

Smart farming: Bringing safe food, sustainable land management and jobs to rural areas

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The European People's Party (EPP) has always been proud of how European farmers contribute to our quality of life. They are at the heart of rural societies and the engine of rural growth. Farming provides jobs and careers, in particular in rural areas, and provides the food our society needs. Farmers' hard work is highly respected, and their products are appreciated worldwide for their high standards and tradition of quality. Europe's small-to-medium-sized family farms are nevertheless under growing pressure to make their production models more competitive in order to survive in the long run.

We in the EPP are committed to creating long-term conditions that will make such a future possible. We are committed to a fair and respectable future for our farmers, as well as for rural areas. We want to enable a stable economic ecosystem within which European agriculture can not only thrive but grow. We are committed to ensuring that the essential services agriculture provides, to both human society and to the natural environment, continue to meet our high standards while still meeting our needs. We believe European farming represents an indispensable added value for Europe as a whole; but decisive steps towards smarter and more sustainable farming are needed to ensure that this vital branch of the European economy remains healthy and viable. To this end, a strong, strategic and forward-looking Common Agricultural Policy is necessary.

Growing digital: Transformation to smart and sustainable farming

The EPP supports moving swiftly to a sustainable growth of farming through the widespread introduction of digital farming technologies. So-called 'precision farming' represents a whole-farm management approach; it means innovative solutions based on better input management – ultimately, based on actual, measured crop needs. Technologies – for example, satellite positioning systems (i.e. GPS), remote sensing and soil monitoring – can gather and process information needed to know the state of every centimetre of the farm. Using this processed data will enable farmers to make the most of their everyday tasks, helping farmers make the absolute most of their time and resources. They will be able to take advantage of every detail, such as dryness of soil, early detection of crop disease, etc., and make their activities more sustainable and profitable.

Broadband for beehives: Making the farm a hub

Having access to real-time information is more and more vital for farmers, who can now connect their modern machinery to cloud computing. The European Commission's Digital Economy & Society Index shows that broadband is available to 71% of European homes – but to only 28% in rural areas; that mobile broadband, such as 4G, reaches 86% of European homes – but only 36% in rural areas. Ensuring adequate, reliable and affordable rural broadband connectivity infrastructure across the entire EU is essential in fostering a transformation to next-generation

digital agriculture. Without sufficient connectivity, it is difficult, sometimes even impossible for farmers to use their new applications to their full extent. The EPP supports the European Commission's ongoing work within the Digital Single Market and encourages

Member States to be committed to implementing this strategy, making state-of-the-art connectivity available throughout the EU, and to closing the digital divide between urban and rural areas. The EPP encourages the European Commission to continue its work on rural development and 'smart village' initiatives, the goal being to boost growth and jobs in rural areas, help enable businesses to stay competitive, integrate rural areas into the broader economy and enhance the appeal of rural communities. This should also benefit farmers in less favoured areas, in particular mountainous regions, where infrastructure is often less developed and interconnectivity can be an important driving force.

Digital skills: The catalysts for future farming models

Making digital transformation a reality in the agricultural world will require the digital know-how to get the most out of precision engineering technologies. As only 8% of EU farmers are currently below the age of 35, knowledge transfer has to be high on the agenda.

The EPP encourages setting up training programmes under the New Skills Agenda for Europe, the Sectorial Cooperation on Skills. These programmes would teach farmers how best to use new technologies, as well as how best to manage land and how to set up the kinds of rural business models which the new technologies make possible. All this will make European farms more competitive and sustainable; it will also increase farmers' influence on price-setting and at the same time help bolster food safety, protect against climate change and boost growth and jobs in rural areas.

Brain gain: Attracting young talent to rural areas and revolutionising our image of farming

Working on a farm requires admirable dedication. Day after day, farmers get up early and invest hours of hard work in order to manage their fields or livestock. Tapping into connectivity and greater use of Information and Communication Technologies on farms can create a shift in the farming industry and in the way farmers' everyday lives are structured. Precision farming, for example, makes it possible to reach the same levels of productivity while decreasing the manpower required. In turn, farmers can then focus more on monitoring and managing their land or animals; this lightens the physical workload and improves the quality of life for those working on the farm. Changes such as this also render farming itself more attractive: farming as a career would thus be seen not just as a traditional profession but also as an entrepreneurial job opportunity. It could then attract new talent from overpopulated urban communities, offering high standards of living and dynamic job prospects in the countryside. With more than half of today's farmers older than 55, attracting young talent will become more and more crucial for the sector's long-term economic viability.

The EPP believes that access to other infrastructure — such as good education and healthcare, transportation, shopping areas and cultural and social activities — also plays an important role in making rural areas more attractive. Furthermore, the EPP stresses the need for PR campaigns to boost the image of agriculture, showing the upside to a career in a sector not often depicted as a young person's game.

New ways of connecting — for better yields

The time-savings stemming from more automated farms will enable agricultural workers to engage more actively in their local communities. Sharing data among neighbours — for example

within a local agricultural cooperative or association — can lead to even better predictability and planning. Such information can help improve both the quantity and the quality of yields on individual farms, thus contributing to higher and more stable income for farmers.

A collaborative approach can act as a knowledge pool, raising awareness of the added value of deploying new technologies like precision farming. This approach can provide the tools needed for investing in the modernisation of farms; it can take the bureaucratic load off of farmers' shoulders, helping them find appropriate co-financing opportunities and even in handling the paperwork. Furthermore, a farmers association or a cooperative can be the umbrella offering necessary training to farmers: for example, how best to use the new equipment or instruments they themselves, or their cooperatives, have acquired. The EPP calls for these specific training programmes for local communities to be co-funded with European funds.

Farmers as innovators and entrepreneurs

As a multifunctional sector, farming today already fulfils a number of different tasks for rural communities. Cooperatives or farmers associations can offer farmers a forum in which to exchange ideas. Building on their understanding and innovative spirit, farmers will improve the performance and adaptability of their precision-farming techniques. What is more, they will be able to invent new applications themselves, enabling even greater productivity for their local community. A farmer can thus become an integral part of developing locally applied, tailor-made agricultural machinery. By connecting with each other, farmers can also develop business and marketing strategies to promote their innovations.

The EPP believes that such data-driven innovations in farming must be at the frontline of the agriculture-related research funding in the context of the Horizon 2020's European Innovation Partnership for Agricultural Productivity and Sustainability. The participation of farmers in new agri-tech cooperatives and the data collected by their technological instalment will stimulate further research and innovation at both regional and local levels. This will not only contribute to closing the gap between research and practice; it will also create jobs in local communities across Europe, including in research and development, thereby helping to integrate rural areas into the overall economy.

Another way our farmers can benefit from new business models is in reaching out to customers directly, without relying on retailers. By establishing their own digital platforms, these models give consumers the possibility to directly pick their own local producer.

This will not only mean more jobs and business diversity in the agricultural sector, but also fewer monopolies — and thus fewer of the negative market effects which monopolies bring. For Europe's small- and medium-sized family farms, this is especially good news.

Growing to scale: Reasons for growing digital

While smart, sustainable farming is already happening in certain parts of Europe, a large concern is still how farmers across the EU can afford the needed high-tech equipment on a broader scale.

As a capital-intensive system requiring large up-front investments, digital farming requires prompt attention by policy makers in order to establish the conditions for widespread

deployment. The European People's Party encourages these good practices and calls for greater financial incentives for farmers, enabling them to make their purchases and adopt new production practices as fast as possible. The EPP believes that through Cohesion Funds, the EU can work on bridging the gaps between Member States.

Not only farmers, but also farmers' organisations, need to be well funded if they are to facilitate agricultural technology development and transfer. The EPP further supports the European Fund for Strategic Investments (EFSI), especially intended to spur digital transformation in the agricultural sector. Through public-private partnerships, the uptake of new technologies and the performance of agricultural innovation systems will improve. New investments can be further promoted by transferring technologies from other sectors: for example, from computer science or robotics. Offering comparative advantage to early adopters in the farming business, and demonstrating the positive results of early adoption, can encourage investments more widely.

Keeping growth green

The European farming model, in particular family farming, is based on intergenerational planning and sustainability, preserving natural resources for the benefit of future generations. In the face of climate change — but also future global crises — maintaining food security through a vibrant agricultural sector in Europe has become a strategic necessity.

The EPP strongly believes that by creating conditions for streamlining new technologies, agri-tech will be able to help solve pressing challenges, such as growing food sustainably and safely, preserving natural habitats and taking care of the countryside. In recent years, overall emissions from agricultural production have been reduced significantly; yet modern agriculture still uses resources unsustainably and is responsible for about 10% of the EU's total greenhouse gas emissions. Aware of the environmental impact of the agricultural sector, the EPP is strongly convinced that digitalising farming is also an efficient way to decarbonize it.

By collecting large amounts of data from crop yields, soil-mapping, weather data, machinery, fertiliser applications and animal health, digital farm management systems can help farmers better control and predict plant and animal development. Monitoring sensors can inform agricultural managers of the exact needs of any plant or animal, thus increasing the accuracy of intervention. Subsequently, farms can optimise their production costs by reducing water consumption and the use of fertilisers, by better preventing outbreaks of disease and ultimately by increasing their yields. They can furthermore ensure a greater abundance of high-quality, safe and healthy food — at a competitive price — to meet the needs of a growing population. The environmental footprint throughout the value chain will get smaller, and biodiversity on and around farms will increase. This will help with pollination and natural pest control, and with keeping the soil from washing away or from losing its natural nutrients. Technology has also helped farmers manage those natural landscapes most affected by natural processes, such as weathering or erosion, resulting from human interventions like dams or dikes. Looking after our landscapes will ensure greater safety and reduced risks for everyone.

Sowing seeds — and reaping jobs

The rural economy of the future will depend increasingly on digitalisation and knowledge as farmers make the most of the digital transformation taking place around the world to enhance sustainable production. The European People's Party is convinced that new technologies and their adoption by EU farmers will be key drivers for maintaining Europe's agricultural competitiveness. Aware of the added value which innovative and sustainable farming communities generate for our society — for farmers, consumers, the countryside and the environment alike — we believe that a systematic approach to sustainable farming, including new business models of platform economy in the agricultural sector, needs to be promoted across the EU.

Creating new jobs for 21st-century farming — in education, research and development, land management and all along the food supply chain — will ensure decent livelihoods for farmers and increase the well-being of citizens both in rural as well as in nearby urban areas.

After all, the business of farming, as in any other enterprise, must be economically viable: it must be able to pay its employees fairly, internalise the costs of investing in new technology, including the subsequent maintenance or repair of technological instruments, while enabling farmers to run a profitable business. For the European People's Party, it is important that ordinary citizens reap the benefits of European agricultural policies. Our vision for the smart, sustainable farming of the future aims to do exactly that.

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**If you have any question
you would like to ask
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