical database*, http://ec.europa.eu/eurostat/web/agriculture/data/database.
- FADN (2017), "2015 standard results of Polish FADN agricultural holdings", Farm Accountancy Data Network, Warsaw, http://fadn.pl/en/publications/standard-results.
- FADN (2015), *Agriculture and Rural Development* (database), http://ec.europa.eu/agriculture/rica/database/database_en.cfm.
- FADN (2012), "2010 standard results of Polish FADN agricultural holdings", Farm Accountancy Data Network, Warsaw, http://fadn.pl/en/publications/standard-results.
- Faludi, A. (2006), "From European spatial development to territorial Cohesion Policy", *Regional Studies*, Vol. 40/6, pp. 667-678, https://doi.org/10.1080/00343400600868937.
- FAPA (2016), "Rural Poland 2016: The report on the state of rural areas", Foundation for the Development of Polish Agriculture, https://enrd.ec.europa.eu/news-events/news/rural-poland-2016 en.
- Fazekas, M. and S. Field (2013), *A Skills beyond School Review of Germany*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202146-en.
- Fazekas, M. and I. Litjens (2014), *A Skills beyond School Review of the Netherlands*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264221840-en.
- FDPA (2016), "Polska wieś 2016, Raport o stanie wsi" ["Polish village 2016, Report on the condition of the villages"], Foundation for the Development of Polish Agriculture, www.fdpa.org.pl/polska-wies-2016-raport-o-stanie-wsi-informacja-prasowa.
- Ferry, M. (2013), "Implementing regional policy in Poland: A new era?", *Europe-Asia Studies*, Vol. 65/8, pp. 1578-1598, https://doi.org/10.1080/09668136.2013.833016.
- Field, S. et al. (2012), *A Skills beyond School Review of Denmark*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en.
- Furmankiewicz, M., K. Janc and A. Macken-Walsh (2016), "The impact of EU governance and rural development policy on the development of the third sector in rural Poland: A nation-wide analysis", *Journal of Rural Studies*, Vol. 43, pp. 225-234, https://doi.org/10.1016/j.jrurstud.2015.12.011.

- Gaziński, B. (2016), "Poland recast. Agriculture and rural development during a period of the transformation and European integration: An overview", AgroLife Scientific Journal, Vol. 5/1, pp. 69-82, http://agrolifejournal.usamv.ro/pdf/vol.V 1/Art10.pdf.
- Gomułka, S. (2016), "Poland's economic and social transformation 1989-2014 and contemporary challenges", Central Bank Review, Vol. 16/1, https://doi.org/10.1016/j.cbrev.2016.03.005.
- Górniak, J. (2013), "Kompetencje Polaków a potrzeby polskiej gospodarki", Raport podsumowujący IV edycję badań BKL.
- Government of Poland (2017), Strategy for Responsible Development, Warsaw.
- Government of Poland (2012), National Spatial Development Concept 2030: Summary of the Government Document, Ministry of Regional Development, www.esponontheroad.eu/dane/web espon library files/682/national spatial develop ment concept 2030 summary.pdf.
- Government of Poland (2011), National Spatial Development Concept 2030: Summary, Ministry of Regional Development, Warsaw, www.esponontheroad.eu/dane/web espo n library files/682/national spatial development concept 2030 summary.pdf.
- Government of Poland (2007), "Report of the Polish Ministry of Infrastructure", http://warszawa.sarp.org.pl/pliki/raportMBud2007 04.pdf?PHPSESSID=47f2e722vtlk nciln8p3bhp0m1 (accessed 25 March 2016).
- Gradziuk, P. (2016), "Significance of agriculture and the rural areas for the improvement of the ecological situation and power supply system of Poland", in: Wilkin, J. and I. Nurzyńska, Rural Poland 2016, Foundation for the Development of Polish Agriculture.
- Gray, B.H., D.O. Sarnak and J.S. Burgers (2015), "Home care by self-governing nursing teams: The Netherlands' Buurtzorg model", The Commonwealth Fund, www.commonwealthfund.org/publications/case-studies/2015/may/home-care-nursingteams-netherlands.
- Grzelak, M. and E. Roszko-Wójtowicz (2015), "Development of Polish foreign trade in agri-food products after Poland's accession to the EU", Acta Oeconomica, Vol. 14/4, pp. 37-48.
- Gwiazdzinska-Goraj, M. and R. Rudnicki (2016), "Agricultural education of managers of agricultural holdings in Poland in 2002-2010", Proceedings of the 2016 International Conference "Economic Science for Rural Development", No. 41.
- Gyarmati, D., de Raaf, S., Palameta, B., Nicholson, C. and T. Hui (2008), "Encouraging work and supporting communities: Final results of the Community Employment Innovation Project", Social Research and Demonstration Corporation, Ottawa, Ontario, www.srdc.org/media/8508/CEIP finalrpt ENG.pdf.
- Hajduga, E. (2015), "Social insurance of farmers vs. the concept of sustainable development", Research Papers of the Wroclaw University of Economics/Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, No. 397.
- Halamska, M. (2016), "The evolution of family farms in Poland: Present time and the weight of the past", Eastern European Countryside, Vol. 22/1, pp. 27-51, https://doi.org/10.1515/eec-2016-0002.

- Halleux, J.M., S. Marcińczak and E. van der Krabben (2012), "The adaptive efficiency of land use planning measured by the control of urban sprawl: The cases of the Netherlands, Belgium and Poland", Land Use Policy, Vol. 29/4, pp. 887-898, http://dx.doi.org/10.1016/j.landusepol.2012.01.008.
- Hathaway, K. and D. Hathaway (1997), Searching for Common Ground. European Union Enlargement and Agricultural Policy, FAO Agricultural Policy and Economic Development Series, No. 1, Food and Agriculture Organization, Rome, www.fao.org/docrep/w7440e/w7440e00.htm#Contents.
- Henningsen, A. (2009), "Why is the Polish farm sector still so underdeveloped?", *Post-Communist Economics*, Vol. 21/1, pp. 47-64, https://doi.org/10.1080/146313708 02663646.
- Hernik, J. (2012), "Protecting cultural landscapes in rural areas by economic means", *Annals of Warsaw University of Life Sciences-SGGW, Horticulture and Landscape Architecture*, Vol. 33, pp. 105-112, http://annals-wuls.sggw.pl/?q=node/601.
- Hernik, J., G.Y. Chen and K. Gawroński (2015), "Cultural landscapes and land use in the rural areas of Poland", in: Hernik, J., G. Chen and K. Gawroński (eds.), *Cultural Landscapes in the Context of Socio-economic Changes in Poland and China*, Publishing House of the University of Agriculture in Krakow, Krakow, Poland, pp. 11-21.
- Horska, E., M. Szafrańska and R. Matysik-Pejas (2013), "Knowledge and financial skills as the factors determining the financial exclusion process of rural dwellers in Poland", *Agricultural Economics/Zemedelska Ekonomika*, Vol. 59/1.
- Hykawy, R. (2005), "Polska w Unii Europejskiej. DoÊwiadczenia pierwszego roku czΠonkostwa" ["Poland in the European Union Experiences of the first year of membership"], UKIE, Warsaw.
- IEA (2017), Energy Policies of IEA Countries: Poland 2016, International Energy Agency, Paris, http://dx.doi.org/10.1787/9789264272309-en.
- Janc, K. and P. Siłka (2016), "How big is the digital divide between rural and urban areas in Poland?", *Studia Obszarów Wiejskich*, Vol. 43, pp. 45-58.
- Jaworski, P. (2014), Partycypacja w planowaniu przestrzennym: Podsumowanie sesji tematycznej w ramach Forum Praktyków Partycypacji [Participation in spatial planning: Summary of the thematic session of the Participation Practitioners Forum]. Forum Praktyków Partycypacji, 29-30 maja 2014 r., Warsaw.
- Jezierska-Thöle, A., R. Rudnicki and M. Kluba (2016), "Development of energy crops cultivation for biomass production in Poland", *Renewable and Sustainable Energy Reviews*, Vol. 62, pp. 534-545, https://doi.org/10.1016/j.rser.2016.05.024.
- Józwiak, W., A. Kagan and Z. Mirkowska (2016), "Innovations on the Polish farms, their scope of implementation and significance", *Problems of Agricultural Economics*, pp. 82.
- Jóźwiakowski, K. and W. Siuda (2017), "Ochrona i kształtowanie zasobów wodnych na terenach wiejskich" [Rural water resource management and protection], *Fundacja na rzecz Rozwoju Polskiego Rolnictwa* (FDPA), Warsaw.
- Kania, J., K. Vinohradnik and A. Tworzyk (2014), "AKIS and advisory services in Poland", Report for AKIS Inventory (WP-3) of the PRO AKIS project, www.proakis.eu/publicationsandevents/pubs.

- Keane, M. and E. Prasad (2002), "Inequality, transfers and growth: New evidence from the economic transition in Poland", Review of Economics and Statistics, Vol. 84/2, pp. 324-341, https://doi.org/10.1162/003465302317411578.
- Kisiel, R. and M. Gierwiatowska (2013), "Functioning of the Polish LAG in the context of the Leader initiative", Acta Scientiarum Polonorum, Oeconomia, Vol. 12/3.
- Kłodziński, M. (2014), "Przedsiębiorczość pozarolnicza na wsi w procesie wielofunkcyjnego rozwoju obszarów wiejskich", Wieś i Rolnictwo, Vol. 1/162, pp. 97-112.
- Kobielski, W. (2015), Koncepcja reformy system emerytalno-rentowego rolników, Europejski Fundusz Rozwoju Wsi Polskiej [The concept of reforming the farmers' pension European Fund for the Development scheme. Polish Villages], www.efrwp.pl/dir upload/download/thumb/e8301342868923474c4c2cd4ee 18.pdf.
- Kordasiewicz, A. and P. Sadura (2017), "Clash of public administration paradigms in delegation of education and elderly care services in a post-socialist state (Poland)", Public Management Review, Vol. 19/6, pp. 785-801, https://doi.org/10.1080/14719037 .2016.1210903.
- Kowalewski, A. et al. (2013), "Raport o ekonomicznych stratach i społecznych kosztach niekontrolowanej suburbanizacji w Polsce" [Report on economic losses and social costs of uncontrolled suburbanisation in Poland], Fundacja Rozwoju Demokracji Lokalnej, IGiPZ PAN, Warsaw.
- Kowalski, Z. (1993), "Back to market: Polish family farming in the 1990s", Canadian Journal of Agricultural Economics/Revue Canadienne d'Agroeconomie, Vol. 41/3, pp. 349-356, http://dx.doi.org/10.1111/j.1744-7976.1993.tb03753.x.
- Kuczera, M. and S. Field (2013), A Skills beyond School Review of the United States, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.
- Kulesza, M. and D. Sześciło (2012), "Local government in Poland", in: Moreno, A.M. (ed.), Local Government in the Member States of the European Union: A Comparative Legal Perspective, pp. 485-504.
- Kupidura, A. et al. (2014), "Public perceptions of rural landscapes in land consolidation Poland", Land Use Vol. 39, procedures in Policy, pp. 313-319, http://dx.doi.org/10.1016/j.landusepol.2014.02.005.
- Kurowska, A., M. Myck and K. Wrohlich (2015), "Making work pay: Increasing labour supply of secondary earners in low income families with children", IZA Discussion Paper Series, No. 9531, http://ftp.iza.org/dp9531.pdf.
- Leń, P. and Ż. Król (2016), "Analysis of economic and environmental effects of land consolidation on the example of Hucisko village", Journal of Ecological Engineering, Vol. 17/5, pp. 232-239, https://doi.org/10.12911/22998993/65090.
- Lis, M. and A. Miazga (2014), "Time for quality in vocational education", IBS Policy No. 03/2014, Paper, http://ibs.org.pl/app/uploads/2015/10/IBS Policy Paper 03 2014 eng.pdf.
- Macours, K. and J. Swinnen (2008), "Rural-urban poverty differences in transition countries", World Development, Vol. 36/11, pp. 2170-2187, https://doi.org/10.1016/j. worlddev.2007.11.003.

- Majewski, E., W. Guba and A. Was (2016), "Farm income risk assessment for selected farm types in Poland: Implications of future policy reforms", in: O'Reilly, S., M. Keane and P. Enright (eds.), *Proceedings of the 16th International Farm Management Congress*, Cork IL International Farm Management Association, New Zealand, pp. 437-448.
- Malinowski, M., K. Wolny-Koładka and B. Jastrzębski (2015), "Characteristics of illegal dumping sites case study: Watercourses", *Infrastruktura i Ekologia Terenów Wiejskich*, No. 2015/IV (4 (Dec 2015)).
- Marks-Bielska, R. (2016), "Conditions underlying the regional diversity of the area structure of farms in Poland", *Acta Scientiarum Polonorum: Oeconomia*, Vol. 4, pp. 105-116.
- Matczak, P. et al. (2016), "Stability and change of flood risk governance in Poland", in: *Flood Risk in the Upper Vistula Basin*, pp. 381-398, Springer International Publishing.
- Matyja, M. (2016), "Position of Polish agricultural production cooperatives on the international and domestic market", *Problems of World Agriculture/Problemy Rolnictwa Åświatowego*, Vol. 16/31.
- Mehl, P. (2009), "A marathon rather than a sprint: The reform of the farmers' pension system in Germany and its impacts", in: Beckmann, V. and M. Padmanabhan (eds.), *Institutions and Sustainability*, pp. 61-82, Springer Science +Business Media B.V., http://dx.doi.org/10.1007/978-1-4020-9690-7 4.
- Mieszkowski, K. and M. Kardas (2015), "Facilitating an entrepreneurial discovery process for smart specialisation: The case of Poland", *Journal of the Knowledge Economy*, Vol. 6/2, pp. 357-384, http://dx.doi.org/10.1007/s13132-015-0242-y.
- Mikula, L. and M. Walaszek (2016), "The evolution of local public service provision in Poland", in: *Public and Social Services in Europe*, pp. 169-183, Palgrave Macmillan UK.
- Milczarek-Andrzejewska, D. (2014), Zagadnienie siły w ekonomii–na przykładzie sektora rolno-spożywczego. IRWiR PAN, Warsaw.
- Miller, M., T. Mroczkowski and A. Healy (2014), "Poland's innovation strategy: How smart is 'smart specialisation'?", *International Journal of Transitions and Innovation Systems*, Vol. 3/3, pp. 225-248.
- Ministry of Agriculture and Rural Development (2017a), Rural Development Program for the years 2014-2020, www.minrol.gov.pl/Wsparcie-rolnictwa/Program-Rozwoju-Obszarow-Wiejskich-2014-2020.
- Ministry of Agriculture and Rural Development (2017b), "Restrukturyzacja małych gospodarstw" [in Polish], www.minrol.gov.pl/Wsparcie-rolnictwa/Program-Rozwoju-Obszarow-Wiejskich-2014-2020/Instrumenty-wsparcia-PROW-2014-2020/2FRestrukturyzacja-malych-gospodarstw2.
- Ministry of Agriculture and Rural Development (2017c), "System płatności dla małych gospodarstw" [in Polish], www.minrol.gov.pl/Wsparcie-rolnictwa/Platnosci-bezposrednie-w-2015-r/System-platnosci-dla-malych-gospodarstw.

- Ministry of Agriculture and Rural Development (2014), "Ocena ex-ante Programu Rozwoju Obszarów Wiejskich na lata 2014-2020" [Ex-ante evaluation of the Rural Development Program for 2014-2020], Konsorcjum w składzie Instytut Rozwoju Wsi i Rolnictwa Polskiej Akademii Nauk (lider konsorcjum), ECORYS, Instytut Uprawy, Nawożenia i Gleboznawstwa – Państwowy Instytut Badawczy, współfinansowany ze środków Unii Europejskiej w ramach Pomocy Technicznej.
- Ministry of Agriculture and Rural Development (2012), "Strategia zrównoważonego rozwoju wsi, rolnictwa i rybactwa na lata 2012-2020" ["Strategy for the Sustainable Development of Rural Areas, Agriculture and Fisheries for 2012-2020"], www.minrol.gov.pl/Informacje-branzowe/Strategia-zrownowazonego-rozwoju-wsirolnictwa-i-rybactwa-na-lata-2012-2020.
- Ministry of Economic Development (2017), "National Strategy for Regional Development 2010-2020: Regions, Cities, Rural Areas (NSRF)". https://www.mr.gov.pl/strony/zadania/polityka-rozwoju-kraju/zarzadzanie-rozwojemkraju/krajowa-strategia-rozwoju-regionalnego.
- Ministry of Infrastructure and Development (2014), "Programming of the 2014-2020 financial perspective", https://www.funduszeeuropejskie.gov.pl/media/883/Umowa P artnerstwa eng.pdf.
- Mölleryd, B. (2015), "Development of high-speed networks and the role of municipal networks", OECD Science, Technology and Industry Papers, No. 26, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrqdl7rvns3-en
- Mularska-Kucharek, M. and J. Wiktorowicz (2015), "Entrepreneurship of rural residents in Poland", Acta Scientiarum Polonorum, Oeconomia, Vol. 14/3, pp. 83-93, www.oeconomia.actapol.net/pub/14 3 83.pdf.
- Nowak, A., A. Kamińska and A. Krukowski (2015), "Regional differentiation of productive potential of agriculture and the effectiveness of its use in Poland". in: Proceedings of the 7th International Scientific Conference Rural Development, pp. 1-6, http://doi.org/10.15544/RD.2015.082.
- Nurzyńska, I. (2016), "The role of the Common Agricultural Policy in stimulating rural jobs in Poland", paper presented at the 160th EAAE Seminar "Rural Jobs and the CAP", Institute for Agriculture and Rural Development Polish Academy of Sciences, December, Warsaw.
- Nurzyńska, I. (2013), "Uwarunkowania instytucjonalne rozwoju przedsiębiorczości na obszarach wiejskich", Wieś i Rolnictwo, Vol. 3, pp. 119-137.
- Nurzyńska, I. (2012), "The rural development policy in Poland: Synthetic picture of the new policy implementation results", ftp://ftp.repec.org/opt/ReDIF/RePEc/iag/iag pdf/ AERD1202 175-196.pdf.
- Ociepa-Kubicka, A. (2015), "Udział społeczności w procedurze planowania przestrzennego", *Inżynieria i Ochrona Środowiska*, Vol. 18/4, 471-481.
- OECD (2017a), Agricultural Policy Monitoring and Evaluation 2017, OECD Publishing, Paris, http://dx.doi.org/10.1787/agr pol-2017-en.
- OECD (2017b), "European Union", in: Agricultural Policy Monitoring and Evaluation 2017, OECD Publishing, Paris, http://dx.doi.org/10.1787/agr_pol-2017-13-en.
- OECD (2017c), "Evaluation of the EU Common Agricultural Policy (CAP) 2014-2020", paper presented at the 118th EAAE seminar, Ljubljana, Slovenia, August.

- OECD (2017d), Getting Infrastructure Right: A Framework for Better Governance, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264272453-en.
- OECD (2017e), *OECD Territorial Reviews: Northern Sparsely Populated Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268234-en.
- OECD (2017f), *SME and Entrepreneurship Policy in Canada*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264273467-en.
- OECD (2017g), "Subnational governments in OECD countries: Key data", brochure, OECD, Paris, https://www.oecd.org/cfe/regional-policy/Subnational-governments-in-OECD-Countries-Key-Data-2016.pdf.
- OECD (2017h), *The Governance of Land Use in France: The Cases of Clermont-Ferrand and Nantes Saint-Nazaire*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268791-en.
- OECD (2016a), *Employment and Skills Strategies in Poland*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264256521-en.
- OECD (2016b), Governance of Land Use in Poland: The Case of Lodz, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260597-en.
- OECD (2016c), *OECD Economic Surveys: Poland 2016*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-pol-2016-en.
- OECD (2016d), *Poland: Implementing Strategic-State Capability*, (Polish version), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264236851-pl.
- OECD (2016e), Policy Priorities for Making Poland a More Inclusive and Knowledge-Based Economy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264267886-en.
- OECD (2016f), OECD Regional Outlook 2016: Productive Regions for Inclusive Societies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260245-en.
- OECD (2016g), *OECD Territorial Reviews: Japan 2016*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264250543-en.
- OECD (2016h), *OECD Tourism Trends and Policies 2016*, OECD Publishing, Paris, http://dx.doi.org/10.1787/tour-2016-en.
- OECD (2015a), "OECD Regional Outlook Survey", GOV/RDPC(2015)8, OECD, Paris.
- OECD (2015b), OECD Environmental Performance Reviews: Poland 2015, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264227385-en.
- OECD (2015c), "Development of high-speed networks and the role of municipal networks", *OECD Science, Technology and Industry Policy Papers*, No. 26, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrqdl7rvns3-en.
- OECD (2015d), *Education Policy Outlook: Poland*, OECD Publishing, Paris, www.oecd.org/edu/POL-country-profile.pdf.
- OECD (2015e), Ageing and Employment Policies: Poland 2015, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264227279-en.
- OECD (2014a), *OECD Economic Surveys: Poland 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco surveys-pol-2014-en.
- OECD (2014b), *Innovation and Modernising the Rural Economy*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264205390-en.

- OECD (2013), "Business models for rural sanitation in Moldova", OECD, Paris, https://www.oecd.org/environment/outreach/Business%20models%20for%20rural%2 0sanitation%20in%20Moldova ENG%20web.pdf.
- OECD (2011). OECD Rural Policy Reviews: England. United Kingdom 2011. OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264094444-en.
- OECD (2010), Strategies to Improve Rural Service Delivery, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264083967-en.
- OECD (2008), OECD Territorial Reviews: Poland 2008, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264049529-en.
- OECD (2006), OECD Economic Surveys: Poland 2006, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco surveys-pol-2006-en.
- OECD (1999), Social Enterprises, OECD Publishing, Paris, http://dx.doi.org/10.1787/978 9264182332-en.
- OECD/EU (2017), Boosting Social Enterprise Development: Good Practice Compendium, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268500-en.
- OECD/EU (2013), "Policy brief on social entrepreneurship", OECD, Paris, https://www.oecd.org/cfe/leed/Social%20entrepreneurship%20policy%20brief%20EN FINAL.pdf.
- Ordovensky, J.F. (1995), "Effects of institutional attributes on enrolment choice: Implications for post-secondary vocational education", https://doi.org/10.1016/0272-7757(95)00013-A.
- PARSP (2005), "Poland: Post Accession Rural Support Project", World Bank.
- Pawelek, J. (2016), "Degree of development and functionality of the water supply and sewage systems in rural Poland", Barometr Regionalny, Vol. 14/1, pp. 141-149.
- Pawłowska-Tyszko, J. et al. (2013), "The social insurance system for farmers and its impact on public finances", Institute of Agricultural Economics and Food Economy, National Research Institute.
- Pellešová, P. and P. Sýkorová (2014), "Position of small and medium companies in Poland and results of research in selected areas", Procedia-Social and Behavioral Sciences, Vol. 110, pp. 932-941, https://doi.org/10.1016/j.sbspro.2013.12.939.
- Petrick, M. (2001), "Poland's agriculture: Serious competitor or Europe's poorhouse? Survey results on farm performance in selected Polish voivodeships and a comparison with German farms", Discussion Paper, No. 37, Institute of Agricultural Development in Central and Eastern Europe, Halle, Germany.
- Petrick, M. and E. Tyran (2003), "Development perspectives of subsistence farms in southeastern Poland: Social buffer stock or commercial agriculture?", in: Abele, S. and K. Froberg (eds.), Subsistence Agriculture in Central and Eastern Europe: How to Break the Vicious Circle?, pp. 107-123, Institute of Agricultural Development in Central and Eastern Europe, Halle, Germany.
- PHAC (2006), "Age-friendly rural and remote communities: A guide", Public Health Agency of Canada, www.phac-aspc.gc.ca/seniors-aines/altformats/pdf/publications/public/healthy-sante/age friendly rural/AFRRC en.pdf.

- Pietrucha-Urbanik, K., A. Nogaj and J. Stecko (2016), "Assessment of water supply infrastructure state in rural areas in Poland using multivariate analysis", *Humanities and Social Sciences*, Vol. 23/2, pp. 177-186.
- Piwowar, A., M. Dzikuć and J. Adamczyk (2016), "Agricultural biogas plants in Poland: Selected technological, market and environmental aspects", *Renewable and Sustainable Energy Reviews*, Vol. 58, pp. 69-74, https://doi.org/10.1016/j.rser.2015.12. 153.
- Polish Rural Areas (2014), Report on rural areas. Wydaw. Naukowe, Warsaw.
- Praszkier, R., A. Zabłocka-Bursa and E. Jozwik (2014), "Social enterprise, social innovation and social entrepreneurship in Poland: A national report", http://ashokacee.org/poland/wp-content/uploads/sites/4/2017/03/EFESEIIS-National-Report-Poland.pdf.
- Przybysz, I., A. Orzechowska and G. Cichowicz (2017), Closing the Skills Gap in Poland: Leveraging the Promise of Social Enterprise and the BPO Industry, NESsT.
- Puślecki, D. (2016), "Problems of legal definition of family farm in Poland", *EU Agrarian Law*, Vol. 5/2, pp. 20-24, https://doi.org/10.1515/eual-2016-0008.
- Radzimski, A., M. Beim and B. Modrzewski (2010), "Are cities in Poland ready for sustainability? Poznań case study".
- REGON (2017), "National Official Business Register", Central Statistical Office of Poland, https://bip.stat.gov.pl/en/regon.
- Republic of Poland (2016), National Reform Programme, 2016-2017 Update, http://ec.europa.eu/europe2020/pdf/csr2016/nrp2016 poland en.pdf.
- Republic of Poland (2013), National Reform Programme, 2013-2014 Update, http://ec.europa.eu/europe2020/pdf/nd/nrp2013 poland en.pdf.
- Republic of Poland (2012), "National Development Strategy 2020: Active Society, Competitive Economy, Efficient State", Warsaw.
- Rosik, P., M. Stępniak and T. Komornicki (2015), "The decade of the big push to roads in Poland: Impact on improvement in accessibility and territorial cohesion from a policy perspective", *Transport Policy*, Vol. 37, pp. 134-146, https://doi.org/10.1016/j.tranpol.2014.10.007.
- Rosner, A. and M. Stanny (2017), *Socio-economic Development of Rural Areas in Poland*, Europejski Fundusz Rozwoju Wsi Polskiej and Instytut Rozwoju Wsi i Rolnictwa, Polskiej Akademii Nauk, Warsaw.
- Rowiński, K. (2014), "Uwagi o propozycjach zmian przepisów regulujących rynek ziemi rolnej", Forum Inicjatyw Rozwojowych, www.efrwp.pl/dir_upload/download/thumb/1 bcf04742fd6af6ba00f72ba4619.pdf.
- Rutkowski, J. (2006), "Labor market developments during economic transition", *World Bank Policy Research Working Papers*, No. 2006/3894, World Bank, Washington, DC, http://documents.worldbank.org/curated/en/503261468019793470/Labor-market-developments-during-economic-transition.
- Sakowicz, M. (2017), "Rebirth of local government in Poland: 25 years of decentralization reform", in: *The Palgrave Handbook of Decentralisation in Europe*, pp. 327-352, Springer International Publishing.

- Shortall, S. and M. Alston (2016), "To rural proof or not to rural proof: A comparative analysis", Politics & Policy, Vol. 44/1, pp. 35-55, http://dx.doi.org/10.1111/polp.12144.
- Sienkiewicz, L. (2009), "Peer review on 'Professional Traineeships for Young Adults", Portugal, 19-20 November.
- Stańko, S. and A. Mikuła (2014), "Tendencje w handlu zagranicznym produktami rolnospożywczymi w Polsce w latach 1995-2013", Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich, Vol. 101/1, pp. 41-52.
- Swinnen, J.F., L. Dries and K. Macours (2005), "Transition and agricultural labour", Agricultural Economics, Vol. 32/1, pp. 15-34.
- Szczygieł, E. and T. Piecuch (2014), Przedsiebiorczość kobiet wykluczonych: Raport z badań pilotażowych [Entrepreneurship of excluded women: Pilot study report]. Stowarzyszenie Centrum Wspierania Edukacji i Przedsiębiorczości.
- Szymańska, D. and A. Lewandowska (2015), "Biogas power plants in Poland: Structure, capacity, and spatial distribution", Sustainability, Vol. 7/12, pp. 16801-16819, http://dx.doi.org/10.3390/su71215846.
- Tarkowska, T. (2008), "Poverty and social exclusion in rural areas, Annex I, Country case studies: Poland", European Communities, http://ec.europa.eu/social/BlobServlet? docId=4434&langId=en.
- Teräs, J.et al. (2015), "Implementing smart specialisation in sparsely populated areas", JRC Technical Reports, S3 Working Papers Series, No. 10/2015, European Commission, https://ec.europa.eu/jrc/sites/jrcsh/files/JRC98691.pdf.
- Tropea, F. (2016), Common Agricultural Policy 2014-2020: Direct Payments, A Reference Note, European Parliamentary Research Service, European Union, http://dx.doi.org/10.2861/289046.
- Turek, K. and B. Worek (2015), Kształcenie po szkole: Na podstawie badań instytucji i firm szkoleniowych pracodawców i ludności zrealizowanych w 2014 roku w ramach V edycji projektu Bilans Kapitału Ludzkiego: Edukacja a rynek pracy – tom III, Polska Agencia Rozwoju Przedsiębiorczości, Warsaw [Post-primary education: Based on the research of institutions and training companies of employers and people carried out in 2014 as part of the 5th edition of the project Capital of Human Capital: Education and the labor market - Volume III, Polish Agency for Enterprise Development].
- Umlauf, G. et al. (2010), "Seasonality of PCDD/Fs in the ambient air of Malopolska Region, southern Poland", Environmental Science and Pollution Research, Vol. 17/2, pp. 462-469, http://dx.doi.org/10.1007/s11356-009-0215-4.
- US Treasury (2016), "Community Development Financial Institutions Fund", www.cdfifund.gov/Pages/default.aspx (accessed 9 January 2016).
- Ustaoglu, E. and B. Williams (2017), "Determinants of urban expansion and agricultural land conversion in 25 EU countries", Environmental Management, Vol. 60/4, pp. 717-746, http://dx.doi.org/10.1007/s00267-017-0908-2.
- Velaga, N.R. et al. (2012), "The potential role of flexible transport services in enhancing rural public transport provision", Journal of Public Transportation, Vol. 15/1, pp. 111-131, http://dx.doi.org/10.5038/2375-0901.15.1.7.

- Vie Publique (2016), "Que sont les conférences territoriales de l'action publique?", webpage, www.vie-publique.fr/decouverte-institutions/institutions/collectivites-territoriales/intercommunalite-cooperation-locale/que-sont-conferences-territoriales-action-publique.html.
- Wasilewski, A., Z. Floriańczyk and M. Wigier (2013), "Governance of Internet development in rural areas in the context of territorial competitiveness: The case of Poland", ERDN book series *Rural Areas and Development*, Vol. 10, http://ageconsearch.umn.edu/bitstream/164901/2/vol.%2010 1.pdf.
- Wesołowska, M. (2016), "The role of agricultural producers in building the social capital in rural areas: Cooperation of pig farmers from Babin case study", *Studia Obszarów Wiejskich*, Vol. 43, pp. 125-136.
- Wigier, M. (2014a), "The competitiveness of Polish agriculture after accession to the EU", *Economics of Agriculture*, Vol. 61/1, pp. 87-102.
- Wigier, M. (ed.) (2014b), Food Economy and Rural Areas in Poland Structural Changes and Effectiveness of Public Policy, Institute of Agricultural and Food Economics, Warsaw.
- Wilkin, J. (1997), "From agricultural policy to rural policy: Central Europe in transition", in: Hathaway, K. and D. Hathaway (eds.), *Searching for Common Ground*, Food and Agriculture Organization, Rome.
- Wintjes, R. and H. Hollanders (2011), "Innovation pathways and policy challenges at the regional level: Smart specialization" United Nations University, Working paper series 2011-027.
- Wintjes, R. and H. Hollanders (2010), "The regional impact of technological change in 2020", http://ec.europa.eu/regional_policy/en/information/publications/studies/2010/thee-regional-impact-of-technological-change-in-2020.
- World Bank (2017b), "Designing regional technology transfer office: Podkarpackie Center for Innovation", World Bank, http://documents.worldbank.org/curated/en/394731496205476293/pdf/115349-WP-P161965-PUBLIC-PCIENG.pdf.
- Zawalińska, K. (2009), "Instrumenty i efekty wsparcia Unii Europejskiej dla regionalnego rozwoju obszarów wiejskich w Polsce" ("Instruments and effects of European Union support for regional rural development in Poland"), Polska Akademia Nauk, IRWiR, Warsaw.
- Zawalińska, K. (2008), "Ile jest spójności a ile efektywności w polityce rozwoju obszarów wiejskich w Polsce?" ("Cohesion and efficiency as two objectives of the rural development policy in Poland"), *Wieś i Rolnictwo*, Vol. 2/139, IRWIR PAN, Warsaw, pp. 43-56.
- Żmija, D. (2015), "Economic poverty in rural areas of Poland", *Acta Sci. pol. Oeconomia*, Vol. 14/3, pp. 167-175.
- Zyadin, A. et al. (2017), "Farmers' willingness to supply biomass for energy generation: Evidence from south and central Poland", *Biofuels*, Vol. 8/4, pp. 421-430, https://doi.org/10.1080/17597269.2016.1225647.

Chapter 3.

Governance and implementing the Strategy for Responsible Development

Effective multi-level governance and deepened decentralisation are key to Poland achieving its rural development objectives. While Poland has made great progress in adopting a strategic framework for rural policies, silos and gaps remain. This chapter discusses these issues in two parts. The first section discusses the governance of rural policy, including the role of the European Union, the national co-ordination of sectoral and territorial policies, the capacity of subnational governments, inter-municipal partnerships, and community-based development. The second section discusses the national government's new Strategy for Responsible Development, which sets a strong vision for rural development in Poland – one that can only be realised through effective multi-level governance and enhanced regional and local capacity.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Rural development extends across a wide array of policy areas – the environment, agriculture, infrastructure, health and economic development to name a few. As such, it requires strong multi-level governance frameworks in order to be effective. Governance is broadly defined to include not only governments but the broad process under which policies are developed, and the full range of agents that participate in that process. Building on Chapters 1 and 2, this chapter applies the OECD perspective on rural policy to suggest ways that Poland can act to improve its rural development processes.

Effective structures of multi-level governance together with increased governance capacity at the regional and local levels are critical for Poland to adopt a more holistic approach to rural policy. Regions across Poland face very different rural conditions and there are marked differences even within regions themselves. Resources can be better targeted to meet the local conditions and improving the capacity of both regional and local actors is critical in this regard. One of the unique aspects of rural development in Poland is the ongoing importance of agricultural policy for most rural areas because such a large share of the rural population remains dependent on farming. While sound agricultural policy is a vital part of rural development policy for Poland, it alone is not enough. Economic progress in Poland requires a considerable expansion of the non-farm economy if there is to be a reduction in rural poverty and reduced social exclusion of rural people. Achieving this rural development objective requires that Poland develop a national rural development strategy that: addresses the diverse needs of different rural regions; supports economic development opportunities that vary considerably by region, including a still underutilised agricultural potential; and that is capable of strategically using EU funds to support national interests while interpreting evolving EU regulations and directives in ways that reduce any impediments to Polish development and that are complemented by national, regional and local funds.

In designing such an approach to rural development, Poland faces the need for reform of its governance structures in order to make them more suitable for the current environment. This need is fully recognised by the Polish government – the new Strategy for Responsible Development (SRD), released early in 2017, clearly identifies major problems and opportunities in rural Poland and describes current weaknesses in public policy and governance institutions. Implementing the SRD in a way that allows the various parts of rural Poland to make a stronger contribution to national development objectives will be the main challenge.

The balance of the chapter begins with a discussion of Poland's system of multi-level governance as it pertains to rural policy. It first discusses the formative influence of the European Union in elaborating both a new approach to rural development, and its role in spurring institutional reform in order to better meet these objectives. Following this, the governance of rural policy at the national level is discussed, including mechanisms for vertical and horizontal co-ordination. Next, multi-level governance at the regional and local levels are examined, including co-ordination mechanisms between regional and local governments and among local governments themselves. The second part of the chapter discusses the national government's new Strategy for Responsible Development and its approach to rural development, which is consistent with OECD rural policy recommendations, both from the New Rural Paradigm and Rural Policy 3.0. It addresses key conditioning elements that will be important in moving the SRD from its current conceptual form to a more operational version.

Making the most of rural policy through multi-level governance

Poland's system of multi-level governance has evolved significantly since its political transformation in 1989. A series of decentralisation reforms led to the first municipal (gmina) elections and the creation of the regional (voivodeship) and county/district (powiat) levels of government in the 1990s. These governance reforms have in turn shaped the delivery of regional and rural policy, with subnational governments taking an increasingly important role in the provision of infrastructure and services. At the same time, Poland's accession to the European Union in 2004 has significantly influenced the governance of rural policy. Programmes such as LEADER (discussed in Chapter 2) have raised the prominence of bottom-up development processes while the EU's rural development framework has encouraged a multifunctional view of rural development - one that considers both agriculture and rural development more generally. This, together with the EU's emphasis on regional policy, has led to the reform of Polish institutions in order to be better placed to manage interdependent policies – a process that remains ongoing.

Given that rural development extends across a wide range of policy areas and involves many governmental and non-governmental actors, effective multi-level governance is critical to achieving rural development objectives. A complete separation of policy responsibilities and outcomes across levels of government is impossible to reach for rural policy or any other policy area. There will always be interdependencies among levels of government. The challenge is how best to manage these interdependencies in order to ensure that policies are implemented in a manner that is co-ordinated where relevant and that makes the most of the available resources. These interdependencies extend across vertical (across different levels of government), horizontal (among the same level of government) and networked (involving multiple actors) scales. The appropriate institutional structures are needed in order to bridge fiscal gaps, including the fiscal capacity of governments to meet obligations; overcome information asymmetries between levels of government; manage gaps in administrative responsibility, particularly where administrative borders do not correspond to functional economic and social areas; correct gaps in policy design (when line ministries take purely vertical approaches to cross-sectoral regulation that can require co-design of implementation at the local level); and finally, to bridge gaps in terms of the human or infrastructure resources to deliver services and design strategies (Charbit and Michalun, 2009).

This section examines Poland's system of multi-level governance for rural policy. It focuses first on the role of the EU in shaping the governance of rural policy. It then examines how rural policy is institutionally organised within the national government and the mechanisms for horizontal and vertical co-ordination before turning to regional and local multi-level governance. Key challenges for Poland to overcome are the silos that continue to exist between agriculture and rural development and the need for increased governance capacity at the local level, including inter-municipal partnership.

The European Union and the governance of rural development in Poland

Joining the European Union in 2004 has had a large influence on Poland's development path. Poland's preparation for membership in the 1990s entailed transforming its governance institutions, its economy and its culture to make the country compatible with the conditions of membership. With membership, additional changes have occurred, many of which have been facilitated with financial support from the European Union, but others of which have come from evolving EU regulations and the process of becoming more integrated into the single market. Clearly, the Poland of today would not exist in its current form without the experience of the EU accession, but some of the changes in Poland have been challenging for both the national government and society in general.

While all of Poland was less than fully prepared for EU membership in 2004, the situation in rural Poland was one where conditions were substantially further from EU norms than was the case in urban areas. This is most evident in the case of agriculture. In the late 1990s, farming in Poland continued to be in a state of disarray that had begun with the end of the socialist system in 1989. While state farms had been closed, most of the former workers remained without work and continued to live in poverty in their housing estates. Large numbers of private farm households had lost their former off-farm employment when nearby factories closed and relied on assistance from the state and limited sales of farm output for survival. Local governments in rural areas lacked own-source revenues and were not a development priority for the national government. Education and healthcare institutions in rural Poland were well below those in urban areas in terms of quality. Most tellingly, despite having a large arable land base and large amounts of labour in agriculture, Poland was a net food importer until 2002.

From a purely financial perspective, Poland has gained hugely from membership in the EU. Even during the earlier period, when funding was limited by accession rules that gave new members smaller payments than older members, Poland remained one of the largest recipients of EU support for the majority of programme areas. This funding, supplemented by national investments, foreign direct investment and access to the EU common market, led to major improvements in infrastructure, supported farm incomes and stimulated economic modernisation that increased incomes, employment and exports. Membership in the EU has influenced rural areas in Poland in three distinct ways:

- 1. through EU requirements in the form of treaties, laws and other types of regulation
- 2. the transfer of agricultural policy to the EU in the form of the Common Agricultural Policy
- 3. the introduction of regional policy that is largely shaped by the EU approach to regional development.

These elements in turn have structured Poland's governance, including multi-level relations. Each programming period has the potential to change elements of these governing frameworks by altering the underlying logic of how programmes operate and how actors implement them and the accountability frameworks under which they operate. For multi-level governance to be effective, it has to be a negotiated process among entities that have different objectives, resources and authority, but all of which are interdependent in the sense that their individual outcomes depend upon the actions of the others. If co-ordination and co-operation can be achieved, the game can be turned into one that has a positive sum; where it cannot, it can become a zero or negative sum game. Poland's national government in effect is engaged in two parallel games. The first is the internal multi-level governance process and the second involves negotiations with the European Union. In the first instance, the national government is the dominant party, but in the second, it has less bargaining power. However, outcomes in the national case are strongly affected by what happens in negotiations with the EU. Increasing the strategic capacity of the Polish national government is advantageous in both sets of negotiations.

Membership in the EU has spurred institutional reform in Poland

Membership in the European Union requires that applicant countries modify significant aspects of their economic, political, legal and social welfare systems in order to conform to the practices of the European Union (Box 3.1). A complex negotiation process precedes

membership entailing 35 various "chapters" or policy fields that cover the EU's formal rules making up the aquis, which forms the basis for a treaty between the applicant country and Union members. This treaty binds the country to follow EU laws and regulations, both current and those developed in the future. Member countries effectively transfer part of their sovereign powers to the Union and its constituent organisations in turn for receiving the benefits of membership.

Box 3.1. **Membership in the European Union:** Implications for governance and policy transfer

The European Union can be thought of as a policy transfer agent. Traditionally, multinational organisations provide a way for national governments to learn about policy options adopted by others that might be useful for them (Dolowitz and Marsh, 1998). An intermediary organisation plays the role of identifying and screening different policies and assessing where they can be useful, which reduces the costs for potential adopters. Bulmer and Padgett identify three levels at which this process operates within the EU: 1) hierarchal or coercive governance; 2) majority or common consent governance; and 3) facilitated unilateralism (2005: 104).

Hierarchical or coercive governance

The first type is hierarchical or coercive governance, where the EU requires that nations adopt, or cease to employ, specific practices. Some of these are embedded in the terms of the aquis, but others evolve as directives or regulations, or decisions by the European Court of Justice. These are binding on all member states and can require amendment of existing laws and regulations to be in compliance. The second occurs through what they term common or majority consent, where members agree to adopt particular policies or approaches that are often modelled on an existing practice by one member. In both these cases, Bulmer and Padgett suggest the EU has some degree of authority over the specific policy domain. Finally, in cases where authority continues to rest at the national level, they identify voluntary exchanges of ideas and practices that can be facilitated by the EU, but may develop from some other approach. It is this last category which best describes the OECD role in policy transfer.

Coercive governance exists in three distinct forms (Bulmer and Padgett, 2015: 108). The first mechanism stems from the treaties and agreements that nations enter into and from rulings by the Court of Justice that nations agree to be bound by as conditions of membership. A second mechanism comes from actions by the European Commission when it exercises authorities delegated to it to set new regulations that are binding on member countries. Directives result from agreements among member countries forged in the Council of Ministers and then codified by the Commission. Member countries are obligated to adopt the requirements of directives, either through changes in legislation or regulations. A third mechanism is associated with policy areas where the EU has an interest, but member countries have not delegated authority to the Union. In these instances the EU offers financial assistance to member countries, but with conditions on how it can be used. Cohesion funds and regional development funds are obvious examples of conditional financial assistance. Countries can choose not to take this money, but if they do take it the money has to be used in ways that the EU, through the Commission, authorises.

Majority or common consent governance

The second type, majority, or common, consent involves a process of governance by negotiation (Bulmer and Padgett, 2005: 109). Member states, through the Council of Ministers voluntarily agree to adopt particular practices or norms. In this process the current practices of one or more member states typically become a starting point for the negotiation and the end point is something that all, or a qualified majority of members, can accept. The result is a new rule, but it is one that the members choose to impose upon themselves, and has a form that reflects the interests of the members. As the authors note, each country has an incentive to incorporate as much of its current practices into this negotiation process as possible, because this makes it easier to comply with the resulting end-product and is less likely to trigger domestic "push-back" about externally imposed changes. But what the authors do not note is that new members are bound by these negotiated decisions because they become part of the body of EU policy and process, but have no opportunity to influence them.

Box 3.1. **Membership in the European Union: Implications for governance and policy transfer** (*continued*)

Facilitated unilateralism

The third and last level of policy transfer is the traditional model described by Dolowitz and Marsh (1998) whereby a nation looks for practices followed by peers and emulates them as a way to resolve its internal challenges. Bulmer and Padgett term this "facilitated unilateralism" because the EU provides a forum for member countries to learn about how other members structure policies, similar to that provided by the OECD. Whether an individual country chooses to adopt a similar policy is purely individual decision. The authors note that in this context "... transfer operates horizontally through the diffusion of policy between member states" (Bulmer and Padgett, 2005: 110).

The crucial point is that while membership in the EU has been unambiguously beneficial for rural development in Poland, it is vital that the national government construct a domestic rural development policy that both reflects Polish needs and considers how the resources and constraints associated with EU membership affect this policy. Arguably, in the early years of membership, the needs of rural Poland were so pressing and the EU policies were so generous that any funds spent in Poland had a positive rate of return. Now, as conditions in rural Poland improve and most of the obvious investments have been made, it will be important to use EU assistance in a more strategic way that reinforces domestic priorities, rather than simply adopting EU priorities.

Source: Bulmer, S. and S. Padgett (2005), "Policy transfer in the European Union: An institutionalist perspective", www.jstor.org/stable/4092282; Dolowitz, D.P. and D. Marsh (1998), "Policy transfer: A framework for comparative analysis".

Importantly, the institutions of the EU, while originating in the 1957 Treaty of Rome that established the original six-member European Economic Community, have evolved to be more numerous and complex as time passed and more members joined. However, the EU, like all political institutions, has a strong degree of path dependency in that its institutions are inevitably more closely aligned with those nations that have been long-standing members. Countries that have joined more recently have had to make greater changes in their internal structures in order to be compliant with a more complex and pervasive EU than did earlier members. In addition, the appropriateness of institutions varies with stages of development. Relative to the EU-15, Poland and the other 2004 group were at an earlier stage of economic development and had only recently made the transition from a centrally planned economy and an authoritarian single-party state to a market-oriented democracy.

While Poland and the other incoming countries technically satisfied the membership requirements of the EU, they did so with a newer institutional structure in the process of enacting decentralisation and building local capacity and as such, faced greater challenges in implementing all the changes associated with membership in a coherent manner. The EU is a supranational state that establishes policies and structures that individual countries have only limited influence over. The national state gives up some of its authority to the EU, but it also effectively gives up authority to the level of regional government, since part of the *aquis* process includes a chapter on regional government where the EU specifies roles for regions and establishes a preferred population size for regions. Where countries already have regions, they typically have to reconfigure them as part of the negotiation process. At the lowest level of government is the municipality, the basic unit of local government. Countries can have additional levels, but the EU focus is on the region and on the national government as its two main points for collaboration. The creation of a regional tier of government in Poland in the 1990s was in part spurred

by the process of accession to the European Union. While Poland's regional policy was initially nationally led and was focused on developing the objectives and principles of EU Cohesion Policy, the 2010 National Strategy of Regional Development enhanced the role for regional policy, including the strategic role of regions in managing EU funds.

Making smart specialisation work for rural areas

Since 2010, the EU has revised its framework to encourage an integrated rural development approach that is based on the idea of smart specialisation as a means to increase the competiveness of regions. This has required applicants for funding to incorporate a more strategic approach in their requests for support. The basic premise of smart specialisation is that each region has comparative and absolute advantages that should be the main target of its development effort. Investing in these sectors is most likely to lead to increases in income and employment because these are the local strengths. While the typical focus of the smart specialisation approach is on metropolitan regions, the basic concept is applicable across a variety of regions (da Rosa Pirez et al., 2014).

Because rural regions have a fundamentally different economic structure than do large metropolitan regions, the nature of their smart specialisation strategy will be different. But a specialisation strategy is even more appropriate in rural regions than in large urban ones because rural regions have to specialise in order to be efficient producers of a small number of exports. It is the successful export of local production that forms the basis of a successful rural economy, and these exports are often linked to the natural resource base (OECD, 2016c). To date, however, there is limited evidence that those responsible for regional policy in Poland recognise the important differences in smart specialisation approaches for urban and rural areas. Most *voivodeship* regional strategies emulate the ideas common for metropolitan approaches with a focus on high technology, formal research and development, and advanced manufacturing and producer services. However, only some voivodeships have large enough urban centres to host this type of activity, and even then these metropolitan areas are only a portion of the regional territory.

The governance of national rural policy

The evolution of policies towards a more multidimensional view of rural development leads to the question of how it should be organised within ministries and departments at the national and regional levels. Across the OECD there are a range of approaches. In the majority of European countries, overarching frameworks for rural development are set by the EU rural development programme only (OECD, 2016a). However, Poland (like France, Hungary and Switzerland) has an overarching strategy for rural development which is realised, in a considerable part, by EU programmes and funds through the rural development programme and agriculture support (OECD, 2016a).¹

From the centre of government, the Council of Ministers is responsible for key national development strategies and their strategic management. The prime minister directly supervises the national development strategy, including regional policy, and ensures co-ordination between different territorial measures. This includes managing the work of the Development Policy Coordination Committee (a body of the Chancellery of the Prime Minister) and co-ordinating the preparation and consultation processes for the mediumand long-term national development strategies and related sub-strategies. The Chancellery of the Prime Minister assists the prime minister in determining the most important programme measures and adopting the National Strategy of Regional Development, among other tasks.

At the national level, there are two key ministries for rural development: the Ministry of Agriculture and Rural Development and the Ministry of Investment and Economic Development (Figure 3.1). Other important ministries for rural development include the Ministries of: Digitalisation; Energy; Family, Labour and Social Policy; Finance, which has oversight functions for EU and national funds; Health; Infrastructure and Construction; Interior and Public Administration; National Education; and Science and Higher Education (supervising the agricultural universities). Representatives of the central government at the regional level (in all 16 regions, *voivodeship* offices) are also important actors as the face of the central government in the regions. The *voivode*, who represents the national government's interests at the regional level, is equivalent to the prefect under the French system. Figure 3.1 outlines the key institutions for rural development in Poland at the national level (including the deconcentrated state administration in regions).

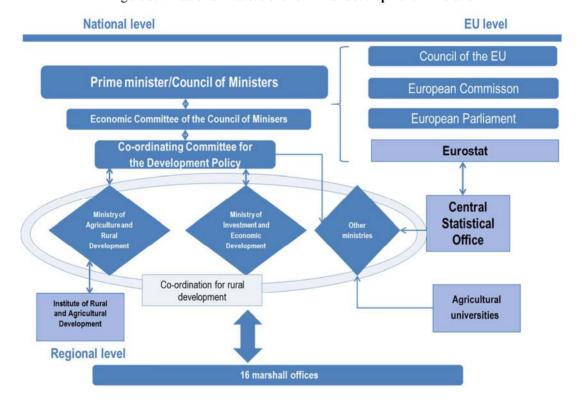


Figure 3.1. National institutions for rural development in Poland

Note: The agricultural universities include: Warsaw University of Life Sciences, the Agricultural University of Krakow, the University of Life Sciences in Poznan, the Wroclaw University of Environmental and Life Sciences, the University of Technological and Life Sciences in Bydoszcz, and the University of Life Sciences in Lublin.

Source: Own elaboration based on Ministry of Investment and Economic Development of Poland.

Co-ordinating regional, spatial and Cohesion policies

Given the role of the Ministry of Investment and Economic Development in elaborating the country's development strategies, it has an important co-ordinating function across government and across territories. As part of its strategic management function, the ministry manages EU funds and performs monitoring, evaluation and reporting.

The Ministry of Investment and Economic Development is also the main governmental institution responsible for the co-ordination of regional, spatial and Cohesion policy. While these are not rural policies per se, they do impact rural areas significantly and target investments to them.

The "National Strategy for Regional Development 2010-2020: Regions, Cities, Rural Areas (NSRF)" defines the main challenges, assumptions and objectives of the regional policy of the state as well as the principles and mechanisms of co-operation between the government and voivodship self-governments. The three main objectives of the national Strategy for Regional Development (SRD) are:

- 1. support the growth and competitiveness of regions
- 2. build territorial cohesion and prevent the marginalisation of problem areas
- 3. create the conditions for efficient, effective and partnership implementation of development activities targeted at territories.

These three objectives each in turn address the need for competitiveness, cohesion and efficiency. The strategy is being updated in light of the new SRD, along with all other sub-strategies of national development. The strategy specifically recognises the need to better integrate rural areas into national and regional development processes. The strategy specifically notes the different development potential of rural areas and the need for place-based solutions and signals the activities where support for rural areas will be directed. This includes such measures as: increasing non-agricultural employment opportunities through direct support to develop entrepreneurship along with career counselling and skills training/education; increasing access to public services; ensuring effective transport infrastructure and improving public transport; support for the development of powiat towns and other towns of local importance; and creating the institutional conditions for non-agricultural investments (e.g. promoting local integrated advisory and financial institutions). This report echoes the importance of these strategic actions.

While the Ministry of Investment and Economic Development does not bear responsibility over the agricultural portfolio, the National Strategy for Regional Development recognises the importance of agricultural policy for rural development and the need to increase agricultural productivity, particularly in areas that are highly dependent on farming and that have lower levels of socio-economic development. For instance, it identifies opportunities to develop the agri-food sector and recognises the need to support multifunctional agriculture.

The Ministry of Investment and Economic Development is also responsible for preparing and adopting the National Spatial Development Concept 2030 (NSDC). This document presents an assessment and analysis on the state of spatial planning in the country and puts forward a vision for the country's spatial development to the year 2030. As such, it offers an assessment of key challenges and guidance on how to co-ordinate and implement public policies that have a significant territorial impact. Substantively, the NSDC is a means to inform regional strategies and mutually align their core objectives around the goals of sustainable development. Regional spatial development plans for each voivodeship are checked for compliance with the NSDC.² However, it is not an internally binding document. It is the purview of the Council of Ministers to decide the extent to which the NSDC will inform government programmes (and be binding upon them). Objectives within the NSDC such as preserving the pro-cohesive polycentric settlement structure of the country, creating conditions for the multifunctional development of rural areas, improving transport and telecommunications infrastructure connectivity, and preserving high-quality natural environments and landscape pertain to rural development.

Co-ordinating rural development, agriculture and fisheries

The MARD is responsible for Poland's rural development strategy (Strategy for the Sustainable Development of Rural Areas, Agriculture and Fisheries) which identifies five main objectives:

- 1. increase the quality of human and social potential, employment and entrepreneurship in rural areas
- 2. improve living standards in rural areas, including their spatial accessibility
- 3. enhance food security
- 4. increase the productivity and competitiveness of the agri-food sector
- 5. support environmental protection and climate-change adaptation in rural areas.

The MARD is responsible for establishing legal, methodological and organisational as well as institutional grounds for pursuing the rural policy (i.e. meta-governance).³ The ministry provides strategic policy direction, implements EU funds for rural development and agriculture, and provides operational functions, including the financial supervision of budgets (Figure 3.2).

The MARD is responsible for payments under the direct support scheme of the CAP and provides analyses of the CAP and its impacts and monitors the changes in other EU policies on agriculture and rural areas. Under the current financial perspective (2014-20). Poland was one of only four member states that decided to move resources from rural development (Pillar II of the CAP) to direct payments and market supports (Pillar I of the CAP). Poland used the upper limit for that shift (25%), which has led to a significant redirection of resources towards direct payments to farmers and away from rural development.⁴ This transfer of funds was made to partly compensate for the gap between the level of direct payments in Poland relative to the EU average. The resulting decrease in rural development funds was almost fully compensated through national co-financing. Poland has also decided to direct resources to less-favoured areas under the rural development component (CAP Pillar II) and under the current financial perspective, there are a number of policies for small and medium-sized farms. One consequence of this decision is that, despite being assessed as one of the key priorities for rural development, the current structure of regional development programme activities provide only limited support for creating employment opportunities outside agriculture. Nevertheless, it should be noted that the key actions in this regard are supported by Cohesion Policy funds through, for example, retraining, supporting the professional mobility and creation of workplaces in rural areas. Further, it has somewhat reduced the scope to devise nationally specific instruments since the rules under Pillar I of the CAP are structured in terms of the ways in which funds can be spent.⁵ However, it bears noting that the CAP today has far more flexibility than in the past (see Roederer-Rynning [2015] for a discussion).

The MARD also has responsibility for aspects of land management, technical infrastructure, skills and education, agricultural markets, labour market policies, and social matters. The Department of Land Management has responsibility for a wide range of issues including the protection of agricultural land and the development of the technical infrastructure for rural areas. Note that this is separate from the spatial policies for which the Ministry of Investment and Economic Development is responsible – and

yet, it is very much related to this work. The Department of Social Matters and Agricultural Education is responsible for the social security of farmers, entrepreneurship, labour market policies and agricultural education, among other functions. The Department of Agricultural Markets is responsible for both market information and regulation. Taken together, the ministry bears responsibility for a wide range of policies that impact agricultural and rural development spanning from direct support to farmers, social and cultural policies to regulation.

Food safety Social matters Plant breeding Land and veterinary Agency for the Restructuring and Modernisation of Agricultural Advisor National Center for Support of Agricultu Voivodeship Agricultura Advisory Center ntation of EU funds for rural development and agriculture Plant protection and seed inspection ntation of FII funds and state air Agricultural schools

Figure 3.2. Structure of the Ministry of Agriculture and Rural Development and supervised or dependant organisations

Note: The National Center for Support of Agricultural was established September 2017 out of the former Agricultural Markets Agency and the Agricultural Property Agency.

Source: Own elaboration based on Ministry of Investment and Economic Development of Poland.

The MARD also has a large oversight function for various agencies that provide on the ground support to the agricultural sector and manage and distribute funds to farmers, rural businesses and others (Table 3.1). Shortly after transformation from a communist state. Poland had to create new public institutions to carry out the transformation to a democratic, market-oriented form of government. Then again when it began the accession process to join the European Union, additional transformations of public institutions were required. Since accession in 2004, there have been ongoing changes both in internal conditions in Poland and in the way the European Union operates that have induced additional changes. As a result, Poland today only slightly resembles the way it appeared just over 25 years ago. However, many of the institutions established in the early days of the 1990s remain in place close to their original form.

This is particularly true for those institutions that focus on rural Poland and agriculture. Poland has an extensive array of agencies that are engaged in national agricultural policy and rural development. Most of these agencies were originally created in the period immediately after the end of the communist era in 1989 and were designed to address the challenges of that time, such as the decision to slow the pace of modernisation where small farms were concerned and an attempt to retain a large number of these households in place. It was also related to the recognition that the national economy would be unable to absorb a large exodus of these households from rural areas, both in terms of providing employment and in terms of the existing urban housing stock.

Table 3.1. Agencies of the Ministry of Agriculture and Rural Development, 2017

Agency	Mandate	Structure
Agency for Restructuring and Modernisation of Agriculture (ARMA), est. 1994	Implements instruments co-financed from the European Union's budget and provides aid from national funds. The main beneficiaries of measures implemented by ARMA are farmers, inhabitants of rural areas, entrepreneurs from the agri-food sector, local governments. The agency also provides aid to entities operating in the fisheries sector.	Headquarters, 16 regional offices in each region (voivodeship) and 314 local offices
National Center for Support of Agriculture, 2017	Supports and maintains economic balance in the Polish agri-food sector. Aims to improve the structure of family farms (e.g. access to land and farmland consolidation) and manages state assets for agricultural purposes.	Headquarters and 16 regional branches
Agricultural Social Insurance Fund (<i>Kasa Rolniczego</i> <i>Ubezpieczenia Społecznego</i> , KRUS), 1990	Manages the farmers' social insurance programme and related supports. This includes both pension and accident insurance.	A head office with 16 regional branches, 256 local offices and 3 centres (farmers' rehabilitation centres; recreation and rehabilitation centre; training and rehabilitation centre)
Secondary agricultural schools	Provide vocational training in agricultural and related trades/occupations.	47 agricultural schools across the country
Agricultural Advisory Center (AAC), 2004	Works to improve agricultural incomes; enhance market competitiveness of agricultural holdings; supports rural sustainable development and the development of vocational skills for agricultural farmers and other rural inhabitants.	The head office of the Agricultural Advisory Centre is located in Brwinów; branch offices are located in Poznań, Kraków and Radom

Poland and Polish agriculture have changed radically in the intervening years, and it is now time to consider how these agencies should be reconfigured to make them more effective in the current environment. National agricultural agencies should be designed in such a way to be a more effective mechanism to implement the CAP in the Polish context and support rural development. As Polish agriculture modernises, using the CAP resources in a more effective manner will become more important, because the return from spending money will become lower and the funding envelopes will likely be smaller.

The Agency for the Restructuring and Modernisation of Agriculture (ARMA) manages the European Agricultural Fund for Rural Development (EAFRD), the Agricultural Markets Agency provides support to Poland's agrifoods sector, and the Agricultural Advisory Center (AAC) provides agricultural extension services to farmers. It is through these agencies that the MARD has a regional and local presence; both the AAC and the ARMA have regional offices (in all 16 regions) and local offices as well.

Two of the MARD's agencies, the Agricultural Markets Agency and the Agricultural Property Agency, have recently been merged to form a new National Center for Support of Agriculture (*Krajowy Ośrodek Wsparcia Rolnictwa*, KOWR). This new agency, effective September 2017, will support the government's new proposed pact for rural areas (described further in the second part of this chapter). The KOWR will issue administrative decisions regarding the personal trading of agricultural land, provide non-repayable financial assistance for the maintenance of the infrastructure in rural areas, co-operate with local governments on the free transfer of land, and more generally, provide much needed urban planning support for rural and semi-urban areas.

The MARD's agencies are a critical source of knowledge of on-the-ground conditions for agriculture across the country – e.g. the AAC in Brwinów with divisions in Kraków, Poznań and Radom – which provide support to the agricultural advisory centres in the

voivodeships. These agencies could be better co-ordinated in order to enhance agricultural policy based on knowledge and data of local conditions. There needs to be stronger mechanisms in place to support local intelligence gathering and reporting to the MARD in order to enhance its ongoing assessment of changing conditions and local needs. There is potential for stronger horizontal co-ordination and knowledge sharing across the MARD's agencies. For example, local intelligence on the emerging training needs of farmers could help inform the curriculum design and "training for trainers" of secondary agricultural schools.

The creation of the new KOWR has the potential to refocus the efforts of the Agricultural Markets Agency on support for the agri-foods sector; the transfer of the Agricultural Markets Agency's payment functions for EU funds to ARMA is an opportunity to increase its capacity in other areas (under the new configuration ARMA is now the only paying agency for the CAP in Poland). The new KOWR could be far more active as a centre of expertise for marketing and promotion and could strengthen its support for territorial product branding. Further, there should be more efforts to support the development of producers groups and farm co-operatives, which are particularly important in places with small-scale agriculture.7 There is an act dedicated to the horizontal consolidation of agricultural holdings (through agricultural producers groups). The Agricultural Markets Association has been reducing the number of groups and increasing control over their functions. There are presently approximately 1 200 such agricultural producers groups, which is not a high number given the prominence of agriculture in Poland's economy. In the case of co-operatives, there is a need for more information and knowledge sharing about their legal and financial underpinnings. The knowledge of these aspects of co-operative membership in Poland is very low, both among farmers who are members of co-operatives themselves and those who are not. Doing so might help overcome the most commonly identified challenges with their adoption: reluctance to co-operate and a general lack of trust among the actors involved (Nowak, Jastrzębiec-Witowska and Gorlach, 2016).

Regional diversity – Implications for the governance of rural policy

The governance problem for rural policy in Poland is complicated by the high degree of diversity across the rural regions of the country. Dimensions of this diversity are set out in Chapters 1 and 2 of this report and are further highlighted in reports by Rosner and Stanny (2017, 2014). Poland's regional diversity is underpinned by its historical development, including the distant past when Poland was partitioned into parts controlled by the Austro-Hungarian Empire, Prussia and Russia; the post-World War II era when Poland was effectively moved west and became a member of the Soviet bloc; and most recently the end of central planning and the socialist one-party state. Each of these large events created cultural geographic and social changes whose influence remains today. For many analysts, understanding regional differences in Poland means understanding the patterns of history.

Beyond regional development differences, Poland has retained much of the centralised control mechanisms associated with the previous centrally planned economy, including: strong oversight of subnational government, limited local fiscal capacity, earmarked funding, strong separation of national ministries in terms of function and operation, and rigid planning processes. The combination of diverse local conditions and a high degree of central control limits the development of rural areas. Among the other OECD member countries, Chile and the United Kingdom exhibit a similar degree of centralisation (OECD, 2011; 2014b).

The OECD has previously recommended that Poland strengthen its regional policy in ways that will allow all parts of the country to fully participate in enhancing economic growth; it has also recommended that Poland introduce a sustainable development strategy that anticipates lower levels of future EU financial support and that uses EU funding in a more strategic way to reinforce domestic investments (OECD, 2008). Steps have been taken in recent years to promote such an approach and improve the capacity of regional and local governments to implement their development objectives. However, it is clear that subnational capacity building is a work in progress and more needs to be done in order to help these governments be more effective partners, enablers and instigators of rural development; this point is elaborated further in the following section.

Multi-level governance and subnational capacity building

Poland's rural policy – from conceptualisation to delivery – entails a complex web of interactions between different levels of government including the supranational level (EU), non-state and non-governmental actors. This creates a co-ordination challenge. Upper-level governments tend to set overarching policy direction and channel resources to lower-level ones; lower-level governments in turn undertake actions in their own areas of competency and have some of their own resources to draw on as well but rely in large measure on funding from upper-level governments. There are also cases of state deconcentration at the regional level – e.g. the MARD's agencies have a local presence. Effective systems of multi-level governance help to overcome some of the many obstacles to rural policy implementation. Tools for multi-level governance – in the form of vertical and horizontal co-operation – can help to narrow the "policy gap" among levels of government and promote co-ordinated implementation of stated policy goals and plans. They can help to ensure that all of the actors in the policy system are pulling in the right direction and that bottom-up and top-down interventions are appropriately combined and mutually informed.

In every country, the nature of the multi-level governance system will differ based on a wide range of factors, including the division of powers between levels of government and the nature of fiscal relations. In Poland's case, the multi-level governance framework has evolved significantly since 1989 and continues to change. After 40 years of centralisation, Poland pursed political and fiscal decentralisation reforms and the scope and role of subnational government in policy delivery increased significantly. They have risen to this challenge. Every regional government in Poland articulates a regional development strategy which is tied into its regional operational programme; this includes a diagnosis of key issues and an assessment of the best way in which to channel resources to meet them. In some regions – e.g. Małopolskie – this is also complemented by a regional strategy for rural development.

Correspondingly, local governments too are more than just delivery agents. *Gmina* local governments have their own strategies of community and economic development and are increasingly embracing a participatory approach to policy development – engaging local residents and businesses (including farmers) in the process. However, the capacity of *gminas* can differ significantly in this regard. Poland's intermediate level of government, the *powiat* (county or district), contains several municipalities, except in the case of large urban municipalities, termed "city counties" that are autonomous and combine the authority of a *gmina* and *powiat*. These units of government have limited authority and their elimination is the topic of ongoing debate (Sakowicz, 2017). However, they may in the right circumstances be a useful vehicle for fostering co-operation among *gminas* because they are a recognised contact point.

Poland's decentralisation reforms are regarded as a successful example among Central and Eastern European countries, especially regarding reform implementation (OECD, 2017d). However, the task of ensuring effective multi-level governance continues. Poland's strategic management system - with medium- and long-term national strategies and related sub-strategies – are a form of horizontal co-ordination at the national level. However, they also serve as a signal to local and regional governments of intent and in cases such as the National Spatial Development Concept, are a directive to the regional government, requiring some compliance. The system of nested strategies at the national, regional and local levels should in practice inform one another and provide a complementary set of objectives within each government's sphere of responsibilities. This thus forms one mechanism for multi-level governance.

Development policy is also co-ordinated in Poland through national and regional operational programmes which are co-financed from EU Structural and Investment funds. While the Ministry of Investment and Economic Development plays a key role in this process, other institutions are involved, including local governments, the private sector and academia. A new instrument – the territorial contract – has been adopted to coordinate investment priorities between the national government and each region. These territorial contracts are used to implement regional policy through a contract which sets the tasks and responsibilities of each level of government. Poland has also recently established national and regional territorial for which offer a platform to monitor and assess the effectiveness of regional policy. At the local level, the Joint Commission of Central Government and Local Government provides a forum to connect the national and gmina level governments with representation on the joint commission evenly split. This group develops common positions on social and economic priorities and provides opinions on government acts, programmes and policies that relate to local government.

These multi-level co-ordination mechanisms serve a range of purposes but they tend to be focused on regional policies overall, of which rural development is one part. There should be efforts to consider how the specific needs of rural areas can be strengthened where pertinent. Besides permanent fora, ad hoc commissions can be established for a given period, accompanying the design and implementation of a national strategy or of a specific reform or policy issue. These for may involve experts and different stakeholders from the civil society and public and private sectors. It is a well-developed method for multi-level governance in Nordic countries, as well as in Japan and New Zealand (OECD, 2017d).

Strengthening regional governance

Since 2010, voivodeships have taken on a stronger role in the management of EU funds. This has required the implementation of new management instruments, including evaluating the outcomes of this support. As such, they have strengthened their management and oversight functions. The structure of EU funding has been highly instrumental in shaping the objectives within both regional development strategies and related regional operational programmes. A central task going forward is for regional governments to draw on own-source investments to complement EU and national earmarked funds in order to meet their own development priorities. There are already positive examples of instruments that support such an approach. For example, the voivodeship of Wielkopolskie has allocated its own funding to support village renewal. A precondition to receive these funds is that a group of local actors (gmina or non-governmental organisation) first elaborate a local development strategy. These funds are thus used to strengthen the development capacities of communities and own-fund contributions are required in order to access funds.

A second area of regional governance that should be strengthened is related to regional territorial observatories. These observatories have been established by voivodeship governments in order to monitor the impact of policies with a territorial impact. These entities collect and analyse data in order to evaluate the impact of development policies locally. As such, they serve to help determine if regional policies are having the intended effects. But rather than just reporting up, these observatories could serve to enhance the analytical capacities of local communities themselves, in order to promote, for example, urban-rural partnerships. This is particularly important for rural gminas that have limited internal capacity to undertake such functions. One key function in this regard could be to enhance local governments' understanding of spatial trends and emerging challenges. As noted in Chapter 2, rural gminas in Poland have very low coverage of local development plans and face many spatial management issues, particularly in areas that are experiencing rapid peri-urbanisation. Rural communities need better data and analytical support to develop plans. Such work is presently beyond the scope of the regional territorial observatories and would require additional resources in order to be fulfilled. It could support the efforts of some voivodeships such as Zachodniopomorskie in identifying functional linkages and encouraging inter-municipal partnerships.

The organisational composition of regional territorial observatories differs somewhat across Poland's regions. For example, in the case of Podlaskie, the regional territorial observatory is a separate organisational unit composed of six people within the Department for Regional Development. In some regions the territorial observatories are not separate organisational units, but rather composed of a group of people who carry out evaluation in the marshall's office. Further, the Podlaskie territorial observatory monitors regional development of the *voivodeship* but also acts as an evaluation unit. Other *voivodeships* in Poland have separated these two functions – monitoring and evaluation. There need not necessarily be a single standard in terms of how these bodies are structured and function; however, where these differences do matter is in the quality and consistency of the data that they provide. At present it is noted that there are no specific quality parameters and data content, collection and processing differs (Maśloch and Piotrowska, 2017).

Enhancing local governance

Governance prospects for rural policy in Poland have improved considerably in the past two decades. In general, the competence of subnational authorities has increased and the cumulative effect of investments in rural areas over a decade has been substantial. However, some subnational governments continue to have weak outcomes that reduce the level of well-being and contribute to slower economic growth in their territory.

This study confirms that there is wide variability in local government capacity. *Gminas* with higher levels of social and economic development were characterised by strong efforts to improve local public services to make the community more attractive to residents and potential employers. In these cases, leadership was highly engaged with the community (see Box 3.2 for an example of strong municipal leadership). Local businesses consisted of a mixture of traditional firms and new entrepreneurs who were exploiting niche export opportunities. In contrast, *gminas* with lower levels of social and economic development were characterised by declining public services and an attitude that an external party was responsible for improving them. Moreover, the leaders seemed pessimistic about the

future of the community. In such instances, the local economic base relied upon a few traditional firms and there was little evidence of new entrepreneurship. While improving local governance cannot erase these differences, it can contribute to the process.

These differing capacities in turn highlight the differing potential of endogenous development. While the majority of rural gminas may be capable of determining and delivering upon investment proprieties, others will struggle in undertaking these functions and may require higher levels of support, including financial support for investments and programmes and partnerships to deliver key services and interventions. A key role for upper-level governments is to determine how best to target communities in the greatest need.

Given the importance of strong local leadership, it is noted that a proposed reform to limit the tenue of locally elected mayors could serve to reduce local leadership and capacity building. Such rules have merit in ensuring that the position of mayor is not monopolised by incumbents who may have a competitive advantage; however, it also has its drawbacks in reducing the tenure of such officials who may have built strong relationships with community members over time.

Box 3.2. The role of local leadership in community and economic development: Profile of Środa Wielkopolska

Local leadership is often the secret ingredient to strong community and economic development. Such leadership has been highlighted as one of the key factors for success in the case of the town of Środa Wielkopolska. Located in central Poland approximately 30 kilometres from the Wielkopolskie regional capital of Poznań, the town has seen both strong population and economic growth in recent years. In the early 1990s, Środa Wielkopolska faced a number of challenges - it had underdeveloped infrastructure (e.g. a rudimentary sewage system and no waste treatment system), and poor socio-economic conditions. Major development efforts were needed to improve the city's infrastructure and enhance services for its residents. Since that time, the water supply and water quality system have been completely upgraded and 95% of rural areas (i.e. rural part of Środa Wielkopolska gmina) are now equipped with a sewage system. Over 14 years, the gmina has spent about PLN 200 000 million on investment and construction; 15% of those funds were from external funding (e.g. EU-funded projects). The town has increased from approximately 22 000 inhabitants in 2009 to 31 000 in 2016 and has seen a growth in new business entities.

A key element of the town's success has been effective public engagement between the local government and residents. There have been concerted efforts to engage citizens in community and strategic planning and, over the past two years, the town has employed participatory budgeting, wherein citizens submit projects that are then assessed by the community and voted on. The town has adopted a policy of being open to both businesses and residents and offers various ways to contact the city administration and engage with residents. There are also strong connections between villages and the town. There is an office of heads of villages (soltys) in Środa Wielkopolska country that are in direct contact with service providers and with the mayor. The Mayor of Środa Wielkopolska has been in his post for 14 years and also holds the position of president of the city council and deputy head of the county. The stability of the local government system has helped to solidify collaboration and engagement with citizens, businesses and suspending gminas.

Box 3.2. The role of local leadership in community and economic development: **Profile of Środa Wielkopolska** (continued)

Economic development strategy – Low taxes, supportive business environment, effective spatial planning and quality of life

The town's competitive tax rate has been a key part of its economic development strategy. The town has a strategy of trying to keep local taxes as low as possible in order to attract businesses and residents and the agricultural tax is the lowest allowed by law. Economists call this strategy "beggar thy neighbour" – there is a risk that such an approach leads to diminished public finances and in turn a reduced ability to provide infrastructure and services. It can also create a "race to the bottom", whereby jurisdictions compete to have the lowest taxes. To date this strategy seems to have worked well for Środa Wielkopolska and the town has seen its municipal budget increase 3.5 times over the past 14 years. Own resources have been constantly increasing and at present, 6% of own-source revenues come from the corporate income tax while 40% comes from personal income tax. The town has seen yearly increases in the personal income tax. The town has a policy of only increasing tax rates in line with inflation.

Beyond adopting low and stable taxes in order to invite entrepreneurship to the area, the town also offers various supports to business and sped up the permit issuing period. Administrative decisions were taken as quickly as possible and the town provided assistance to businesses in obtaining external funding. The development of spatial plans facilitated the development of industry and was deemed particularly important because the town has areas with high-quality soil and environmentally protected areas (Natura 2000 areas). Part of the town's economic development strategy also entailed investments in both technical infrastructure to support business development and cultural and leisure facilities in order to enhance residents' quality of life. In effect, the approach to local economic development was grounded in a focus on the multiple dimensions of well-being.

This approach has been successful and there are a number of large employers in Środa Wielkopolska *gmina*. For example, Solaris bus and coach (700 employees); Holmug (500 employees); Shroda milk production (300 employees); large sugar plants (200 employees); Décor (300 employees); Knot company (150 employees). Środa Wielkopolska is located in an area with intensive agricultural production (e.g. large poultry farms, egg production, milk, beef farms) and there are approximately 800 farms registered in the municipality; 80% of land is used for agriculture and the area has high-quality soil and efficient farm production as a result.

Strategy for social development

Środa Wielkopolska faces a certain paradox that is not uncommon in many rural parts of Poland. On the one hand the town has a large number of unemployed persons registered; and yet, many of the companies that operate in the town experience difficulties in finding employees and, as such, hire foreign workers to fill these positions. It is reported that the local employment agency releases 5 800 work permits for foreigners annually in Środa Wielkopolska with most individuals originating from Ukraine, Belarus and Kazakhstan. It is thought that many of those individuals who are formally registered as unemployed are in fact working in the shadow economy in order to retain their access to the health insurance system. The municipality provides two types of assistance: 1) employment programmes for those who are unemployed to perform basic maintenance for the city (up to 100 people are year are employed in this manner); 2) a social integration centre that is supported through public funds.

The town has also adopted a number of family-friendly policies. There is a discount card for large families (with three or more children); the town has opened a free school for future mothers; and additional benefits are provided for new children. All families have access to low-cost child care and women have above average rates of labour market participation. Środa Wielkopolska's public transportation, which is free of charge, extends to surrounding rural areas. This service is particularly used by those with limited mobility, such as seniors, those with low incomes and young mothers.

Source: Own elaboration, based on interviews.

Also evident was the ongoing difficulty in collaboration. This includes: limited co-operation among gminas on shared opportunities and problems; weak co-operation among the regional arms of national ministries that lacked the authority to work with their counterparts without explicit approval on a case-by-case basis from head offices in Warsaw; ongoing conflicts among gminas, powiats and vovoidships over authorities' spending priorities and the use of EU finds. There were also several instances of national laws and regulations tightly constraining the actions of subnational governments, making it difficult for them to be either innovative or to deviate from national guidelines. Study visits in Podlaksie highlighted several examples where programme priorities do not meet local needs. For example, exclusion of support for the reconstruction of historical monuments and buildings within the rural development programme or funding being provided for areas that suffer from flooding, but not for drought mediation and adaptation initiatives, which have greater pertinence in some of Podlaskie's rural regions.

The quality of government is an indicator of the capacity for public authorities to select and implement effective public investments. Given that Polish subnational governments account for almost a third of public sector expenditure, it is important to develop strong co-ordination. The capacities of subnational governments to undertake effective public investments are related to:

- their ability to assess upfront long-term impacts and risks of public investment
- encouraging stakeholder involvement throughout the investment cycle
- mobilising private actors and financing institutions to diversify sources of funding and strengthen capacities
- reinforcing the expertise of public officials and institutions throughout the investment cycle; and focusing on results and promoting learning.

Indeed, where the capacities to design and implement investment strategies are weak, policies may fail to achieve their objectives – even if co-ordination mechanisms are in place. The OECD has developed Principles on Effective Public Investment across Levels of Government in order to help governments assess the strengths and weaknesses of their public investment capacity across levels of government and set priorities for improvement (Box 3.3).

OECD recommendations on sound rural policy place an emphasis on engaging a broad set of actors in the multi-level governance process, not just governments. Poland is making progress on this, but there is still a significant lack of private sector engagement with local government; since the private sector accounts for the majority of employment and the majority of GDP it is important that firms be part of the governance process. In rural areas in particular, economic progress hinges on entrepreneurs and owners of existing small and medium-sized businesses. Increasing their engagement with subnational government can lead to improvements in the business climate and better economic progress. It is also found that where there are a wide range of civil society actors, the role of local governments in such organisations as local action groups (LAGs) remains disproportionate.

Box 3.3. Effective public investment across levels of government

The impact of public investment on growth depends in part on the quality of governance. The quality of governance is correlated to public investment and growth outcomes, notably at the subnational level (OECD, 2013c). Substantial savings can also be made by better managing public investment throughout its life cycle, across levels of government.

The OECD has developed *Principles on Effective Public Investment across Levels of Government* in order to help governments assess the strengths and weaknesses of their public investment capacity across levels of government and set priorities for improvement. It is the first instrument developed by the OECD in the area of regional policy and multi-level governance.

The principles group 12 recommendations into the 3 pillars representing systemic challenges to public investment.

Co-ordinate across governments and policy areas

- 1. Adopt an integrated, place-specific strategy.
- 2. Co-ordinate across subnational and national levels.
- 3. Invest at the relevant scale.

Strengthen capacities for public investment and promote learning

- 4. Understand impacts and risks.
- 5. Engage stakeholders at every step.
- 6. Include private actors and institutions.
- 7. Build expertise in local partners.
- 8. Focus on results, capture lessons from experience.

Ensure sound framework conditions at all levels of governments

- 9. Develop a fiscal framework aligned with objectives.
- 10. Insist on sound, transparent financial management.
- 11. Promote strategic use of public procurement.
- 12. Strive for consistent, quality regulation.

Source: OECD (2014d), Recommendation of the Council on Effective Public Investment Across Levels of Government, www.oecd.org/cfe/regional-policy/recommendation-effective-public-investment-across-levels-of-government.htm; OECD (2013c), Investing Together: Working Effectively across Levels of Government, http://dx.doi.org/10.1787/9789264197022-en.

Fiscal decentralisation: Has it gone far enough?

There are ongoing debates in Poland about whether fiscal decentralisation has adequately kept pace with the devolution of responsibilities to subnational governments. A lack of fiscal capacity at the subnational level reduces the ability of governments to deliver infrastructure and services and to pursue interventions based on their own priorities. It can leave them beholden to the funding structures imposed by other levels of governments. *Voivodeships* and *powiats* in particular rely heavily on national subventions and have limited own-source revenue-raising abilities (Box 3.4). While *gminas* are in a

better position in terms of own-source revenue, it is often remarked that they have seen more and more responsibilities devolved to them and yet very little in the way of increased fiscal decentralisation to match it; successive OECD reviews have made this point (e.g. OECD, 2008; 2013b). Further, in 2015 the amount of planned subsidies to rural gminas for their performance of "commissioned" tasks was set at a level 25% lower than the actual amounts dispersed in 2014. The "missing" amounts were transferred from the allocation for rural gminas to allocations for powiat-cities and to urban gminas.⁸

Box 3.4. The fiscal capacity of subnational governments in Poland

Subnational government revenues in Poland come mainly from four sources: 1) own-source tax revenues (levied through limited taxation powers in accordance with nationally determined maximum rates); 2) shares in personal and corporate income taxes; 3) grants, including general purpose grants and conditional (or earmarked) grants. The latter may include resources from European Union budgets (Structural and Cohesion Funds). 4) non-tax own-source revenues (user tariffs and fees; revenue from property, leasing and sales, including revenues from municipal companies and public utilities).

Gminas are the only subnational tier that holds the power to tax – though this power is limited. The property tax is the most important among these; it is levied on buildings and plots of land. The amount of the local taxes and fees is determined by each municipality, but must comply with frameworks (and upper tax limits) determined by national legislation. Property taxes are generally levied on a square metre basis, with differential rates set for commercial versus residential buildings. For example, in the case of land, the property tax is based on the area of the land (to a maximum of PLN 0.89/m² of land); in the case of buildings it is based on their floor area (to a maximum of PLN 23.03/m² of the usable surface of a building) (Ernst & Young, 2014: 91). This information is determined through the central registry and assessment takes place on an annual basis. Only one element of property tax is based on assessed value: certain construction structures (other than buildings) that are being used in an economic activity are taxed based on market value at a fixed rate (usually 2% of market value). Agricultural and forestry lands are subject to taxes which are separate from property taxes. Other taxes that are far more marginal to the municipal budget include taxes on agricultural lands (paid by hectare with soil quality taken into account), forests, large vehicles and a number of other minor duties.

Property tax revenues form a proportionately larger share of total revenues for rural subregions as opposed to urban ones (OECD, 2011). Property tax revenue accounted for 28% of total budget revenues for predominantly rural subregions, 25% for intermediate subregions and 17% for predominantly urban ones in 2014 (Government of Poland, 2015). These figures have changed little since 2010.

Shared tax revenue comes from the share of the personal income tax (48% of subnational tax revenue) and the company income tax (9% of subnational tax revenue). Shares of national income taxes are redistributed to all three levels of subnational government according to a fixed percentage of the total proceeds collected within the territory of the jurisdiction; there is no horizontal equalisation mechanism. These flow to regional, county and municipal governments, with municipalities receiving the largest share of the personal income tax transfer and regional governments receiving the largest share of the corporate income tax. As such, there is a fiscal incentive for municipalities to increase their populations and for regional governments to foster business growth.

The general purpose grant for municipalities (subventions) consists of four main shares: education share, equalisation share, the balancing share and the regional share. Despite these delineations, subnational governments can spend general grants at their own discretion - they are not tied to a particular purpose. The composition of each is outlined in the Act on Local Government Revenues.

Box 3.4. The fiscal capacity of subnational governments in Poland (continued)

The education share is by far the largest, accounting for over 20% of subnational government revenues. It covers educational expenses, including teacher's salaries.

The equalisation share (5% of subnational revenue) is allocated to all subnational governments with below-average tax capacities. Municipalities whose per capita revenue-raising capacity from local and shared revenues is below that of a national threshold amount qualify for a basic grant determined on the basis of both population and tax capacity. The structure of the equalisation grant favours small municipalities with low population density (Sauer, 2013: 17).

Balancing share (only for municipalities and counties) distributes funds based on social expenditure; it takes into account such issues as gross domestic product (GDP) per capita, the surface area of public roads per capita and the unemployment rate in an area.

The **regional share** is a general grant calculated for each region based on the unemployment rate, GDP per capita, area of public roads per capita and regional railways expenditure (OECD, 2008: 239).

Some municipalities may also receive "compensating" grants, which are used compensate municipalities for lost property tax revenues due to special economic zones (special zones that can be established which provide businesses with income tax rebates, hence limiting tax intake).

The final group of **conditional or earmarked grants** are related to the responsibilities that have been delegated to local governments; the most important of these are provisions for social assistance. The vast majority of intergovernmental transfers in Poland are lump sum as opposed to matching grants. Grants from the EU are included under conditional or earmarked grants in most cases. The value of local governments' revenue to GDP ratio in Poland has been significantly higher than the average of EU countries (Uryszek, 2013: 253). Access to European Union funds has increased the competencies of *gminas* in recent years.

It bears noting that the recently adopted Revitalisation Act (2015) expands municipal fiscal instruments on two points: 1) it enables local governments to calculate and collect an adjacency levy (at a rate higher than that set by general rules), which can be used to capture the increase in value of real estate as a result of the construction of municipal infrastructure in the regeneration zone; 2) it introduces the possibility to increase the real estate tax rate (up to PLN 3/m² of land per year) in the designated revitalisation zone for new developments.

Source: OECD (2016a), Governance of Land Use in Poland: The Case of Lodz, http://dx.doi.org/10.1787/9789264260597-en; OECD/UCLG (2016), "Subnational governments around the world: Structure and finance", https://www.oecd.org/regional/regional-policy/Subnational-Governments-Around-the-World-%20Part-Lpdf.

Subnational governments in Poland are responsible for almost a third of public expenditures. With the decentralisation process, the share of subnational government expenditure in Poland has increased, from 23.0% in 1995 to 30.8% in 2015 (Figure 3.3). However, this remains lower than the OECD 35 average of 40.3% in 2015. Polish subnational government expenditures made up 12.8% of GDP in 2015, while for the OECD 35 this figure stood at 16.4%.

Gminas across Poland have very different subnational fiscal capacities depending on such factors as their size and the sources of local incomes. Poland has adopted a number of vertical and horizontal equalisation systems in order to compensate in part for these differences. For example, gminas that have the poorest social and economic outcomes are eligible for special grants. At the regional level, some regions receive additional financial

support for the implementation of regional development programmes through special contracts, which follow the programming period for European Structural and Cohesion Policy.

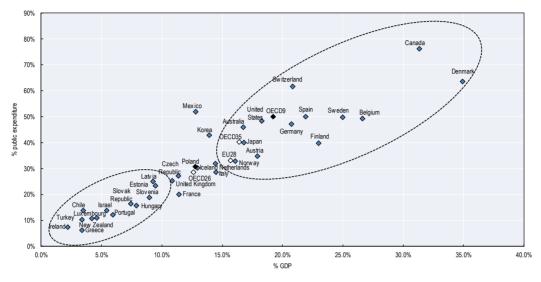


Figure 3.3. Subnational government public expenditure, OECD, 2015

Note: OECD 9 refers to federal countries; OECD 26 refers to unitary countries.

Source: OECD (2017b), "Subnational government expenditure as a percentage of GDP and total public expenditure", OECD Regional Database, http://dx.doi.org/10.1787/region-data-en.

Mechanisms for horizontal equalisation are applied through a modified general grant. Gminas with fiscal revenues of less than 90% of the national average receive additional funds while those with revenues exceeding 150% of the national average are net contributors (Sakowicz, 2017). In a similar vein, regions with lower tax revenue per capita than the national average have access to an equalisation grant. Rural gminas with low population density receive additional funds as do countries with higher than average unemployment rates and regions with fewer than 3 million inhabitants (Sakowicz, 2017). The system of fiscal equalisation is clearly beneficial for small villages and towns, particularly those in remote rural areas where there is low population density. Poland places a number of restrictions on local government budgeting and borrowing and as such, subnational public sector debt is lower than EU and OECD averages. A municipality's total debt cannot exceed 60% of its forecast revenue in a given year and the total amount of debt repayment cannot exceed 15% of the revenue budget for a particular year.⁹

The reliance of voivodeship and powiat governments on transfers from the national government or on EU funding has significant adverse governance effects. The first is the uncertainty of income streams, which makes strategic planning difficult. Governments cannot be sure of future income so they tend to take only short-term expenditure and investment decisions. Further, when funding comes on a project basis, governments tend to apply for whatever projects are available, rather than focusing on higher priorities, because no funding is available for these outlays. Even gminas face difficulty in finding funds for new investments that can be a foundation for future growth because the national government has largely failed to provide sufficient new revenue when it downloads new responsibilities to subnational governments. One example is the new national educational reform to the system of primary and secondary schools, which places significant infrastructure costs on rural *gminas* without out additional funding. Finally, both EU directives and new national regulations can be imposed on subnational governments in the middle of expenditure cycles with devastating budgetary consequences.

There are ongoing debates about whether the institutional reforms at the regional level have gone far enough in Poland, with some arguing that political and administrative regionalisation has not matched fiscal regionalisation, which in turn unduly limits the capacity of regional governments to carry out regional policy (Ferry, 2013) (see Box 3.5 for discussion). *Vovoideships* have responsibility for broad planning decisions and receive significant EU development funds; their limited own-source revenue can in turn reduce their scope for policy implementation. The OECD has previously remarked that politically driven short-term investment imperatives and the desire to maximise the stream of revenue from EU sources can too often drive decision making (OECD, 2013b: 183). Crucially, while municipalities in Poland, as in other OECD countries, take the majority of the public investment decisions that influence firm competiveness, they typically fail to co-operate, even when they are in the same local labour market (OECD, 2013b: 184). At minimum, these asymmetries emphasise the need for a strong multi-level governance process that can co-ordinate the different actors' capabilities and resources and responsibilities.

Box 3.5. Do Poland's *voivodeships* have adequate fiscal capacity to implement regional policy?

Regional policies are inherently linked to a place-based approach – the idea that policies need to be territorially adapted in order to meet the complex, multi-sectoral issues. Effective regional policies are therefore also linked to strong multi-level government frameworks that can co-ordinate actions across levels of government and sectors. Implementing such an approach is not without its risks: "it assumes a multi-level governance system whereby higher levels of government define strategic objectives; agreement on the contribution of each level or actor to implementation; the capacity of lower levels to express local knowledge and interests, and the scope to identify investment priorities; and robust information channels and verification mechanisms to ensure accountability" (Barca [2009], quoted in Ferry [2013]). In Poland, the legacies of the communist era, including low levels of trust and nascent subnational institutions, have made implementing a multi-level governance framework challenging (Ferry, 2013).

Up to the late 1990s, regional policy in Poland was limited in terms of scope and funding and largely conducted through *ad hoc* centralised interventions in order to address specific issues such as unemployment in areas undergoing industrial restructuring (Ferry, 2013). Upon accession to the EU, this approach evolved as a number of institutional and policy reforms took place in an effort to better align Poland with the goals of Cohesion Policy and to support its implementation. Over this time, the role and scope of regional policy broadened and new administrative arrangements were established. However, the changes ushered in by Cohesion Policy also laid bare competing impulses towards centralisation and regionalisation (Ferry, 2013). On the one hand, the EU favours subsidiarity and encourages bottom-up local development and partnerships at the regional and local levels. But it does not have the purview to structure policies to work in this way domestically.

In countries such as Poland, where the scope and function of subnational governments are still in the process of decentralisation, there have been concerns about the capacity of this level to effectively implement regional policies. Ferry (2013) notes that processes of political and administrative regionalisation have not matched fiscal regionalisation and that regional governments have very limited own-source revenues in contrast to national and local governments. He argues that this has impeded the capacity of *voivodeships* to carry out regional policy.

Source: Ferry, M. (2013), "Implementing regional policy in Poland: a new era?" https://doi.org/10.1080/09668136.2013.833016.

Major changes to Poland's system of subnational finance are planned to be introduced shortly, but it remains to be seen if they will help to counter this issue. 10 Substantively, the tax system will be simplified by 2018, and all basic taxes will be combined into one unified tax (personal income tax, corporation income tax, pension contribution, healthcare, etc.). Centralisation of the tax system on a national level will impact subnational revenue and the methodology of the local contribution will be modified, but it is as yet unclear how the introduced changes will impact local public finance.

Encouraging inter-municipal partnerships

Poland presently has two main legal forms of co-operation between gminas, including rural gminas: inter-municipal agreements and inter-municipal unions (as specified in the Law on Local Government, 1990). Inter-municipal unions are corporations of public law created by local governments. Their primary objective is to implement specific public tasks. There are presently 313 such unions in Poland. The vast majority has been adopted to manage the sewage system, but some have also been adopted to promote investment in such areas as the agri-food sector or the development of tourism, sport and leisure. 11 The other type, inter-municipal agreements, do not constitute a separate legal entity. Instead, the inter-municipal agreement allows a gmina to entrust certain public tasks, rights and obligations to another gmina (usually for transport or sewage). The supported gmina finances at least part of the costs related to the implementation of these tasks. Since 2016, local authorities can also create so-called shared service centres (see Chapter 2). The national government has established a framework for inter-municipal collaboration through the "Metropolitan Association Act in Ślaskie voivodeship" (2017). This is an explicit form of partnership where there are common objectives, but no delegated functions. Finally, the LAGs under the EU LEADER Programme are a form of inter-municipal partnership, but involve other actors as well (private sector and non-profit actors).

Despite the aforementioned institutional mechanisms, the take up of inter-municipal co-operation has been slow in Poland. Inter-municipal co-operation is increasingly popular in such areas as water and waste management or broadband and road infrastructure, but it remains limited in sectors such as education and housing (OECD, 2016c). National and regional governments should actively promote and support inter-municipal co-ordination and demonstrate its benefits, particularly for new initiatives such as shared services centres. The slow uptake of such agreements may be in part due to a lack of adequate knowledge about how they work and the risks involved. Resolving inter-municipal co-ordination problems is challenging in many OECD countries. Most of these involve finding ways to provide positive incentives for municipalities to collaborate on a voluntary basis.

Closer collaboration among proximate local governments can strengthen development efforts and the potential to provide a better quality of life and a better business environment. Sometimes it takes action by higher level governments to bring this about. For example, between 1979 and 2002, the province of Quebec, Canada, reorganised rural county governments dissolving traditional administrative boundaries. Subsequently, the province realised that the communities in the new administrative units lacked a tradition of working together. To overcome this, it introduced the Rural Pact (*Pacte Rurale*) in 2002, which provided several rounds of multi-year funding to support a broad variety of joint actions by local governments that was mainly intended to facilitate better collaboration in order to ultimately lead to the creation of a bottom-up regional development strategy (Box 3.6). This Rural Pact programme had a regional focus, embraced a multi-sectoral approach, created a long-term framework for collaboration, empowered community actors and was adaptable to local contexts. A new National Rural Policy 2014-2024 was issued, along with a new Rural Pact signed in the spring of 2014.

Box 3.6. Empowering local government and civil society actors in Quebec, Canada

Quebec has one of the most advanced policy approaches to promote rural development in the OECD; it is closely in line with the New Rural Paradigm (OECD, 2010: 18). The province's rural policy (Politique nationale de la ruralité, PNR), was first launched in 2002. The latest iteration is for 2014-24. Regional county municipalities are the locus of intervention, ownership and decision making under the PNR and the policy, directed from the Ministry of Municipal Affairs, Regions and Land Occupancy, is very much focused on empowering local government and civil society actors (Solidarité rurale du Québec, 2013; 2016).

A recent OECD territorial review of rural policy in Quebec describes this approach as being based on networks of small and medium-sized communities that feed into the "historic social priority of occupying land to protect Québec's cultural heritage" in such a way "that stimulates ownership both among levels of government and within society" (OECD, 2010: 17).

Rural Quebec is quite different from other rural areas in Canada. Employment in the former has increased on average since the 1980s, there has been population growth and the economy is increasingly diversified, although these trends are not uniform across geographies (OECD, 2010). However, for comparability purposes, it is the institutional landscape that is of interest here. The PNR is structured as a formal partnership between the provincial government and local governmental institutions and networks, each with defined roles and formalised obligations. This is a true devolution of power to the local level, because it also involves the accompanying resources. Further, the PNR outlines formal commitments related to rural development of other governmental departments and agencies, presenting a co-ordinated effort. Finally, the plan explicitly values and prioritises cultural and social outcomes alongside economic ones; social and cultural capital are valorised alongside economic capital. Related to this, indicators for success entail both quantitative and qualitative components (e.g. quality of life, sense of belonging and community engagement) (Ministry of Municipal Affairs, Regions and Land Occupancy, 2006: 54). The PNR approach has been described as "innovative public policy offering a genuine model of sustainable territorial development" - one which entails both regional development and rural development elements and subsidiarity (Jean, 2012).

Quebec invests in community capacity-building to a greater extent than other provinces in Canada (OECD, 2010: 200). Granted, the approach taken in Quebec is grounded on the province's own historical and political economy. Nevertheless, the institutionalised partnership process with local governmental actors offers a model of best practice for other jurisdictions.

Source: OECD (2010), OECD Rural Policy Reviews: Québec, Canada 2010, http://dx.doi.org/10.1787/9789264082151-en; Ministry of Municipal Affairs, Regions and Land Occupancy (2006), "Politique nationale de la ruralité: Une force pour tout le Québec"; Jean, B. (2012), "Les territoires ruraux au Québec: Vers un modèle de développement territorial durable"; Solidarité rurale du Québec (2013), "Politique nationale de la ruralité-<a href="https://pwww.ruralite-pnr.gio.ca/fr/Ruralite/Politique-nationale-dela-ruralite-pnr.gio.ca/fr/Ruralite-pnr.gio.ca/fr/Ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-politique-nationale-de-la-ruralite-pnr.gio.ca/fr/Ruralite-pnr.gio.ca/

Rural-urban partnerships

Rural and urban areas are interconnected. These linkages take various forms, e.g. migration and labour market flows, environmental and ecosystem preservation and enhancement, investment and economic transactions, and infrastructure and service provision (OECD, 2013b). As noted in Chapter 1, Poland has a relatively dispersed settlement structure with a number of small and medium-sized towns throughout its territory. This settlement

structure elevates the importance of fostering rural-urban linkages in order to promote collective strategies for community and economic development and planning. OECD research has demonstrated the value of rural-urban linkages and has found that rural regions close to cities are more resilient and have higher growth rates than rural remote regions (OECD, 2013b; 2016c). It is important for public policy to focus attention on rural-urban dynamics in order to develop consistent, effective and intentional policies to support partnerships.

As a general delineation, rural-urban partnerships entail either explicit or implicit partnership types involving informal forms of collaboration or formal ones embedded in legal-institutional arrangements. It is not necessarily the case that more formal forms of partnerships are more effective; this depends on the institutional actors involved and embedded historical relations. In places where there is high social trust and a consensus model of decision making, more informal forms of co-operation can work well. In Poland's case, inter-municipal co-operation has historically been weak and there are few institutional mechanisms or policy instruments to support them. This can make informal forms of co-operation challenging. At the same time, more formal partnerships need to be made on the basis of trust, and as such, informal partnerships are the necessary first step in order to gain more formal relationships later on (e.g. shared service agreements, joint transportation provision).

Public policy incentives for rural-urban partnerships should be strengthened. One of the most important polices adopted recently to help achieve this are the EU's integrated territorial investments (ITI). ITI funding can be used to tackle joint projects across functionally connected municipalities (Box 3.7). The voluntary nature of this association leads to collaboration on projects that are mutually beneficial. This is on the whole positive, but it also leads to the risk that important issues where interests do not align with one another may not be undertaken. Also, these funds target regional capitals and subregional centres, thus excluding partnerships based on rural communities and smaller market towns. Further, while EU funding has structured incentives for co-operation at present, this may change when funding inevitably declines. The OECD has recommended that regional authorities provide a template for partnership contracts between municipalities applying jointly for funding in order to ensure a clearer division of tasks and responsibilities and thus reduce the risks involved for the project leader (OECD, 2016c).

More needs to be done to encourage rural-urban partnerships, particularly for rural areas and small to medium-sized towns, which is major part of the new spatial development strategy articulated in the SRD. One new strategy in this regard is the national government's package for medium-sized cities loosing economic functions. The package involves hard investments and parallel actions that provide support and advice (e.g. advisory support centre, improving institutional capacity and the Partnership City Initiative). Post-2020, a second stage of the project is envisaged with a greater emphasis on using national funds. Cities with a loss of economic functions are identified based on an analysis of approximately 100 municipalities, from which 7 medium-sized cities were selected for the programme. The idea is to promote local growth centres, i.e. small and medium-sized towns that are service centres.

This is an important initiative, but it is by no means enough. The regional and national governments should create more financial incentives whereby gminas can access higher funding amounts for joint projects. Local governments also need the right legalinstitutional arrangements to structure partnership. In some places, associations of gminas have been developed despite a lack of legal regulations to govern their activities, e.g. an association of rural *gminas* and rural-urban *gminas* in Podlaskie which was founded in 2000. With the right support, these types of partnerships would be more common and likely more effective.

Box 3.7. Strengthening rural-urban partnerships in Poland: The use of integrated territorial investments

The EU's integrated territorial investments (ITI) create incentives for rural-urban partnerships. Metropolitan co-operation on projects is required in order to access ITI funds and they are implemented by *voivodeship* capitals. In Łódź, Poland's third-largest city, a metropolitan area association has been created in order to adopt an ITI (established in April 2014). At present, the association includes Łódź and cities and townships in four counties: Pabianice, Eastern Łódź, Brzeziny and Zgierz. A first goal of the association is to develop a development strategy for the metropolitan area. The voluntary nature of this association leads to collaboration on projects that are mutually beneficial. This leads to the risk that important issues where municipal interests do not align with one another may not be undertaken. It is also the case that some projects, such as metropolitan transportation planning, may in fact incentivise sprawl by opening up new areas for investment, which is contrary to overarching spatial goals.

ITI EU funding requirements stipulate that two documents are required in order to apply for funds – a strategic diagnosis of the issues facing the area and a joint development strategy. Previous OECD research on rural-urban partnerships in the West Pomeranian region of Poland points to the importance of getting the geography right (OECD, 2013a). For partnerships to support more coherent spatial and land-use planning, the question of geography is paramount.

While EU funding has structured incentives for co-operation at present, this may change when funding inevitably declines. Commenting on Łódź's new form of association, Wójcik notes that:

... the integration of local government entities around specific tasks should not only lead to the completion of predetermined investment tasks, but should also strengthen the Association in its pursuit of a higher system of planning and governance in the Łódź Metropolitan Area. However, actions of this type will need approval at higher levels of government; hence, the need for a national metropolitan area law. If this does not happen, then the proposed projects will come to a quick end and reduced financing from the European Union (after 2020) may cause a marked decline in the pursuit of cohesion, especially in the realm of functional integration. (Wójcik, 2014: 136).

The national government has met this need for increased inter-municipal collaboration through the law on Metropolitan Association in Śląskie voivodeship" (2017). This law has repealed and replaced the earlier 2015 law on Metropolitan Association which had pertained to the country as a whole

Source: OECD (2013a), Rural-Urban Partnerships: An Integrated Approach to Economic Development, http://dx.doi.org/10.1787/9789264204812-en; Wójcik, M. (2014), "Rural-urban collaboration in a large metropolitan area: The Łódź metropolitan area case study"; OECD (2016a), Governance of Land Use in Poland: The Case of Lodz, http://dx.doi.org/10.1787/9789264260597-en.

In some cases, more flexible arrangements may be needed to spark municipal co-operation in order for it to evolve into a stronger partnership in the future. France's "reciprocity contacts" serve such a function (Box 3.9). They are a supportive and flexible document that structures dialogue between rural and urban municipalities rather than rigidly fixing the responsibilities of each party. The purpose of this approach is to develop a framework for mutual exchange that can support the accompanying project. An underlying precondition of effective partnerships is that municipalities are able to understand their

functional relationships. Given this, how rural areas are defined matters. A more nuanced understanding of mixed gminas in the TERYT typology could help improve the understanding of how these territories function with urban and rural counterparts.

Beyond encouraging rural-urban partnerships, there may be cause in Poland to reconsider the boundaries of some rural gminas adjacent to urban ones. Approximately 10% of all gminas in Poland – 158 rural gminas – have administrative seats located in neighbouring urban gminas (Mickiewicz and Mickiewicz, 2016). In some cases, the main offices of these rural communities are located in the same building as the administration of the urban gmina and services for the rural gminas are often concentrated and performed there. While such gminas are justified on political grounds, the economic rationale is limited (Mickiewicz and Mickiewicz, 2016). It can lead to a duplication of services and poor co-ordination.

Rural-rural partnerships

While ITIs create an incentive for rural-urban partnerships, they do not address the need for greater collaboration in rural areas that are not functionally connected to the urban centres. Community-led local development (CLLD), a new territorial instrument building on the EU LEADER approach, is potentially useful in this regard in order to encourage rural-rural partnerships or partnerships between smaller cities and rural areas by establishing local development strategies within a specific territory. While some funds must be dedicated to this instrument under the Common Agricultural Policy, there are also non-obligatory options to draw on it under Cohesion Funds. 12 It is an important instrument to encourage local communities and local partners – local governments, business and the non-governmental sector – to create and implement local development strategies. Doing so can result in an integrated approach to the sustainable development of a given area thanks to better mobilisation of endogenous potential. In addition, increased participation of local communities in the programming and management of community development can help build social capital by increasing civic activity in Poland. It can also be used as an instrument for the revitalisation of cities and urban districts to support marginalised rural areas that have lower levels of service accessibility. Only a few voivodeships in Poland decided to include the CLLD instrument in their regional operational progammes (ROPs). The LAGs which operate in rural areas in Poland are quite experienced in managing local development strategies thanks to LEADER being implemented in Poland since 2004, demonstrating the potential of this approach. It is important to monitor the implementation of the CLLD in those regions which have chosen to integrate the instrument into their ROPs and to promote best practices. This may encourage other regions to follow suit.

Box 3.8. Governance frameworks for rural-urban partnerships

A 2013 study on rural-urban partnerships conducted by the OECD revealed some common elements. In case studies of 11 rural-urban partnerships in a range of OECD countries, 4 different ways to approach rural-urban collaborations emerge. Each reflects the specific institutional and cultural context of the country. This framework divides the partnerships observed into an admittedly simplified schema, to tease out key aspects that can guide policy development and support (see Figure 3.4 for a summary).

Explicit rurban partnerships Implicit rurban partnerships Rennes (France) Forli-Cesena (Italy) Geelong (Australia) Extremadura (Spain) Castelo Branco (Portugal) Nuremberg (Germany) Central Zone of West Pomeranian Central Finland (Jyväskylä and Voivodeship (Poland) Saarijärvi-Viitasaari) (Finland) BrabantStad (Netherlands) Lexington (United States) Prague/Central Bohemia (Czech Republic) Model 1 Model 2 Model 3 Model 4 No delegated functions Delegated functions No delegated functions Delegated functions Geelong (Australia) Rennes (France) Lexinaton Extremadura (United States) Nuremberg (Spain) Forlì-Cesena (Germany) Prague (Czech Republic) Central Zone of West (Italy) Central Finland Pomeranian Voivodeship (Poland) (Jyväskylä and BrabantStad Saarijärvi-Viitasaari) (Netherlands) (Finland) Castelo Branco (Portugal)

Figure 3.4. Types of rural-urban partnerships

Source: OECD (2013a), Rural-Urban Partnerships: An Integrated Approach to Economic Development, http://dx.doi.org/10.1787/9789264204812-en.

The categories "explicit" and "implicit" are used to highlight an important distinction between the 11 rural-urban partnerships analysed. The "explicit" rural-urban partnerships (five in total), deliberately set out to cultivate a rural-urban partnership or manage rural-urban relationships. This "intent" is reflected in the objectives of the partnership agreement. This rural-urban dimension is a core aspect for the partnership that is deliberately pursued, either through the issues identified, initiatives realised and/or stakeholder involvement.

In contrast, the "implicit" group (six cases) shows no such overt objective. In these cases, the collaboration that emerged was driven by other local development objectives mandating the involvement of urban and rural areas. The second layer sub-divides the two groups further, based on the partnerships' delegated authority. Delegation of authority means division of authority and powers downwards. This means the partnerships have some semblance of recognition, such that they have been entrusted with the responsibility to act. This provides clues to the level of recognition (by other levels of government), its ability to realise objectives (implementation tools) and financial acumen.

Each type presents various advantages and disadvantages. On the topic of spatial planning, the case of Rennes, France offers a unique approach – it is an inter-municipal structure called Rennes Métropole with a dedicated revenue source that elaborates a common spatial plan for the territory that is then binding for local land-use plans. The Territorial Coherence Plan allows Rennes Métropole to directly manage rural and urban issues and present a unified voice on behalf of the region. It is able to effectively incorporate and then work with smaller peri-rural municipalities towards the realisation of an overall vision for Rennes. The partnership is also able to take advantage of its large organisational structure and stakeholders. Nonetheless, there can be some drawbacks, such as less local autonomy – municipalities agree upon joining to cede certain powers, which they are no longer authorised to exercise.

Source: OECD (2013a), Rural-Urban Partnerships: An Integrated Approach to Economic Development, http://dx.doi.org/10.1787/9789264204812-en.

Box 3.9. France's reciprocity contracts

Well-aware of the complementarity potential of its different urban and rural territories, France has developed a new experimental tool to promote inter-municipal collaboration: "contracts of reciprocity for the city-countryside" (contrats de réciprocité ville-campagne). These agreements are adaptable to different territorial realities: their jurisdictions are not pre-defined, which allows them to cover different areas depending on the issue at hand. The process is primarily led at the inter-municipal level, with the state, regions and departments being asked to support local initiatives.

France's "contracts of reciprocity" acknowledge the diversity of rural areas and seek to strengthen and valorise urban-rural linkages. This is driven by an understanding that urban-rural 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 include:

- environmental and energy transition (e.g. waste management, food security, the preservation of agricultural land and natural areas, and bio energy development)
- economic development (e.g. the joint promotion of the territory and the development of joint territorial strategies, land-use policies, support for businesses, and the development of teleworking to help maintain remote towns centres)
- the quality of services (e.g. promoting tourist sites, access to sports facilities, leisure, heritage and access to health services)
- administrative organisation (e.g. mobilisation of staff with specific skills to support key projects or needs).

Four territorial partnerships have been selected for the first round of experimentation under the "contracts of reciprocity" starting in March 2015. It is part of the Commissariat général à l'égalité des territoires' mission to support local actors in the definition and conception of the "contracts of reciprocity" between each territorial entity. They include: the metropolis of Lyon and the Pays d'Aurillac; the metropolis of Brest and the 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.

In July 2016, the framework for a new state-metropole pact (pacte État-métropoles) was signed. It recognises the excellence in the 15 French metropolitan areas labelled as metropole as well as the importance of the polycentric urban network for the development of the territories linked to these metropoles. One axis of this pact focuses on the relations of interdependence with the surrounding peri-urban areas and the small and medium-sized cities nearby. The pact also commits the parties to identify good practices in territorial co-operation.

Source: Commissariat général à l'égalité des territoires (2015a), "Note d'information sur les contrats de réciprocité ville-campagne"; Commissariat général à l'égalité des territoires (2015b), "Point sur l'expérimentation de contrats de réciprocité", <u>www.logement.gouv.fr/experimenter-les-premiers-contrats-</u> de-reciprocite-ville-campagne-cryc (accessed 22 June 2016).

Reforms to the spatial planning system are needed to support rural-urban partnerships

One of the greatest barriers to effective rural-urban partnerships in Poland is the lack of an effective framework for spatial planning (see Chapter 2 for a discussion). Spatial plans can provide a way in which to encapsulate a co-ordinated approach to investments

in such areas as culture and tourism, service delivery, transportation. This issue is all the more pressing given the rapid pace of peri-urban developments which have led to incompatible land uses and more costly infrastructure and service delivery in many parts of Poland. The system of spatial management needs reform in a number of areas including, but not limited to, new institutional frameworks to encourage joint forms of planning (see OECD [2016a] for a full discussion).

France serves as a potentially useful example in this regard; there are various incentives for inter-municipal co-operation, such as inter-communal local development plans for rural areas. France's inter-municipal land-use plans provide strategic planning and zoning functions, including regulations on residential, commercial, industrial, agricultural, transport-related and environmental/parks/recreation land uses. The 2014 Law for Housing Access and Renewed Urban Planning encourages municipalities to participate in a inter-municipal land-use plan by forming a multi-commune agreement. It established that the competencies for land-use planning will be transferred to the intermunicipal level automatically by 27 March 2017, unless locally elected officials decide otherwise. The legal framework for this type of joint planning does not exist under Polish planning law.

Beyond fiscal and institutional incentives, national and regional governments have an important role to play in helping communities understand their functional linkages and monitor trends. Local governments need better knowledge about the conditions in surrounding communities in order to identify and prioritise areas of joint action. Upper-level governments have a role to play in facilitating this by establishing the platforms to share such information and encouraging its use. For example, many countries in the OECD have digitised their planning documents (e.g. France, the Netherlands) – a move which benefits residents and investors as well. In Poland, at present 66 of valid land-use plans are georeferenced; however, this does not mean that they are shared on an open platform. France's urban planning agencies provide advice and expert assessment on planning and land management issues and develop planning documents. They are a centre of expertise on spatial planning and are linked to a national federation which shares best practices, tracks major trends, and provides opinions on major national and European debates related to spatial planning. This type of expertise is important for smaller gminas that have more limited capacity. Poland's new regional territorial observatories could serve to more actively provide spatial planning expertise to enhance community planning practices. At present, these play a greater role in strategic and regional planning than expertise on land-use planning.

Community empowerment and local leadership

It has often been remarked that Poland has a weak civil society and third sector stemming from both the legacy of the socialist era when the role of government loomed large in all aspects of society and also as a result of the large population movements that Poland experienced in the 20th century, leading to areas with less-established social bonds. This makes the impressive growth in local organisations involved in community-led development in the past two decades all the more remarkable. EU funding has been highly instrumental in supporting such initiatives. Areas of the country where the EU's LEADER programmes have operated have a higher share of newly established third-sector organisations (Furmankiewicz, Janc and Macken-Walsh, 2016). Poland currently has 337 LAGs which involve 2 877 third-sector organisations. In the current programming period, out of 337 local action groups that had applied for EFSI support, 322 were selected. These groups have undertaken a range of development projects, from small business incubators,

tourism promotion networks, and training and skills upgrading for marginalised groups. Beyond third-sector organisations that undertake projects in rural areas, it is also important to recognise the role of foundations and NGOs that provide research expertise. Many of these organisations have written formative reports on conditions for rural development, elevating these issues within national public discourse.

An underlying premise of the LEADER approach is that there should be balanced representation of public, private and civic interests (statutory, private and third-sector interests) within the local development groups. Despite the growth of CLLD in Poland, the levels of civic engagement in strategy building remains relatively weak and local governments continue to play a disproportionate role in these networks. For example, a 2011 study notes that 43% of Polish third-sector organisations in rural areas had a government representative as a member of their management board while a more recent 2016 study on social engagement in the third sector finds that 25% of Polish LAGs did not include any kind of meaningful civic participation in how local development strategies were elaborated (Przewłocka, 2011: Furmankiewicz, Janc and Macken-Walsh, 2016). There is a clear need to enhance the quality of public participation and engagement in local development processes.

As noted by Furmankiewicz and Macken-Walsh (2016), the composition of LEADER partnerships is dominated by statutory actors and there are tensions between how territorial and functional interests are represented. In their assessment, "professional dependency, tokenism and clientelism, impede the realisation of governance processes" (Furmankiewicz and Macken-Walsh, 2016). These findings are echoed by Antolak et al. (2017) who note that funds in the LEADER programme tend to accrue to places where there is effective leadership and not necessarily where the money is most needed. Given these tendencies, policies and supports could help address these issues by promoting leadership programmes to more effectivity engage civic actors in CLLD. This is a problem that needs to be recognised and acted on, with best practices shared. Co-operation and co-decision are very difficult in rural areas, including for the LAGs.

Beyond the scope and role of third-sector organisations, civic engagement is relatively weak. This matters for rural development in a number of ways. It can lead to lower levels of trust in government and engagement with governmental institutions, including lower rates of voter turnout. It can mean that individuals are less likely to volunteer in their community and to be involved in community development. One measure of the levels of civic engagement in a society is the frequency of volunteering activity. Volunteering through an organisation (termed "formal volunteering") is less common in Poland than in the average OECD country: 19.4% of the Polish working-age population report that they engaged in formal volunteering during the past 12 months (OECD, 2015). This is one of the lowest shares in the OECD, where the average stands at 34.2%. Low social participation in rural areas is also manifest in, for example, lower rates of participation in the CAP consultations announced by the European Commission in 2017. Only 1.6% of all respondents were from Poland (compared to over 45% from Germany; and 12% from Italy and France respectively). 14 It is also reflective of the poor turnout of farmers on election to the Chamber of Agriculture in 2015 – only 4%. ¹⁵ This is a complex issue and there is no panacea to solving it. Local leadership and ongoing efforts at community empowerment and meaningful involvement in decision making will help shift the culture.

Regional development agencies – The need for reform?

Regional development agencies (RDAs) are non-governmental agencies that play important roles in rural development across the OECD. These third-sector agencies occupy an intermediate position between government and private profit-oriented firms and citizens. Because they are outside formal government they cannot impose behaviour on anyone, but because they serve the broader public good and not the narrow financial interests of their members they have a broader perspective. This can make them an important part of civil society and an effective forum for developing a consensus on development strategies. The focus of the work of RDAs differs; however, a large number work on supporting entrepreneurship and, as such, can play an important role in supporting rural economic diversification.

Poland has a number of RDAs that differ considerably in scope and function (Box 3.10). They played an important role in the transition from a socialist, centrally planned state to a democratic market-oriented system of government. They acted as the initial means for implementing externally provided development finance by helping to create local strategies and projects and then serving as financial intermediary organisations. This occurred at a time when regional government was still in a nascent state and local governments often still lacked the capacity, or the public trust, to be the intermediary. With the introduction of formal development strategies at the regional level, and the greater co-ordination of various levels of government, the ongoing role of the RDAs is being debated.

Box 3.10. Poland's regional development agencies

Regional development agencies (RDAs) in Poland support local development at the level of regions, *powiats* and *gminas*. Their origins date to the early 1990s in order to support the transition and, in particular, support the development of areas where state industries collapsed. For many years, many of them worked on the basis of public funds, often foreign aid funds. An important role was assigned to RDAs when Poland entered the European Union in 2004. They took responsibility for the preparation of the local government units to use the Structural Funds, and for many years have served as intermediary institutions in the implementation of major EU programmes implemented in the programming periods 2004-06 and 2014-20. Many RDAs provide support for local entrepreneurship through such services as consulting, training, promotion and financing.

There are currently about 60 agencies for regional and local development in Poland, which support entrepreneurs and the local community. Some of them, such as the Małopolska Regional Development Agency (Małopolska Agencja Rozwoju Regionalnego) or the Pomerania Development Agency (Agencja Rozwoju Pomorza) have undertaken many projects that improve entrepreneurship and innovation. There is considerable diversity of the level and kind of services provided by RDAs (Kozak, 2013). Most operate as joint-stock companies with the largest shares held by the local authority. In some cases the shareholders also include business organisations, entrepreneurs and industrial development agencies. RDAs operate under the regulations of commercial companies, foundations and associations.

The terminology for what constitutes an RDA is not consistent in Poland, and this has led to challenges in identifying and classifying them; they can differ considerably in scope and function (Szczerski, 2013). There are ongoing debates about the role of RDAs in regional development. Some have advocated for the adoption of a more formalised system of what constitutes an RDA.

Source: Szczerski, K. (2013), "Securing growth and cohesion in Europeanized conditions: The role of regional development bodies in Poland"; Kozak, M. (2013), "Regional revelopment agencies as implementing body of innovation policy in Poland".

There are concerns that these groups are not an effective vehicle for local economic development and that the RDAs and regional governments compete with one another and have low levels of trust among them (Ferry, 2013). There are ongoing discussions as to whether RDAs should be standardised so that their institutional configuration, scope of responsibilities and practices are comparable. There are presently concerns that there is a lack of co-ordination among these entities, leading to duplication of efforts and institutional overload at the regional level (Ferry, 2013).

However, while the RDAs may no longer be needed for the identification of a formal development strategy or as conduits for external finance, they can still play a useful role in ways that formal government cannot. An effective RDA is part of civil society and a part of the social capital of the region. It plays an important role as a forum for discussions that can link government to the broader populace. Importantly, it can usefully challenge governments to better explain or defend policies that may be controversial. In essence, the RDA plays a similar role to the LAGs in providing a platform for people to co-operate. However, like the LAGs, the RDAs can become ineffective if they are captured by narrow interests or if they become too close to governments. Their value hinges on them recognising that their function has to evolve so that they do not directly compete with government, but instead play a role that informs government and mobilises society. Because the nature of civil society varies considerable from place to place, the nature of an effective RDA will also vary. A uniform structure shifts could weaken their value and adaptability to changing contexts and needs. However, the inconsistency in terms of the terminology of what constitutes an RDA is problematic and should be addressed. Ultimately, if an RDA is no longer providing a useful function it will lose popular support in the communities it serves and cease to exist.

The Strategy for Responsible Development – A renewed focus on rural development

On 14 February 2017 the Polish Council of Ministers adopted a new short- and medium-term development strategy for the country. The Strategy for Responsible Development (SRD) updates the 2012 National Development Strategy 2020 by outlining a new approach that endorses more balanced growth across the entire Polish territory. It sets out development policy guidance for the short term through 2020 and identifies objectives and approaches for the medium term through 2030. Rural policy in Poland should align with the SRD's objectives and become an important sub-element of the strategy that links the broader philosophy of the SRD to specific policy elements that are implemented by various government agencies, both national and subnational. Importantly, 2020 marks the end of the current EU programming period and, as such, Poland must tailor its short-term strategy to fit within EU funding and administrative structures.

The SRD places a renewed focus on rural development. Achieving its objectives will require:

- enhanced capacity at the regional and local levels in order for them to be meaningful partners in the development process
- greater flexibility and new accountability measures for subnational government
- improved co-ordination of EU financial support, including strategies to combine EU and national/regional funds for rural development.

The new strategy combines a strategic and operational dimension and will mainly be financed from domestic public funds, but also supported by EU funds and private capital. In order to perform the objectives of the SRD, it is necessary to make changes to the level and structure of public development expenditure. Following 2020, the burden of financing public investments will be transferred to national funds, both public and private, to a larger extent. Formerly financed under Cohesion Policy, tasks will gradually be financed from domestic public funds – both from the central budget and the budgets of the self-government, whose role will increase. It is anticipated that this will in turn impact the manner in which funds are redistributed to units of the self-government under the system of subsidies and grants so that it is possible to ensure that own tasks of the self-government are financed appropriately. Funds from the EU budget will be increasingly allocated to innovative projects.

Towards more inclusive and balanced territorial development

The Strategy for Responsible Development evolved from the so-called "Morawiecki Plan" (adopted on 16 February 2016). The Morawiecki Plan set out a roadmap for Poland's economy until 2020. A number of initiatives envisaged in the plan have already been implemented, such as the 500+ programme. There is a co-ordination committee of ministers and deputy ministers who debate the approaches to the strategic projects. As a continuation of the present approach to national development, it is envisaged that the current nine integrated strategies will be continued, with the exception of the National Defence Strategy. Hence, the Strategy for Responsible Development will be implemented through nine updated "sectoral" integrated strategies (including the Strategy for Sustainable Development of Rural Areas, Agriculture and Fisheries). In the activities, these strategies will draw on strategic programmes with annual reporting requirements.

The broad aim of the SRD is to provide all Poles with higher incomes and a better quality of life, while increasing the competitiveness of the national economy (Government of Poland, 2017: 6). Three main policy objectives have been identified in support of this broad outcome. Poland aspires to create legal, institutional and investment activities that will lead to:

- sustainable economic growth increasingly driven by knowledge, data and organisational excellence
- socially sensitive and territorially sustainable development
- effective state and economic institutions contributing to growth as well as social and economic inclusion (Government of Poland, 2017: 6; see also Figure 3.5).

The new strategy recognises that recent economic growth in Poland, while impressive, has been mainly driven by increased prosperity in larger urban agglomerations, and that many of the more rural areas and smaller towns have not adequately participated or benefited from it. The resulting poverty and social exclusion has created stresses in Polish society that the SRD seeks to erase. There are multiple components of the strategy that are related to rural development – from infrastructure development to environmental protection and education.

Figure 3.5. Key objectives of Poland's Strategy for Responsible Development

Creating the conditions to increase the income of Polish citizens while improving social, economic and territorial cohesion

Objective 1 Objective 2 Objective 3 · Sustainable economic · Social and territorial · Effective state and growth based on the current development economic institutions and the new advantages · social cohesion contributing to growth as well as social and economic · reindustrialisation based · territorially sustainable on Polish resources development · the state in the service of · innovative business citizens and economy development · pro-development · small and medium-sized institutions and strategic enterprises development · capital for growth management foreign expansion e-state · public finance · effective use of EU funds

Source: Adapted from: https://www.oecd.org/regional/regional-policy/Decentralisation-and-multi-levelgovernance-in-Poland.pdf.

An integrated multi-level governance framework

Poland has a system of integrated strategic documents and a primary programming role is fulfilled by a limited number of mutually linked documents that form the principal axis of the development system. This includes: the long-term concept of national development, a mid-term strategy (current development strategy and national spatial development concept), 9 horizontal integrated strategies (on key policy issues), 16 regional integrated strategies (regional strategies and regional spatial development plans) and local integrated strategies (combining economic, social and spatial issues). In addition, functional areas (understood as a bottom-up agreement between local authorities) may prepare common integrated strategies as well. Integration refers to the content of the documents (integration of social, economic and spatial matters) and concerns the mutual interdependence and compliance of the documents. One of the goals of the national government at present is to aggregate the many compulsory and non-compulsory documents that exist into one integrated document on a regional or local basis.

The government is continuing to develop this integrated approach and create more consistency around how these strategic documents are elaborated, used and evaluated. The national government is leading a pilot project that will culminate in a manual for selfgovernments on how to prepare integrated strategies. It is also working to elaborate a new law on the principles of development policy that will define the scope, content and methodology of integrated documents along with evaluation rules and compliance mechanisms. Future work will also examine the nature of territorial contracts and the scope of binding regulations of the strategies.

The core elements of the new "integrated approach" entail:

the preparation of documents integrating social, economic and spatial dimensions within a unified framework and process

- a content compliance mechanism (based on binding regulations) of documents of different levels forming the strategic programming system
- a strategic state investment mechanism that secures the interests of all involved parties (local governments, societies, enterprises) through a territorial contract
- the integration of development policy interventions carried out by stakeholders (national, regional, local) within the principle of subsidiarity
- territories of strategic intervention (on a national, regional or local basis).

The proposed changes will serve to create more regularity around how integrated strategic framework documents are elaborated and used and should serve to improve multi-level governance, with development objectives clearly articulated at each scale along with mechanisms for co-operation through territorial contracts. Integrated strategies that consider a wide range of policy dimensions should encourage policy complementarity and linked-up investments, e.g. co-ordinating transport investments with investment in new schools or recreation centres in high-growth areas; consolidating services and collocating them in areas where the population is in decline.

These types of strategic documents can be complex. Underpinning this work there needs to be a real working relationship between departments or ministries across different sectors. Beyond this, it is important to recognise that integrated development strategies are not just a tool to improve government planning – they can also serve to act as a communications tool between governments and citizens to raise dialogue and awareness about directions for development. In formulating the scope and nature of this integrated framework over the coming years, Poland should look beyond the role of such strategies as statutory documents and consider how they can also be used as a management tool within bureaucracies to encourage different sectors to work with one another when taking decisions about public investments and to engage citizens and outside organisations in development processes.

Targeted territories and a newly proposed Pact for Rural Areas

Within the SRD, a number of territories are targeted for specific supports (Figure 3.6). Several of these territorially targeted supports are a continuation of existing programmes, e.g. the package of activities for eastern Poland. Other initiatives are, however, new, such as one of the strategic projects in the SRD – the Pact for Rural Areas – a proposed document that aims to co-ordinate actions for rural development in order to better target support through the use of national and EU funds. Its development has been led by the MARD in consultation with various stakeholders (experts, central offices, *voivodeship* governments, NGOs, research institutes, agricultural organisations). With the input of these groups at the early stages of work on the document, a number of priority areas for rural development were proposed, like business development, technical and social infrastructure, public services, environmental protection, and agricultural markets.

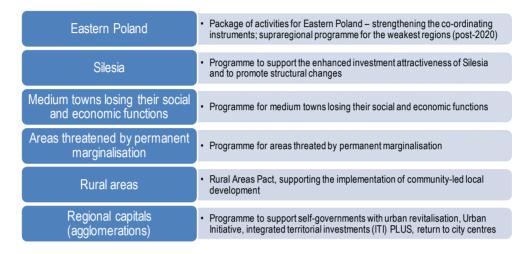
This signals an opportunity for some fundamental changes in the future and a concerted effort for enhanced cross-sectoral co-ordination at the national level. The Pact for Rural Areas is described as an all system-based activities (legislative, institutional, programming) and investment activity. The governance framework that underpins this approach will be critical and is presently being determined. In the Strategy for Responsible Development, the Pact for Rural Areas is described as a document that will consolidate tasks in order to ensure the consistency between strategic tasks of the national

government and subnational governments. However, in order to be effective, it needs to be more than just a document in order to mobilise actors and adjust along the way.

Figure 3.6. Targeted territories under the Strategy for Responsible Development

Poland's Strategy for Responsible Development

Objective 1: Sustainable development of the country with the use of endogenous potential of individual territories



Source: Adapted from Government of Poland (2017), Strategy for Responsible Development.

In a similar vein, the success of the programme directed towards areas at risk of permanent marginalisation - such as the communities of former collective farms - will need to be underpinned by a strong governance framework that can adapt as needed. As pointed out the in the SRD, regional policy instruments that have been used in the past in these areas have not been effective enough. The programme discusses a range of initiatives, including the strengthening rural-urban linkages to enhance residents' access to jobs and services. An effective governance partnership underpins the success of such an approach.

Alignment with the OECD's Rural Policy 3.0

In intent, the SRD is largely consistent with the OECD's recommended approach to rural policy as first outlined in the New Rural Paradigm in 2006 and more recently with Rural Policy 3.0 in 2016 (see Box 3.11 for the basic elements of the OECD approach). Both the SRD and the OECD endorse an investment-based rural policy that seeks to broaden the economic base of rural areas beyond agriculture and to empower local actors to identify place-specific development strategies that can be supported by state resources.

The consistency between the OECD approach and the SRD makes it important to examine in considerable detail how policy recommendations by the OECD that are based on analysis of rural policy in other member countries can be integrated into the new Polish approach. Moreover, the SRD recognises many of the opportunities and challenges identified in Chapters 1 and 2 of this report. Consequently, it is important to clearly show how the assessment and recommendations that are provided to Poland by the OECD map into the new national strategy. But while the SRD is broadly consistent with OECD rural policy principles, there are certain aspects that could be more challenging to implement than might be expected.

Box 3.11. The OECD rural policy framework: Rural Policy 3.0

In 2006, OECD member countries adopted the New Rural Paradigm as a core approach to develop better rural policy. The main principle of this approach was that rural territories can be places of opportunity, but for these places to achieve their potential, a spatially sensitive development approach is required. The key elements of the approach are:

- recognition that rural areas are now much more than only agriculture
- a shift in philosophy from supporting rural areas through subsidies or entitlements to focusing support on investments to increase competitiveness
- belief that rural people have a better sense for their local development opportunities than do national governments, which leads to a "bottom-up" approach
- recognition that there are multiple actors that must be engaged in the rural development process, not just national governments and farmers (OECD, 2006).

Since 2006, the OECD has engaged with a number of member countries to conduct rural policy reviews in order to gauge how existing rural policies in each country conforms with the principles of the New Rural Paradigm and to offer advice on how to reform those policies to make them more effective (Freshwater and Trapasso, 2014). Policy advice is based on evolving academic and practitioner research and on the identification of effective rural policies in member countries. In addition, the OECD has investigated some key thematic topics in co-operation with member countries, including: rural service delivery, the role of renewable energy in rural development, and the nature of the linkages between urban and rural areas.

In 2016, the New Rural Paradigm was updated with the Rural Policy 3.0, which reflects the new knowledge acquired in the intervening decade (OECD, 2016d). This approach builds upon the New Rural Paradigm with the intention of moving from a "paradigm" towards more specific policy recommendations that can help countries with policy implementation (Garcilazo, 2017). The core idea in Rural Policy 3.0 is that economic growth occurs in different ways in rural areas than it does in urban ones. The rural growth process takes place in a "low-density economy" where agglomeration effects do not occur and distance plays an important role in production costs and the lives of the people. Moreover, because the opportunities and constraints in different types of rural places vary, so does their economic function. Rural economies tend to have niche markets because they are small and specialised, except for those places producing natural resources, such as agricultural commodities, minerals or forest products.

Table 3.2 illustrates the evolution of OECD thought on rural policy. The advice for policy implementation is fairly abstract, reflecting the fact that, for any country, variability in regional conditions and in national objectives makes it impossible to provide specific policy advice. Even for specific rural policy reviews, it is difficult for the OECD to develop policy advice that goes much beyond basic principles. To do so would require more information and analysis than is available and a far better understanding of how rural policy fits into the larger set of policy concerns for that national government.

The value of the OECD approach remains its potential to apply a coherent analytical framework to thinking about rural policy. A country that engages in the process receives some basic advice on how to think about policy, but must still develop specific policies on its own. Because the OECD policy framework emphasises the importance of a bottom-up approach and the inherent diversity of rural areas, national governments have to be willing to engage in joint development strategies with local counterparts. It is in only through this process that specific policies are developed.

Box 3.11. The OECD rural policy framework: Rural Policy 3.0 (continued)

Table 3.2. Rural Policy 3.0

	Old paradigm	New Rural Paradigm (2006)	Rural Policy 3.0: Implementing the New Rural Paradigm
Objectives	Equalisation	Competiveness	Well-being considering multiple dimensions of: 1) the economy; 2) society; and 3) the environment
Policy focus	Support for a single dominant resource sector	Support for multiple sectors based on their competitiveness	Low-density economies differentiated by type of rural area
Tools	Subsidies for firms	Investments in qualified firms and communities	Integrated rural development approach – spectrum of support to public sector, firms and third sector
Key actors and stakeholders	Farm organisations and national governments	All levels of government and all relevant departments plus local stakeholders	Involvement of: 1) public sector – multi-level governance; 2) private sector – for-profit firms and social enterprise; 3) third sector – non- governmental organisations and civil society
Policy approach	Uniformly applied top-down policy	Bottom-up policy, local strategies	Integrated approach with multiple policy domains
Rural definition	Not urban	Rural as a variety of distinct types of place	Three types of rural: 1) within a functional urban area; 2) close to a functional urban area; 3) far from a functional urban area

Source: OECD (2016d), "Rural Policy 3.0", http://dx.doi.org/10.1787/9789264260245-7-en.

Source: Freshwater, D. and R. Trapasso (2014), "The disconnect between principles and practice: Rural policy reviews of OECD countries", http://dx.doi.org/10.1111/grow.12059; Garcilazo, E. (2017), "Rural Policy 3.0 productive regions for inclusive societies: Low density economies: Places of opportunity", https://enrd.ec.europa.eu/sites/enrd/files/s4_rural-businesses_rural-policy_garcilazo.pdf; OECD (2006), The New Rural Paradigm: Policies and Governance, http://dx.doi.org/10.1787/9789264023918-en; OECD (2016d), "Rural Policy 3.0", http://dx.doi.org/10.1787/9789264260245-7-en.

Main internal and external framework conditions

Development strategies operate within a specific set of socio-cultural, demographic, economic and institutional systems that condition how well specific approaches can work. Moreover, path dependency – what has happened in the past – also conditions future development. This makes it important to accurately describe the environment in which the goals of any development strategy are to be achieved. The SRD sets out in considerable detail key characteristics of Poland that are seen as important for success (Government of Poland, 2017: 14-25, 197-273). Only those aspects relating to rural areas are considered here.

The SRD recognises that economic growth in Poland since accession to the EU in 2004 has largely been driven by: high rates of foreign investment in manufacturing, including food processing; rapid growth in exports, including processed and unprocessed food; high levels of funding from the EU that has been used to improve infrastructure; easy access to the single market; improved employment opportunities that have increased income and productivity, but less so in rural areas (Government of Poland, 2017: 14). Most importantly, the high rate of growth has been concentrated in large urban areas, although some rural areas where agriculture has been modernised have also seen considerable improvement in incomes and output. An important consequence of this process was the transformation of Poland from being a net food importer in the 1990s to a significant food exporter relatively soon after accession to the EU.

The SRD identifies short-term internal challenges (Government of Poland, 2017: 14-15). These include: the possibility of slower growth in the global economy that will limit export opportunities and inward investment for Poland; evolution of EU policies in ways that are less favourable for Poland than are current policies, particularly in the budget process and the CAP reform; continuation of low commodity prices that reduces income from exports of agriculture, fishing and forest products; the potential for ongoing limits on exports to the Russian Federation due to weak economic conditions in the Russian Federation and to trade embargos. Most importantly, the imminent demographic transition from an increasing number of workers to a shrinking number is seen as having a major impact on how future economic growth can occur. In 2016 the Polish workforce started to decline in numbers as new entrants are too few in number to replace those retiring (Government of Poland, 2017: 20). In this regard Poland is similar to most other OECD countries that also face adjusting to a shrinking and aging workforce. A clear consequence of this change is that the large number of underemployed people now living and working on very small farms are a major underutilised source of workers. Finally, the impacts of climate change are still being fully understood, but are seen as having important consequences for Poland in terms of environmental impacts, on energy use and on resource industries, such as agriculture.

The SRD also identifies longer term challenges that will have considerable impact on Polish society (Government of Poland, 2017: 17). These include trends in OECD countries of increased income polarisation and greater economic and social inequality that have largely benefited the most highly educated and most urbanised segments of national populations; broader implications of an aging society in terms of the need for elder care and absorbing the medical costs of older people; changes in the nature of work that are reducing employment opportunities for the relatively unskilled; and rapid changes in the nature of society that can be threatening to those with traditional values and beliefs.

Finally, the SRD identified other important challenges for Poland in the medium term (Government of Poland, 2017: 18). These include: a high preponderance of Polish firms whose competitiveness depends on a low-cost structure, especially labour; the considerable number of more skilled workers who have chosen employment in other EU countries; an excessive reliance on foreign capital for business investment due to low domestic savings rates and high levels of risk aversion; weak job opportunities for more skilled workers in rural areas that leads to outmigration and limited interest in skill development; poorly functioning local labour markets in rural areas; over-reliance on traditional industries that add little value to products and a lack of innovative firms in most regions. These factors all suggest that it will be difficult to achieve the SRD's goals without major improvements in worker skills and firm technology. A shrinking labour force will increase pressure for higher wages that can only be justified with higher worker productivity. Moreover, because the magnitude of these problems varies by region, with smaller and more rural labour markets facing the greatest difficulty, an effective rural policy will be required to reduce the current large discrepancies in incomes, employment and living standards across Polish regions.

Strengthen Poland's institutions

The SRD recognises that a major challenge in Poland is institutional weakness. The problem of weak institutions has a variety of dimensions. These include: weak social capital in some regions that inhibits the collective action needed for locally based development activity; central government procedures that maintain rigid control over the actions of subsidiary governments, thereby preventing innovative activities; excessive reliance on EU funds and EU programmes to define public policies for Poland; limited communication and co-ordination among state agencies that operate as policy silos; and having multiple agencies charged with overlapping responsibility which can lead to a lack of accountability and unclear outcomes. Beyond this, public governance in Poland is lacking a consistent, clear development strategy, effective co-ordination between ministries responsible for the development of the economy (including rural areas), and monitoring of the outcomes of measures financed from national and EU sources (Wilkin, 2013).

The need to strengthen Poland's institutions requires actions on two fronts. First, it requires more effective implementation, better management, more resources and in some cases, fewer restrictions imposed by the supervising authority. Secondly, policy incentives need to be aligned with strategic objectives. An example of perverse incentives is the effect of the KRUS, the retirement and medical system for farmers, on incentives for low-income farm families to find off-farm income. Because the KRUS is highly subsidised, but eligibility hinges on receiving the majority of household income from farming, there is an incentive to not engage in formal employment since it would lead to the loss of KRUS benefits and a shift to the ZUS, the main pension and medical plan that has much higher individual contributions.

Enhance national horizontal co-ordination for rural development

Policy co-ordination for rural development is important in order to make the most of public investments and supports. Co-ordinated policies can help to take advantage of complementarity between policy areas and ensure that policy support is mutually reinforcing and does not have unintended effects (Box 3.12). A growing understanding of policy complexities – e.g. the social determinants of health – have further heightened the importance of policy co-ordination. Policies should be integrated horizontally, through management arrangements and development plans among different sectors, services and agencies within a given level of government. Policies should also be vertically integrated. from the EU to the local level of government, wherein the capacity of subnational governments is critical in order to be meaningful partners in this process. Interventions should be territorially integrated and consider the interrelationships and interdependencies between different territories.

In terms of horizontal co-ordination, Poland has made efforts to improve its system of cross-ministerial co-ordination in recent years. A pan-ministerial platform was established in 2007-13 to ensure strategic co-ordination between national and EU public policies and this structure has been slightly modified and continued in the 2014-20 programming period (Ministry of Agriculture and Rural Development, 2014). This is a positive development. The overarching strategy for national development sets strong medium- and long-term goals that are then articulated in the nine sectoral strategies with lead ministries identified in each case.

In terms of the various dimensions of rural policy, there is an obvious need to improve co-ordination across a wide range of ministries that each have control of specific policy domains that affect rural development. While some of these ministries, such as Health, Education or Public Safety, focus on people, irrespective of their place, others have more of a territorial focus, in that differences in geography influence the forms of policy. This is most evident in those ministries that deal with economic development in rural areas. In Poland, this largely refers to the Ministry of Economic Development, which has responsibility for regional policies, and the Ministry of Agriculture and Rural Development, which deals primarily with farming, but also has responsibility for rural policy. Although both ministries co-operate with each other, the need for stronger co-ordination between these two ministries is evident, but the challenge is how to achieve it.

Box 3.12. Policy complementarity: What is it and how does it work?

The concept of policy complementarity refers to the mutually reinforcing impact of different actions on a given policy outcome. Policies can be complementary because they support the achievement of a given target from different angles. For example, production development policy, innovation policy and trade policy all support the competitiveness of national industry. Alternatively, a policy in one domain can reinforce the impact of another policy. Sequencing is also important in policy complementarity. Some policies are best put in place simultaneously. For example, innovation, industrial and trade policies must be synchronised to address the issue of industrial competitiveness from all angles. Other policies realise their synergies in a sequential way. For example, investments in broadband infrastructure need to be followed up with specific policies on access and diffusing those services to the population. Complementarities between policies can be "latent", but can be triggered by specific governance arrangements; for example, mechanisms that facilitate co-ordination across levels of government (vertical co-ordination) can help attain complementarity across policies from various levels. Alternatively, they can be induced, by combining different policies through conditionality schemes, or when the complementarities are the result of strategic planning. Employment generation opportunities, for example, can be attached to direct cash transfers to support the inclusion of poor people in production so that they can avoid dependency on income transfers. Policy complementarities can also be spontaneous when they appear as positive side-effects of independent actions of ministries or bodies.

Source: OECD (2014c), OECD Territorial Reviews: Netherlands 2014, http://dx.doi.org/10.1787/9789264209527-en.

This is a common problem across OECD countries. Some countries make their Ministry of Agriculture the lead agency for rural development while others assign this role to another ministry, such as regional development, transport and infrastructure or some other entity. Some countries have allocated responsibilities to different ministries over time because they were unsatisfied with the initial choice. In essence the problem reduces to two different issues. The first is that a Ministry of Agriculture, by its very nature, will focus more on farming than on broader rural development issues. As farming starts to play a smaller role in rural areas, the mismatch between "interests" and "needs" becomes more evident. Alternatively, while ministries involved in regional development have a much broader perspective on economic development, such ministries do not necessarily have a strong commitment to rural areas, especially as urban areas begin to play a larger role in terms of population share and share of economic activity. Resolving these two contradictions has been difficult for all OECD member countries.

While the co-ordination problem is significant for all OECD countries, it is even more so for those within the EU because not only do national policies have to be managed, but so too do applications for regional and Cohesion Funds that have rural dimensions and for the CAP which has Pillar I and Pillar II components. Once these funds are awarded, the

same ministries have to manage their implementation in a co-ordinated way in order to maximise the benefits from the investments. In principle, what is needed is a strong degree of co-operation among the Ministry of Agriculture and Rural Development, which only speaks for rural areas, albeit from a narrow perspective, and a ministry that has responsibility for broad economic development policy, which while spatially-oriented, is not solely focused on rural areas (in Poland's case, this is the Ministry of Economic Development). In countries where the president or prime minister has a strong interest in rural areas, the issue is resolved by the leader directing rural policy. However, this is an increasingly infrequent event. Some countries have tried to establish a specific council of ministers with a rural mandate, but once again, in meetings of equals there can be no leading authority.

Finland has adopted a unique approach to co-ordinating rural policy across sectors – one that combines elements of broad rural policy along with forms of vertical and networked governance. Finland's Rural Policy Committee is a 35-member co-operation body appointed by the Finnish government which draws its membership from national ministries, regional co-operation bodies, trade unions, the federation of higher education and training institutions, the association of local authorities, the ombudsman for the LEADER programme, associations of producers of agriculture and forestry products, and the Village Action Association of Finland. The committee is presently led by a representative of the Ministry of Agriculture and Forestry. There are also seven thematic networks that support the work of the Rural Policy Committee and the realisation of Finland's National Rural Policy Programme 2014-2020. Given that Finland's Rural Policy Committee involves multiple levels of government from the European Union to decentralised local government and several non-governmental actors, it can be described as a form of new governance or governance networks (Sørensen and Torfing, 2007, 2005; Pierre, 2009).

An alternative approach to the co-ordination of national policies that impact rural areas is "rural proofing", which was first adopted in the English context. Rural proofing entails considering the likely impact of policy decisions on rural areas, and, where necessary, adjusting the policy to take into account the particular needs of those who live in, work in or enjoy the countryside (OECD, 2011). This approach encourages the early assessments of expected, or likely, impacts in rural areas. Canada adopted a similar approach at the end of 1990s with a "rural lens" - a checklist of considerations to determine if a policy or programme addresses priorities for rural Canada. The effectiveness of such approaches is a matter of debate, with some arguing that it can act as a form of tokenism that does not in fact adequately inform policy development at an early stage. In an assessment of rural proofing in England and Northern Ireland, Shortfall and Alston (2016) find that it has had limited effectiveness due to a lack of commitment across government to the policy; that the tendency for policy makers is to argue that rural proofing is not pertinent to the policies reviewed; and that it has led to little consideration of appropriate targets, outcomes or goals. In effect, rural proofing is only as effective as underlying commitments to rural development. It is also connected to the nature of the social welfare state in the country in question and its commitment to the territorial redistribution of public resources. As such, it may have greater utility in some counties than in others (Shortfall and Alston, 2016).

Sweden is one of the most recent OECD members to have devised a new approach to co-ordination of rural and regional policy (OECD, 2017c) (Box 3.13). Rural policy in Sweden is defined in a narrow sense at the moment, and to a large extent around the parameters of the CAP Pillar II funding. Although recent advances have been made to broaden the focus of the Rural Development Programme, it is still insufficient for enhancing the long-term prosperity and well-being of rural communities. In response to these issues, Sweden is currently conducting a parliamentary inquiry into rural policy which provides the opportunity to evaluate and improve its approach to rural development. The OECD has recommended that Sweden strengthen the role of political bodies at a regional level in regional and rural development in order to help deliver a more integrated approach and realise policy complementarities for rural places.

Box 3.13. Tackling the governance divide between rural and regional policies: The case of Sweden

The need to integrate rural and regional policies

Sweden is currently conducting a parliamentary inquiry into rural policy and has a strategic opportunity to evaluate and improve its approach to rural development. The work of the committee was framed to a degree by the debate since the 2014 national elections about whether rural Sweden is being left behind in the country's growth and development. A key issue is that rural policy issues are not sufficiently represented in Sweden's growth policy. Sweden's regional growth policy is a broad and integrated approach, and combines EU and state funding to invest in key enabling factors for growth at a regional level. Underlying this policy framework are different funding and governance arrangements for regional and rural policies, which are the consequence of EU funding rules. This results in different scales of investment, and different entities responsible for the rural development and regional growth policy at a regional level. Better co-ordination between different European structural and investment funds is a current priority of the European Commission. More effective mechanisms and incentives are needed to link the rural programme with the regional growth policy, and other sector policies. Another issue is that sectoral policies such as education and health services, spatial planning, and transport do not have a clear and coherent "rural articulation".

Sweden's model for the governance of rural policy is not consistent with regional policy and this reduces the scope for an integrated approach.

Rural policies are governed at the regional level by county administrative boards, which are decentralised agencies of the national government. There are currently three different models for implementing regional policy in Sweden, which include county administrative boards, directly elected county councils and indirectly elected county co-ordination bodies. The future evolution of this county governance model should aim for consistency, and enhancing democratic accountability for regional and rural policies. Consistency in administrative structure is important in terms of the national government establishing clear governance, monitoring and accountability arrangements to deliver national priorities. However, specific regional and rural development policies should reflect the preferences and aspirations of the region. It is deemed that county councils and county co-ordination bodies, which are led by political representatives in each region, provide the best opportunity to achieve this outcome.

Policy complementarities are based on the principle that mutually reinforcing policies generate higher returns because policies – territorial and sector-based – are more effective where they are co-ordinated and aligned along similar goals and objectives, and adapted to the particular circumstances of rural places. There are two key areas where Sweden can take action to further realise the complementarities for rural development: spatial planning and service delivery. Currently, there are no rules or incentives to facilitate the development of strategic spatial plans at a regional scale. Land-use planning now occurs only at the municipal level, and inter-relationships at a functional or regional scale are not properly accounted for. Mechanisms to link infrastructure and land-use planning are also weak. Sweden's model of service delivery has a number of benefits, including equity of service provision, and local accountability for the quality and efficiency of service delivery. However, nationally designed rules and funding arrangements are not always suited to sparsely populated areas, and there is a lack of incentives for social innovation and co-operation between municipalities at a functional scale.

Source: OECD (2017c), OECD Territorial Reviews: Sweden 2017: Monitoring Progress in Multi-level Governance and Rural Policy, http://dx.doi.org/10.1787/9789264268883-en.

There is no one best solution to overcoming inherent divisions between regional, rural and agricultural policies. The type of networks approach that Finland has adopted is enmeshed in its culture of decentralisation and multi-level governance. Similarly, rural proofing does not offer a one-size-fits-all model. However, beyond governance structures, the inherent silos between these policy domains can be addressed at an organisational level as well. For example, relationships and knowledge sharing between ministries can be strengthened through opportunities for short-term secondments, and co-ordinating professional development opportunities and training for staff.

Deepen decentralisation and improve multi-level governance

The new Strategy for Responsible Development reaffirms a commitment to decentralisation of regional policy and to strengthening co-ordination mechanisms between levels of government. Several efforts support this, such as territorial contracts and regional social dialog councils and a Joint Central Government and Local Government Committee. This committee establishes a forum to determine a common national and local government position on state policy towards self-government as well as issues concerning local self-government within the scope of action of the EU and international organisations. It is composed of a minister responsible for public administration along with 11 national appointees and representatives of local government from national organisations. The work of the committee is organised into 12 teams and 3 working groups that are supported by experts. The forum develops joint opinions on legislation, programme documents and policies that have the potential to impact local governments, including impact on their finances. In a similar vein, regional social dialog councils establish a forum at the regional level to promote co-operation between employee representatives and employers along with local government representatives and governmental authorities (marshal, voivode). 16 A social dialog council – which provides a forum for trilateral dialogue between the central government and the 16 regional councils – has also been established

The SRD emphasises the need to continue to build capacity at the regional and local levels so that they can be meaningful actors in community and economic development. These are important goals. Rural development that is targeted to the diverse needs of places should be realised by regions and local governments themselves. Increasing the capacity of subnational governments together with the range of other actors engaged in local development (e.g. LAGs) is especially important in light of the need to be more strategic with public investments in the next EU programming period (post-2020). Such an approach will address a significant problem in Poland of some regions focusing on maximising the flow of EU funds by tapping all possible programmes that they qualify for. In the short run, this can inject a significant amount of money into a region where local governments and NGOs lack adequate financial support to carry out development efforts. In the longer run it can, however, lead to a relatively random set of investments that fail to provide an adequate platform for sustainable development and that may impose ongoing operating costs. As a general principle, an effective bottom-up development strategy requires thinking about rural investments in a systematic way to connect them to the broader objectives of the region. There is the potential in the future programing period that the types of funds that have been available from EU instruments in the past may not continue, and as such, there will need to be much more strategic in prioritising investments and in combining them from the perspective of both soft and hard instruments and in terms of funding from EU, national and own sources. Local actors will need to determine their investment needs first and finance accordingly.

Commitments to decentralisation cannot be piecemeal. While the SRD signals an intention for greater decentralisation in support for endogenous development, there is evidence of centralising tendencies that run in the opposite direction – and include both the centralisation of regional and local functions to the national government. For example, agricultural advisory centres have been transferred from *voivodeships* to the national government. Importantly, funding for NGOs has recently been centralised as well; the national government has established a new National Freedom Institute within the Prime Minister's Office that will distribute public funds from the government and the European Union to Poland's NGOs. This centralisation poses a threat to the independent operation of NGOs. Further, the organisation of schools which was formally approved on the local level is now influenced by the representatives of national authorities in the regions

Provide greater flexibility and new accountability measures for subnational government

Historically Poland has relied upon strong central government oversight of subnational governments as a way to manage its policy objectives. Even with increased delegation of responsibility for policy implementation to subnational governments, the oversight process has continued. In part this reflects the residual influence of central planning, in part it reflects the historically limited capacities for independent action of subnational government, and in part it reflects the relatively simple policy framework used by Poland, which provided only a small set of identical instruments to all places.

Poland has now evolved to a point where conditions in rural areas are increasingly diverse and development options vary considerably, even among nearby places. Detailed analysis at the *gmina* (municipality) level by Rosner and Stanny (2017) makes this clear. They show that overall socio-economic conditions in rural Poland exhibit a high degree of path dependency in terms of broad geographic patterns; progress is more often found to the north of a diagonal line drawn from Suwalki in the north-east to Opole near the south-central border with the Czech Republic (Rosner and Stanny, 2017: 85). However, for any given indicator, such as workforce replacement capacity (ratio of those entering the workforce to those about to leave), percentage of children attending preschool, percentage of villages in a *gmina* with access to public transport, or secondary school test results, there is considerable variability within any *voivodeship*. Thus, strong general trends in rural conditions are accompanied by large variability within any region.

This patchwork of good and bad conditions, although somewhat systematic, demonstrates that particular places have the capability to do better or worse than their neighbours. It is this variability of conditions at the local level that provides the foundation for the argument that rural development policy should empower local actors, both public and private, to first identify what should be done in their place and then to act to implement their ambitions. For example, the town of Środa Wielkopolska has been able to assemble a strong locally based development process that is broadly supported by the populace and that is delivering a greatly improved quality of life for local people.

Higher level governments play important roles in supporting this process, but not in leading or managing it. An important role for higher level government is to provide these actors with appropriate authority to carry out their programmes. Higher level governments act as "investors" in this regard, and like any prudent investor they will monitor behaviour to ensure that their interests are protected and that progress is occurring. Moreover, this monitoring process must ensure that the broader public welfare

is not harmed by the actions of a specific place. The oversight process should, however, not presume, a priori, that harm will occur unless strict controls are put in place. To do so reduces the range of choices open to a place and constrains its actions As a result, not only are possibly harmful behaviours limited, but so too are potentially beneficial ones.

Since national governments cannot identify the full set of options available at any point in time to a community, they cannot assess the cost-benefit ratio associated with strong controls that have the benefit of blocking undesirable choices, versus the associated cost of blocking desirable choices. In principle, if it were only higher level subnational governments, voivodeships, that were being monitored, it might be possible to design 16 specific oversight mechanisms that provided a balanced regulatory structure that had a positive cost-benefit ratio. However, the most important rural development actions occur at the *gmina* or even village level, which involves so many places that only a relatively permissive oversight process can be effective.

Certainly, if local actors receive public funds then oversight should be stronger and the greater the share of external to local funds in the investments the greater the oversight. This is simply good investment practice. But this increased oversight in turn creates the argument for providing more own-source revenues to subnational governments, rather than providing grants. If these places have to raise money locally they must first persuade the local electorate that the plans are sound and then be more careful in managing the development process. Using local revenue can better align the interests of the local community with the actions that are undertaken and increase their engagement with the development process.

It is challenging to know with certainty in advance what the effects of a policy will be; hence the need for policy monitoring in order to distinguish between effective and ineffective policies. Where policy objectives are clear, it is easier to assess if they have in fact achieved what they are supposed to achieve. There are three different types of monitoring indicators: input, output and outcome indicators. All should play a role in a monitoring framework, but it is important to use them according to their purpose. In particular, it is crucial to distinguish between outputs and outcomes. Outcome indicators are arguably the most important indicators, as they are the reason a policy is implemented in the first place. Well designed, they can provide regular, timely and unambiguous feedback to policy makers, foster learning and capacity building, create transparency and accountability, and help correct policies that are not working well or as intended.

Improve the co-ordination of EU financial support

Poland currently receives a large amount of financial support targeted to rural areas. Because the number of farmers is large in Poland relative to most member countries, it qualifies for a large amount of CAP funding, and because rural Poland is relatively poor it qualifies for a large amount of Cohesion and Structural Funds. The multiplicity of funding sources and the diverse nature of what each source supports results in a very complex process. Within Poland complexities occur in terms of programmes that can be applied for, programme administration requirements, co-ordination of applications among different levels of government and managing the implementation of supported projects in an environment where domestic policies and regulations change with considerable frequency.

Box 3.14. Making the most out of outcomes indicators

The European Commission actively supports systematic monitoring and evaluation of policies. For the programming period 2014-20, it has introduced a results-based imperative in its Cohesion Policy framework and requires that the outcomes of supported policies are monitored. For many EU member states, like Poland, this required a modification to the existing monitoring framework. The monitoring requirements of the European Commission vary depending on the programme.

The European Commission specifies that outcome indicators used to monitor programmes under the European Structural Fund (ESF) can be monitored by programme-specific outcome indicators. These are indicators that concern very low-level objectives. Typically they refer to the share of participants in a programme for whom a desired outcome has occurred. Such an indicator could, for example, be the share of unemployed participants in a training programme that found a new job within six months of participating in the programme.

In contrast, indicators for the European Regional Development Fund (ERDF) and Cohesion Fund (CF) refer to outcomes on a macro level. They are supposed to measure the impact of a programme not just on those individuals or businesses affected by it, but on the entire population the programme is targeted at. For example, a typical ERDF indicator would not look at the share of youths who found a job after attending a training programme targeted at unemployed youths, but at the youth unemployment rate in general.

In addition to the different interpretations that the different types of outcome indicators have, they also have different data requirements. Typical outcome indicators for the ESF only require information about the group of individuals (or businesses, organisations, etc.) that is affected by a programme. This information is usually easy to collect and quickly available. In contrast, typical indicators for the ERDF require information for all individuals (or businesses, organisations, etc.) within the country, not just those that are affected by a programme. Such data are more difficult to collect and it typically involves longer time lags until it becomes available.

In order to prevent misinterpretations, the structural differences between the different types of indicators should be highlighted. If possible, it could also be desirable to collect two sets of indicators for key objectives; one on the programme level and one on the macro level. However, before doing so, it should be ensured that the gain from two different sets of indicators justifies the associated costs. Not only do the requirements for indicators under the ESF and the ERDF differ from each other, they are often very different from national performance monitoring and evaluation frameworks. In many cases, the monitoring and evaluation requirements for EU-funded programmes are stricter than those practiced nationally.

The monitoring requirements of the European Commission regarding outcome indicators emphasise the importance of ensuring that policies achieve the desired outcomes. This focus is important not just for programmes funded by the EU, but should be the underlying principle of every policy, no matter whether it is funded nationally or by EU sources. The monitoring requirements of the European Commission could be used as an occasion to modernise and extend national performance monitoring frameworks. In this context, experiences from the introduction of outcome indicators for EU programmes could provide valuable lessons on how to design a broad monitoring framework based on outcomes. However, there is a word of caution – outcomes indicators should not impose overly onerous requirements on reporting authorities and, ideally, should rely on existing administrative or statistical data where possible.

Source: Schumann, A. (2016), "Using outcome indicators to improve policies: Methods, design strategies and implementation", http://dx.doi.org/10.1787/5jm5cgr8j532-en.

The SRD emphasises the importance of improving the co-ordination of government action and the use of EU funding is a clear case for this process. It is important that efforts to better couple support from the CAP to other forms of EU support be enhanced. In particular, the various forms of rural development funding, while administratively distinct, have clear overlaps in intent and supported actions. More important is an increased recognition that with a narrowing of gap between Poland and EU averages, Poland faces less support in future funding cycles and faces a set of supported activities that are less obviously beneficial to rural Poland than was the case in the past. While a strategy of maximising the flow of funds was effective in prior periods, a more strategic approach that targets applications to only those programmes that move the community or region towards its specific development goals is likely to be more valuable going forward. While this may result in a lower aggregate amount of support, it could result in greater progress towards sustainable development.

Access to various regional policies has greatly improved the quality of life in much of rural Poland since 2004. The large amounts of money from the European Union have largely been put to good use in investments in physical infrastructure, agricultural modernisation and improving social capital. Because the need was so great in rural areas, there has been little need to make these investments in a systematic way. Each investment met a significant gap and resulted in a positive rate of return. Moreover, the policy approach followed by the EU did not require that individual investments be connected in a strategic way to improve the competiveness of the receiving region. The challenge now is to adopt such integrated strategies - doing so requires that there are effective institutions and governance frameworks to identify priorities and channel investments to them in complementary ways.

Strategies to combine EU and national/regional funds for rural development

Like many EU countries, Poland is interested in drawing on EU, national and regional funds in a complementary manner in order to amplify their effects. The new proposed Pact for Rural Areas articulates such an approach, though it remains to be seen how it will be implemented in practice. Italy's "Inner Areas" Strategy highlights the importance of multi-level governance frameworks for achieving such an objective. The strategy was launched in 2012 in order to divert the current demographic trend and unlock the local development potential of inner areas, thus improving the overall quality of life. Inner areas are small interconnected centres, rich in natural and cultural resources, at a significant distance from the main hubs providing essential services (education, health and mobility) (see Box 3.15 on how these areas were identified). One of the key figures that are used to determine areas needed for investment is the number of minutes it takes to receive a response from an ambulance in terms of travel time.

The strategy encompasses five mid-term objectives: increasing per capita well-being of residents, increasing employment, reusing territorial capital, cutting the social costs of depopulation and boosting local development factors. In order to reach these goals, improving the accessibility to basic services has been set as a precondition. As inner areas are characterised by small municipalities, different forms of municipal partnership for the provision of services have been established. The aim of these partnerships is to ensure the efficiency and quality in delivering health, education and mobility services through economies of scale and wider co-ordination.

This strategy is highly relevant for Poland given its interest in enhancing rural-urban linkages and increasing service accessibility. Implementation draws on a complementary mix of EU Structural Funds and national funds. For example, while EU funds can be used to purchase a car in order to provide mobile medical services, the same funds cannot be used to pay for a doctor's salary, and hence, national funds are used for such a purpose. The strategy has also restructured the education system in order to help adapt the organisation of schools to rural areas. For example, the same national rules should not be applied to urban and rural schools (e.g. the requirement that only schools with 400 students qualify to have a director).

The national government works directly with regions that have volunteered to take part in the process together with municipalities and other actors. A local strategy is developed in each region. Own regional resources, EU funds, social funds and national funds are drawn on to establish a comprehensive approach co-ordinated by the Italian Presidency of the Council of the Ministers in the Department for Cohesion Policies. There is an inter-ministerial group for each area that forms an operational group – the group travels around the country in order to work with local mayors and people in their communities. This is one of the most important innovations of Italy's Inner Areas Strategy. The local strategy ends with an agreement between the state, the region and the municipalities and then projects are implemented. In each strategy, there are a maximum of 15 indicators for assessment in order to ensure that there is a concerted focus on archiving progress.

In terms of the implementation and assessment of the Inner Areas Strategy, these policies take time. The national strategy was produced in one year and following this, the agreement with Cohesion Policy was negotiated together with the regions. This produced a more complex process, but was critical because many policies are regionally driven in Italy. It was important to build an alliance with regions and with the European Commission. In effect, the Inner Areas Strategy commenced by selecting areas, determining activity, gaining commitment from a mayor to lead the joint municipal initiative and then forming a partnership among them. Once the vision is decided, projects are elected depending on the results. Effective partnership building at all levels has been critical to the success of this approach.

Box 3.15. Defining Italy's "Inner Areas"

Italian "Inner Areas" National Strategy

Inner areas are those territories characterised by: being far from large and medium-sized urban centres able to supply adequate healthcare, education and transport-related services; being rich in natural assets (water resources, agricultural systems, forests, natural landscapes) and cultural resources (archaeological settlements, abbeys, small museums, craft centres); having a complex territory shaped by diverse natural phenomena and human settlement processes (anthropisation and depopulation) that have modelled them accordingly. In Italy, inner areas cover almost 60% of the whole national territory, hosting nearly 23% of national population (about 13 540 people) and approximately 53% of Italy's municipalities.

The Inner Areas National Strategy aims to contribute to Italy's sustainable development by recovering its marginalised territories and improving their inhabitants' well-being and quality of life.

Innovations: National dimension, place-based development strategy, municipal partnership transparency

The Inner Areas Strategy encompasses six main innovations:

- 1. It has a national dimension based on strong partnership between different levels of government.
- 2. It operates through two interrelated classes of actions. The first is focused on improving the quality of life in the selected area through enhanced access to services and supply improvement. The second deals with local development promotion through project support.

Box 3.15. **Defining Italy's "Inner Areas"** (continued)

- 3. It is a step-by-step process. Among the project areas investigated, one area per region is first selected (called a "prototype") to evaluate the strategy's potential success and trigger a positive learning mechanism. All of the selected areas come to be part of a project federation to encourage networking, exchange and learning.
- 4. Project areas are selected through a public proceeding. A dataset, meetings results and synthesis reports are published on line as open sources, thus enabling stakeholders to be aware of the process and ensure a transparent selection mechanism.
- 5. The sustainability of the strategy's actions is ensured by a bottom-up approach in which municipalities and regions are directly responsible for implementing the strategy. Indeed, the strategy is based upon a vertical participatory approach in which municipal associations are the functional spot enabling territories and institutional bodies to work together. Partnership between municipalities helps enhance the essential services supply by sharing its related management costs.
- 6. Attention to outcome indicators and monitored results. Project areas' development strategies must focus on expected results and achievable outcomes. Each project area must identify clear indicators to monitor and evaluate the results achieved in implementing the strategy itself.

The strategy aims to foster co-ordination between national and local interventions, actions and investments. Inner areas investments are funded by:

- Ordinary resources allocated to enhance inner areas' inhabitants access to essential services.
- 2014-20 European Structural and Investment (ESI) Funds available for regional investments aimed at supporting local development projects. Inner areas' available resources stem from the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Rural Development (EAFRD).
- Any additional national interventions in the form of taxes and/or insurance (or other) benefits shall be pondered, whereby substantiated and aimed at implementing as operational instruments which are complementary – or maybe essential – to the strategy's success.

Source: Materiali UVAL (2014), "A strategy for inner areas in Italy: Definition, objectives, tools and governance", www.agenziacoesione.gov.it/opencms/export/sites/dps/it/documentazione/servizi/materiali_uval/Documenti/MUVAL_31_Ar ee interne ENG.pdf.

Provide targeted interventions for distressed and marginalised areas within a multi-level governance framework

Some rural areas of Poland face extremely challenging development conditions and will require much more targeted support delivered through a multi-level governance framework. Communities that are facing rapid population decline, have marginalised populations, a weak economy and poor labour market, that face persistent poverty and/or have poorer infrastructure and accessibility to transportation and services will require special supports. Poland already has a number of territorially targeted supports. The most important in such cases is the SDR programme for areas threatened by permanent marginalisation. Most of these areas are located in the northern and eastern parts of the country and include areas of former state collective farms.

Despite a significant volume of investments financed mainly from EU funds in recent years, conditions continue to deteriorate. Recent research by Crescenzi and Giua (2016) on the ways in which EU Cohesion Policy works in different regions emphasises the importance of flexible integration and co-ordination of both bottom-up and top-down approaches and the differences between more socio-economically advanced and desired areas. This research examines how "spatially targeted" policies (i.e. the European Union Cohesion and Rural Development Policies) interact with sectoral "spatially blind" policies (i.e. Pillar II of the Common Agricultural Policy), jointly shaping regional growth dynamics. It demonstrates that Cohesion Policy has a positive influence on economic growth in all regions, but its impact is stronger in the most socio-economically advanced areas and is maximised when its expenditure is complemented by CAP Pillar I and II funds. In contrast, the top-down funding of the CAP seems to be able to concentrate some benefits in the most deprived regions. Their analysis suggests that bottom-up policies are not always the best approach to territorial cohesion, and that, in some cases, top-down policies can be effective in order to channel resources to the most socio-economically deprived areas.

In Poland it is evident that a new approach in such communities is needed. The SRD envisages communities in socio-economically deprived areas receiving a package of supports to develop integrated investments. It is important to recognise that *gminas* in these areas may have much more limited capacity to identify investment priorities, attract funds, collaborate with other local actors, and deliver services and infrastructure. Such areas would benefit from dedicated co-ordinators at the national and regional levels that could help navigate programmes and deliver catered solutions. At the same time, specific support could be employed to promote community engagement in local development. Canada has adopted an approach that may be of interest to Poland through its community employment and innovation projects. In exchange for foregoing employment insurance or social assistance benefits, project participants were offered wages to work on community projects for up to three years, giving them a significant period of stable income as well as an opportunity to support their community's development.

Risks and opportunities for the future

The Strategy for Responsible Development identifies important risks and opportunities facing Poland's future development. A key function of the SRD is to put in place a development approach that balances opportunities and risks. For Poland, some opportunities and risks are relatively well known, such as a high reliance on external investment funds, including those from the EU and money from private multinational firms, the imminent shrinking of the workforce, and too low levels of domestic research and development activity. Others are less well understood, such as the impact of climate change or where Poland's future competitive advantage will lie in a rapidly evolving global economy.

Since the future cannot be predicted, any development strategy can only provide a general framework for action, and not a specific development path. Especially in times of rapid change, it is important that strategies recognise the importance of creating an environment where adaptability and assessment are facilitated. Adaptability is needed because it can be necessary to change actions and objectives as conditions change in unanticipated ways. Assessment is needed because it is through ongoing monitoring and evaluation that the need for change is recognised.

While monitoring and evaluation of programmes and projects is often seen as an audit process that determines if the intended tasks were accomplished, it can have another potentially more valuable role if it is used to provide mid-course adjustments. As the SRD is currently structured, its implementation process will involve the co-ordination of a

large number of specific projects that will be suggested by subnational and national government agencies. Each of these projects is to support intended targets set out in the SRD. This process, while nominally adopting a bottom-up approach in identifying projects, still involves a large amount of oversight by the national government. Such an approach inherently limits the flexibility that may be needed to adjust to changing conditions at the local or regional level.

Thus, a perhaps underappreciated risk in the SRD is a too rigid implementation process that asks for overly precise proposals and imposes a strong monitoring system to oversee implementation. Perhaps a more useful approach would be to focus on desired levels of specific outcomes, and have both national and subnational agents propose targets to be achieved for specific outcomes and general strategies to do so, but leave the choice and management of specific projects to the agent. This outcomes-focused approach allows actors to modify their actions in a timely way as conditions change. While some monitoring may still be required to ensure that the coherence of the entire process is maintained, it should not involve restrictions on adaptability, but could limit the range of choices that are open to the agent to those that are consistent with broad national objectives. There are additional important risks associated with the growing political conflicts related to institutional reforms in Poland, including the judiciary system, freedom of the media and role of NGOs (European Commission, 2017; Freedom House, 2017).

A key precept of the OECD rural policy approach is that support for rural people and places should adopt an investment approach rather than one relying on entitlements. The rationale hinges on the recognition that an investment presumes that sufficient funds will be generated over time to repay the money that was advanced to fund the initial outlay. Conversely with an entitlement, no expectation of a positive return is made. Changing the approach can trigger important changes in attitudes to both the providers of funds and those receiving them that lead to more sustainable development. Importantly, few external investors provide 100% of the funds required for the investment. The main beneficiaries are expected to have a significant part of their net worth at risk to provide security to those providing additional money that the project is sound. Adopting an investment approach confronts the applicant for funds with the challenge of assessing all the potential investments facing them to select the ones with the highest payback, since these are the most likely to receive external support.

Moving from a grant-based to a loan-based funding process involves considerable adjustments both for the entities providing funds and for those requesting them. Importantly, the shift is from assessing the highest need to identifying the best risk-adjusted return. Consequently, changing the criteria for providing funding will almost certainly change the mix of recipients and will require new forms of relationship building along the way.

Notes

- 1. For the remaining OECD countries (e.g. Canada), rural development policies have an agricultural focus (OECD, 2016c).
- 2. This is done by the minister responsible for regional development whose approval constitutes an obligatory part of a legal procedure on the elaboration and adoption of a regional spatial development plan.
- 3. The MARD was established in 1999 from the Ministry of Agriculture and Food Economy of Poland which traces its history to 1944. The ministry's 1999 incarnation was brought about because development of rural regions was Poland's greatest political, economic and social challenge upon transition to a democratic parliamentary democracy.
- 4. The rules governing the CAP allow for transfers between both pillars (from Pillar I to Pillar II and vice versa). Up to 15% can be transferred between pillars, but in member states with lower than average per hectare direct payments (like Poland), this threshold is set at 25%.
- 5. Under CAP rules there is a list of voluntary measures (voluntary coupled support) for which there is limit on the share for the total transfer for these instruments. Poland has used these instruments. Poland has also created supports that are complementary between Pillars I and II (e.g. top-up payments for young farmers and a start-up grant instrument).
- Various academic studies point to ongoing structural problems in Polish farming 6. associated with too much labour on small farms. These problems are seen to reflect both a low possibility for off-farm employment and government policy (Petrick et al., 2002: 213). Several authors claim that in the transition period following the end of the socialist state, the national government increased social transfers as a way to address weak employment opportunities (Golinowska, 2004: 364; Keane and Prassad, 2002). Rosner shows that over the 1988-96 period, the role of benefits as a source of income for family farm households increased from 23.9% of total income to 37.3%, with a fall in both income from farming and off-farm work (n.d.: 38). More recently, Halamska provides a detailed discussion of policies that were implemented in the 1990s to support farm households during the decade of transition and to prepare them for accession to the EU (2016: 36-38). Post-EU accession, Halamska describes an ongoing dual structure of agriculture in Poland, with about half of all farms having limited connection to the market. The existence of these farms is described as "... an original product of arrested collectivisation/hindered modernisation, the postcommunist transformation, and the controlled dual modernization" (Halamska, 2016: 48). As such, government policy plays an important role in preserving these farm households.
- 7. The number of producer groups in Poland shows an increasing trend over time; however, the share of farmers benefiting from the CAP who are members of producer groups remains low. This figure stood at only 2% in 2012, accounted for only 5.7% of the value of total commercial production of these groups (Chlebicka et al., 2014). In contrast, the value of commercial production of producers groups in countries such as France, Germany, Great Britain or Spain ranges from 25% to 95% depending on the sector (Bijmand et al., 2012).

- 8. Responsibilities of both rural and urban gminas are defined in the Polish Constitution (adopted 1998) and as such, their functions have remained fairly stable. Gminas are primarily responsible for spatial planning (of both private and public real estate). management of the water supply (water treatment processes, distribution and sales), sewage treatment, waste governance, environmental protection, education (various levels), sports, culture and local roads, among others. Gminas are also empowered to undertake any responsibilities and functions not legally reserved by the other local and national authorities and these types of functions have expanded in recent years. They also perform "commissioned" tasks required by law or through individual agreements - these are regarded as "state-level tasks" with dedicated funding and closer oversight. Examples of these functions include the provision of identity cards and organising and conducting elections.
- 9. This is noted in the Public Finance Act of 26 November 1998.
- 10. The Committee of Development (an advisory body composed of the Minister of Development and the Minister of Finance, among others) has announced that the draft reform bill be available by the end of 2017.
- 11 A good example of successful co-operation is the Intercommune Union "Zielonka Forest". The union was created in 2000 by the gminas Czerwonak, Kiszkowo, Murowana Goślina, Pobiedziska, Swarzędz and Skoki (Wielkopolska Region). The territory of these gminas is located either wholly or partially within the Landscape Park of Zielonka Forest.
- 12. Community-led local development (CLLD) is applied under the Common Agricultural Policy and Common Fisheries Policy of the EU. Application of the CLLD instrument under Cohesion Policy (ESF and ERDF) and the Common Fisheries Policy (EMFF) is discretionary, but it is mandatory for the CAP and must constitute least 5% of EAFRD funds.
- 13. There are four different parts to such plans: a presentation report, a sustainable development planning project, the ruling (or zoning) and map annexes (OECD, 2016c).
- 14 As reported by the Central Unit of National Network for Rural Areas.
- 15. As reported by the Central Unit of National Network for Rural Areas.
- 16. Regional social dialog councils express opinions on issues falling within the scope of the tasks of trade unions or employers' organisations and on matters within the competence of the government and self-government administration from the voivodship; provide opinions on the projects of the voivodship development strategy and other programmes within the scope of tasks of trade unions and employers' organisations and prepare reports on the implementation of these tasks; consider cases of provincial coverage, which were provided by the Council for Social Dialogue; communicate to the Council for Social Dialogue and public administration bodies recommended solutions and proposals for legal changes; and consider social or economic issues that cause conflicts between employers and employees if they are considered important for the preservation of social peace.

References

- Antolak, M. et al. (2017), "The impact of European funds on changing landscape of polish villages", *Management Theory and Studies for Rural Business and Infrastructure Development*, Vol. 39/2, pp. 127-138, https://doi.org/10.15544/mts.2017.09.
- Bijmand, J. et al. (2012), "Support for farmers' cooperatives: Final report", Komisja Europejska.
- Bulmer, S. and S. Padgett (2005), "Policy transfer in the European Union: An institutionalist perspective", *British Journal of Political Science*, Vol. 35/1, pp. 103-126, www.jstor.org/stable/4092282.
- Chlebicka, A., J. Fałkowski and B. Łopaciuk-Gonczaryk (2014), "Grupy producentów rolnych a kapitał społeczny–potencjalne zależności", *Wieś i Rolnictwo*, Vol. 3/164, pp. 137-156.
- Charbit, C. and M. Michalun (2009), "Mind the gaps: Managing mutual dependence in relations among levels of government", *OECD Working Papers on Public Governance*, No. 14, OECD Publishing, Paris, http://dx.doi.org/10.1787/221253707200.
- Commissariat général à l'égalité des territoires (2015a), "Note d'information sur les contrats de réciprocité ville-campagne".
- Commissariat général à l'égalité des territoires (2015b), "Point sur l'expérimentation de contrats de réciprocité".
- Crescenzi, R. and M. Giua (2016), "The EU Cohesion Policy in context: Does a bottom-up approach work in all regions?" *Environment and Planning A*, Vol. 48/11, pp. 2340-2357, http://eprints.lse.ac.uk/66946.
- da Rosa Pirez, A. et al. (2014), "Smart specialisation and innovation in rural areas", S3 Policy Brief Series, No. 09/2014, Institute for Prospective and Technological Studies, Joint Research Centre, European Union, http://dx.doi.org/10.2791/13227.
- Dolowitz, D.P. and D. Marsh (1998), "Policy transfer: A framework for comparative analysis", in: Minogue, M., C. Polidano and D. Hulme (eds.), *Beyond The New Public Management: Changing Ideas and Practices in Governance*.
- Ernst & Young (2014), "Poland: The real state of real estate", The Polish Real Estate Guide: Edition 2014, Ernst & Young, www.ey.com/Publication/vwLUAssets/EY_Real Lestate Guide Book 2014/\$FILE/EY_Real Estate Guide Book 2014.pdf.
- European Commission (2017), "European Commission acts to preserve the rule of law in Poland", press release, 26 July, Brussels, http://europa.eu/rapid/press-release_IP-17-2161 en.htm.
- Ferry, M. (2013), "Implementing regional policy in Poland: A new era?", *Europe-Asia Studies*, Vol. 65/8, pp. 1578-1598, https://doi.org/10.1080/09668136.2013.833016.

- Freedom House (2017), "Freedom of press 2017: Poland profile", Freedom House, https://freedomhouse.org/report/freedom-press/2017/poland.
- Freshwater, D. and R. Trapasso (2014), "The disconnect between principles and practice: Rural policy reviews of OECD countries", Growth and Change, Vol. 45/4, pp. 477-498, http://dx.doi.org/10.1111/grow.12059.
- Furmankiewicz, M. and A. Macken-Walsh (2016), "Government within governance? Polish rural development partnerships through the lens of functional representation", Journal of Rural Studies, Vol. 46, pp. 12-22, https://doi.org/10.1016/j.jrurstud.2016.05 .004.
- Furmankiewicz, M., K. Janc and A. Macken-Walsh (2016), "The impact of EU governance and rural development policy on the development of the third sector in rural Poland: A nation-wide analysis", Journal of Rural Studies, Vol. 43, pp. 225-234, https://doi.org/10.1016/j.jrurstud.2015.12.011.
- Garcilazo, E. (2017), "Rural Policy 3.0 productive regions for inclusive societies: Low density economies: Places of opportunity", presented at the ENRD seminar, Rural Business the Future is Now, Brussels, 30 March 2017, https://enrd.ec.europa.eu/sites/e nrd/files/s4 rural-businesses rural-policy garcilazo.pdf.
- Golinowska, S. (2004), "Labour market and social policy development in Poland", Zeitschrift für ArbeitsmarktForschung – Journal for Labour Market Research, Vol. 37/4, pp. 346-374.
- Government of Poland (2017), Strategy for Responsible Development, Ministry of Infrastructure and Development, Warsaw.
- Government of Poland (2015), "Revenue of gminas and cities with powiat status budgets, 1995-2014", Local Data Bank (database), https://bdl.stat.gov.pl (accessed 25 March 2016).
- Halamska, M. (2016), "The evolution of family farms in Poland: Present time and the weight of the past", Eastern European Countryside, Vol. 22/1, pp. 27-51, https://doi.org/10.1515/eec-2016-0002.
- Jean, B. (2012), "Les territoires ruraux au Québec: Vers un modèle de développement territorial durable", Revue d'Économie Régionale & Urbaine, Vol. 4, pp. 649-671.
- Keane, M. and E. Prasad (2002), "Inequality, transfers and growth: New evidence from the economic transition in Poland", Review of Economics and Statistics, Vol. 84/2, pp. 324-341, https://doi.org/10.1162/003465302317411578.
- Kozak, M. (2013), "Regional revelopment agencies as implementing body of innovation policy in Poland" Visegrad & Ukraine, p. 45.
- Maśloch, P. and L. Piotrowska (2017), "An overview of regional territorial observatories: Common elements and substantial differences. Territorial observatories and their role in shaping the defence capability and security of a region", World Scientific News, Vol. 72, pp. 194-203.
- Materiali UVAL (2014), "A strategy for inner areas in Italy: Definition, objectives, tools governance", No. 31, Public Investment Evaluation Rome. www.agenziacoesione.gov.it/opencms/export/sites/dps/it/documentazione/servizi/mate riali uval/Documenti/MUVAL 31 Aree interne ENG.pdf.

- Mickiewicz, A. and B. Mickiewicz (2016), "Directions of development of regional policy within the framework of the local development strategy for rural areas", *Economic Science for Rural Development Conference Proceedings*, No. 41, pp. 104-114.
- Ministry of Agriculture and Rural Development (2014a), "Ocena ex-ante Programu Rozwoju Obszarów Wiejskich na lata 2014-2020" Ex-ante evaluation of the Rural Development Program for 2014-2020], Konsorcjum w składzie Instytut Rozwoju Wsi i Rolnictwa Polskiej Akademii Nauk (lider konsorcjum), ECORYS, Instytut Uprawy, Nawożenia i Gleboznawstwa Państwowy Instytut Badawczy, Projekt współfinansowany ze środków Unii Europejskiej w ramach Pomocy Technicznej.
- Ministry of Agriculture and Rural Development (2014b), *Program Rozwoju Obszarów Wiejskich na lata 2014-2020* [Rural Development Programme for 2014-2020], www.minrol.gov.pl/Wsparcie-rolnictwa/Program-Rozwoju-Obszarow-Wiejskich-2014-2020.
- Ministry of Municipal Affairs, Regions and Land Occupancy (2006), "Politique nationale de la ruralité: Une force pour tout le Québec", Quebec, Canada.
- Nowak, P., A. Jastrzębiec-Witowska and K. Gorlach (2016), "Cooperative movements in rural areas in contemporary Poland: A brief comparison of farmers' attitudes of members and non-members of cooperatives", *Eastern European Countryside*, Vol. 22/1, pp. 151-164, http://dx.doi.org/10.1515/eec-2016-0008.
- OECD (2017a), *OECD Territorial Reviews: Northern Sparsely Populated Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268234-en.
- OECD (2017b), "Subnational government expenditure as a percentage of GDP and total public expenditure", *OECD Regional Database*, http://dx.doi.org/10.1787/region-dataen.
- OECD (2017c), OECD Territorial Reviews: Sweden 2017: Monitoring Progress in Multilevel Governance and Rural Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264268883-en.
- OECD (2017d), *Multi-level Governance Reforms: Overview of OECD Country Experiences*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264272866-en.
- OECD (2016a), Governance of Land Use in Poland: The Case of Lodz, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260597-en.
- OECD (2016b), *OECD Economic Surveys: Poland 2016*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-pol-2016-en.
- OECD (2016c), OECD Regional Outlook 2016: Productive Regions for Inclusive Societies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260245-en.
- OECD (2016d), "Rural Policy 3.0", in: *OECD Regional Outlook 2016: Productive Regions for Inclusive Societies*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264260245-7-en.
- OECD (2015), "Participation rates in formal volunteering: Percentage of the working-age population who declared having volunteered through an organisation in the preceding 12 months, by frequency, 2012", in: *How's Life? 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/how-life-2015-graph109-en.

- OECD (2014a), Innovation and Modernising the Rural Economy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264205390-en.
- OECD (2014b), "Profile of rural Chile", in: OECD Rural Policy Reviews: Chile 2014, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264222892-4-en.
- OECD (2014c), OECD Territorial Reviews: Netherlands 2014, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209527-en.
- OECD (2014d), Recommendation of the Council on Effective Public Investment Across Levels of Government, OECD, Paris, www.oecd.org/cfe/regionalpolicy/recommendation-effective-public-investment-across-levels-of-government.htm.
- OECD (2014e), How's Life in Your Region?: Measuring Regional and Local Well-being for Policy Making, OECD Publishing, Paris, http://dx.doi.org/10.1787/978 9264217416-en.
- OECD (2013a), Rural-Urban Partnerships: An Integrated Approach to Economic Development, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204812-en.
- OECD (2013b), Poland: Implementing Strategic-State Capability, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201811-en.
- OECD (2013c), Investing Together: Working Effectively across Levels of Government, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264197022-en.
- OECD (2011), OECD Rural Policy Reviews: England, United Kingdom 2011, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264094444-en.
- OECD (2010), "Multi-level governance: A conceptual framework", in: Cities and Climate Change, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091375-<u>11-en</u>.
- OECD (2008), OECD Territorial Reviews: Poland 2008, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264049529-en.
- OECD (2006), The New Rural Paradigm: Policies and Governance, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264023918-en.
- OECD/UCLG (2016), "Subnational governments around the world: Structure and finance", OECD, Paris, https://www.oecd.org/regional/regional-policy/Subnational-Governments-Around-the-World-%20Part-I.pdf.
- Petrick, M. et al. (2002), "Economic situation and development perspectives of farms in Poland", Agrarwirtshft, Vol. 51/4, pp. 203-214, http://ageconsearch.tind.io/record/982 51/files/3 Petrick.pdf.
- Pierre, J. (2009), "Tre myter om governance" ("Three myths of governance"), in: Hedlund, G. and S. Montin (eds.), Governance på svenska (Governance in Sweden), Santérus, Stockholm, pp. 37-56.
- Przewłocka, J. (2011), Polskie organizacje pozarządowe, Najważniejsze pytania, podstawowe fakty, Stowarzyszenie, Warsaw.
- Roederer-Rynning, V. (2015), "The third era of the Common Agricultural Policy: Parliamentary politics meet globalization", in: Witzleb, N., A. Martínez Arranz and P. Winand (eds.), The European Union and Global Engagement: Institutions, Policies and Challenges, p.89.

- Rosner, A. and M. Stanny (2017), *Socio-economic Development of Rural Areas in Poland*, Europejski Fundusz Rozwoju Wsi Polskiej and Instytut Rozwoju Wsi i Rolnictwa, Polskiej Akademii Nauk, Warsaw.
- Rosner, A. and M. Stanny (2014), Monitoring Rozwoju Obszarów Wiejskich. Etap I , FEFRWP, IRWiR PAN, Warsaw.
- Sakowicz, M. (2017), "Rebirth of local government in Poland: 25 years of decentralization reform", in: *The Palgrave Handbook of Decentralisation in Europe*, pp. 327-352, Springer International Publishing.
- Sauer, S. (2013), "The system of local self-government in Poland", Research Paper No. 6/2013, Association for International Affairs/Asociace pro mezinárodní otázky.
- Schumann, A. (2016), "Using outcome indicators to improve policies: Methods, design strategies and implementation", *OECD Regional Development Working Papers*, No. 2016/02, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jm5cgr8j532-en.
- Shortall, S. and M. Alston (2016), "To rural proof or not to rural proof: A comparative analysis", *Politics & Policy*, Vol. 44/1, pp. 35-55, http://dx.doi.org/10.1111/polp.12144.
- Solidarité rurale de Québec (2016), "Politique nationale de la ruralité (PNR) ", www.ruralite.qc.ca/fr/Ruralite/Politique-nationale-de-la-ruralite-PNR (accessed 18 July 2016).
- Solidarité rurale du Québec (2013), "Politique nationale de la ruralité", www.ruralite.qc.ca/fr/Ruralite/Politique-nationale-dela-ruralite-PNR (accessed 30 March 2016).
- Sørensen, E. and J. Torfing (2007), "Introduction governance network research: Towards a second generation", in: *Theories of Democratic Network Governance*, pp. 1-21, Palgrave Macmillan UK.
- Sørensen, E. and J. Torfing (2005), "The democratic anchorage of governance networks", *Scandinavian Political Studies*, Vol. 28/3, pp. 195-218.
- Szczerski, K. (2013), "Securing growth and cohesion in Europeanized conditions: The role of regional development bodies in Poland", in: Palermo, F. and S. Parolari (eds.), Regional Dynamics in Central and Eastern Europe: New Approaches to Decentralization, Martinus.
- Uryszek, T. (2013), "Financial management of local governments in Poland: Selected problems", *Journal of Economics, Business and Management*, Vol. 1/3, pp. 252-256, www.joebm.com/papers/55-X00017.pdf.
- Wilkin, J. (ed.) (2013), "Jakość rządzenia w Polsce. Jak ją badać, monitorowac I poprawiać?", ("Quality of governance in Poland. How to study, monitor and improve?"), Wydawnictwo Naukowe Scholar, Warsaw.
- Wójcik, M. (2014), "Rural-urban collaboration in a large metropolitan area: The Lódz metropolitan area case study", in: Dej, M., K. Janas and O. Wolski (eds.), *Towards Urban-Rural Partnerships in Poland: Preconditions and Potential*, Institute of Urban Development, Krakow, Poland, pp. 123-140.

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