Policy priorities for rural digitalisation

POLICY **INSIGHTS**

Digitalisation is helping to make rural Europe more resilient through more efficient and sustainable approaches to business operations and community life. Optimising these opportunities by bridging 'digital divides' is part of the cross-cutting objective of modernisation of the Common Agricultural Policy (CAP). The CAP can help advance rural digitalisation through its range of funding interventions that can be combined with other EU or national funding to help rural Europe take full advantage of the digitalisation potential.

Rural digitalisation continues to represent a transformative force for the development of Europe's agri-food sector and the wider rural economy. This transformation involves the integration of digital technologies and data-driven solutions with the aim of enhancing productivity, sustainability and competitiveness. Digitalisation can cover the spectrum of megatrend activities as diverse as digital twins, automated transport or artificial intelligence.

Digitalisation is evolving at pace and EU policies are tasked with helping all citizens enjoy equal access to the same opportunities. Hence, reducing the risks of rural areas being left behind by the new possibilities offered by technological advances is an important goal for the Rural Pact's work in implementing the long-term vision for EU rural areas.

Member States' CAP Strategic Plans (CSPs) provide funding options for public and private sector stakeholders to invest in the adoption of digital technologies and essential infrastructure and to build workforce capacities to help bridge digital divides. Much of the funding available for digitalisation through CSPs is focused on food security. For example, some CSPs support digitalisation with eco-schemes focused on sustainable food production, others through rural development interventions such as investments, cooperation or knowledge exchange within food value chains.

CAP support can also be coordinated with other EU policies (e.g. cohesion policy, lifelong learning, InvestEU, NextGenerationEU or Horizon Europe funding) to provide a comprehensive coverage of support for rural digitalisation.

Promoting precision

A core aspect of rural digitalisation in Europe is the adoption of precision-driven digital agricultural techniques. Using advanced sensors, drones, GPS/GNSS guidance systems for tractors, satellite imagery and data analysis, farmers can monitor crop health, soil moisture levels and weather conditions with unprecedented accuracy. This enables better farm management and more environmental benefits from the improved deployment of resources.

Farmers can also use new digital tools to make more informed decisions regarding irrigation, fertiliser use and pest control. Consequently, digitalised agriculture can contribute to boosting yields and food security as well as to reducing input costs and

negative environmental impacts. For example, the use of Variable Rate Technology can reduce environmental impact by applying the right amount of agri-chemicals and water in the right place at the right time for specific crop varieties. Other examples include biometric sensors to monitor the health of individual livestock.

Furthermore, digital platforms can transform agri-food supply chains by connecting farmers directly with markets and consumers. Online marketplaces and short value chains enable farmers to sell their products via fewer intermediaries while more directly providing consumers with fresh produce from local sources. This farm-gate style consumer model supports local economies, reduces '**food miles**' and can apply digital systems (including blockchain) to promote produce transparency and traceability.

CSPs can co-finance actions supporting **agricultural digitalisation** throughout EU Member States. CAP support is also available for rural infrastructure and services, particularly for innovative and cooperative initiatives like **Smart Villages**. Vitally, CSPs acknowledge the importance of building capacity across the EU's rural workforce to help it adapt to digitalisation. EU Member States, such as **Spain**, have their own dedicated digitalisation strategies for the agri-food and forestry sector and rural areas which align with CAP funding. Further scope exists to establish synergies with the different digital strategies, promoting digitalisation at EU level.

Policy priorities

Whilst digitalisation is revolutionising the way most of us live and work by bringing numerous benefits, such as increased efficiency, productivity and **employment**, it can produce **positive as well as adverse impacts**. Job loss fears exist if automation and artificial intelligence replace human labour in various employment fields. Nevertheless, automation and artificial intelligence can also create new jobs that potentially mitigate this effect at least partially. If labour is released from these operations, it can be shifted to other activities (in the sector or to other sectors) which can have a positive effect by increasing the efficiency of the sector/economy as a whole.

To mitigate potential job loss risks from digitalisation, a joined-up approach by policymakers can be nurtured. Support sources can be blended to create digital success stories for agri-food and rural policies based around three interrelated priorities.

Firstly, investing in education and training is crucial. As technology advances rapidly, rural workers need to acquire new skills to remain relevant in the job market (upskilling or reskilling). **Skill matching** and promoting lifelong learning is essential for continuous professional development, and rural companies can encourage employees to engage in ongoing training that enhance their skills and knowledge. This helps them to remain competitive amidst technological advancements while minimising job displacement threats. Here, CAP and other EU policies collaborate with educational institutions as well as agri-food and other rural businesses to provide training that equips rural workers with the digital skills that they need.

Secondly, fostering digital entrepreneurship can create new jobs in all rural sectors. Encouraging individuals to start their own businesses not only stimulates economic growth but also generates new employment opportunities. Attracting entrepreneurs and **digital nomads** to the countryside is another opportunity that is gaining in prominence for rural policy stakeholders.

Thirdly, investing in rural infrastructure is necessary for economic growth. Robust digital infrastructure allows businesses to access the latest technologies for streamlining operations, reaching new markets and enhancing outputs. Additionally, improved connectivity enables individuals to access online education and training, opening new avenues for lifelong learning and entrepreneurship opportunities. Nevertheless, remote regions can still lack adequate internet access or reliable power supplies, limiting their ability to participate fully in the **digital economy.** By investing in **broadband competences** and power from renewable energy sources, EU and national funding can help ensure that all rural citizens have more equal access to the full potential of digital opportunities.

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