

Key findings on the NFU Broadband and Mobile Survey 2018

Like many other businesses, farmers are increasingly using digital technologies to manage their operations and daily lives. Poor broadband and mobile connectivity is still a significant issue in rural Wales. By sharing the results of the 2018 NFU Broadband and Mobile Survey, we welcome the opportunity to showcase the picture of farm coverage in Wales, so that wider stakeholders can be aware of the challenges and opportunities for connecting farms and wider rural communities. Only 16% of those surveyed received a reliable mobile signal in all outdoor locations on farm, and 46% still not having access to sufficient broadband speeds sufficient for their business. Better coverage is required to support farmers to maximise the opportunities that digital technology can provide for their businesses and to improve productivity.

Key broadband results from the 2018 survey

Overall, the 2018 survey highlights areas of improvement in relation to broadband services and connectivity among farmers in rural communities. Despite this, the survey identifies slow broadband speed and poor bandwidth as the most significant barrier in preventing farmers from using digital technology. Additional barriers include unreliable internet and mobile connections.

Key mobile connectivity results from the 2018 survey

Effective mobile connectivity is vital for farm businesses for many reasons, from managing the day to day running of the business to ensuring there is sufficient coverage for health and safety purposes. The NFU's 2018 survey highlights that the majority of farmers surveyed have a mobile phone and 89% believe that access to a mobile phone signal is important for their business; however poor signal is a significant issue for many of the respondents surveyed.

How productivity and connectivity are interlinked in Welsh farming.

The Welsh food and drink sector is currently worth £6.9 billion to the economy, employing over 240,000 people. The benefits that farmers receive from applying full connectivity are multi-faceted. Farmers with superfast broadband are more likely to invest and expand their farm businesses, become more productive and be able to take advantage of wider business opportunities. Moreover, digital infrastructure offers significant opportunities for farmers to improve their productivity.

Why farmers need better broadband and mobile phone connections

The majority of farm businesses are family run, with farms and farming families being the acknowledged bedrock of rural communities, as well as the custodians of the countryside. Access to a superfast broadband service can therefore help maintain family life, whether that is to allow family members to return and work on farm, or to support their education and skills development or to provide health care for the older farming generation. It can provide the catalyst for a new farming future.

The benefits that farmers receive from applying full connectivity are multi-faceted. Firstly farmers can optimize the use of inputs as well as decrease production costs, improving productivity as a result. Other benefits are: saving cost by effectively using inputs, better monitoring of crops, monitoring and analysis of animal growth rates and animal health and better planning of farm activities.

According to Welsh Government statistics, 39% of farmers have diversified businesses in 2017/2018. Increasingly farmers are diversifying their income with broadband speed dictating both the uptake and success of some diversification projects. On farm tourism, the letting of buildings for business use and for renting out property for housing are being particularly affected by slow broadband rates.

NFU Cymru Briefing: The NFU Broadband and Mobile Survey 2018

The challenges of the use of this technology in agriculture are the cost of equipment and the need for wider internet coverage. Some examples (by no means exhaustive) of how full connectivity is needed on farm (and how it links to productivity) are shown in the following table.

Benefits of full connectivity for farm businesses	
Example	Description
Support payments	BPS and Pillar II payments now take place wholly online.
Taxation	Taxation returns and Self-Assessment are now all online.
Government and other services	Access to other government service, advice and guidance are increasingly all online.
Diversification	Customers and tourists now increasingly demand the use of broadband when using a farm B&B, farm shop or other facility. Successful diversification requires access to superfast broadband and mobile phone connections. Farmers report that without such services they can struggle to run their diversified businesses efficiently and to attract businesses. For tourism uses, this means less efficient websites, whilst lack of mobile coverage means fewer return visits. For overnight accommodation, visitors more and more demand full connectivity (e.g. Wi-Fi broadband).
Cloud computing and data storage	Cloud storage provides efficient, inexpensive and centralised data storage of large data volumes.
Market information	Use of broadband for keeping up to date with market information and general agriculture news.
E-commerce/ developing new markets	Access to the internet helps advertise products and services beyond the local area, present new business contacts and engage with the customer.
Farm safety	Poor mobile phone signal means farmers, who often work alone, cannot contact anyone in the event of an emergency. Farmers who don't have good mobile coverage are at a disadvantage and are at risk.
Farm isolation	Having full connectivity helps reduce social isolation.
Rural crime	Effective connectivity enables the use of CCTV and mobile phone messaging can help reduce crime.
Banking	Due to the rural location of many farms and the increasing closure of rural bank branches, the use of online banking is growing and is reliant on good connectivity.
Livestock/ dairy - data	Good connection is required for data to be collected from herds to manage grazing lands for sustainability.
Livestock/ dairy – tractability	Electronic ID (Read / Write access for farmers; Multi-species database; Tag and test schemes; Livestock data hub) all require the use of broadband provision for upload; download of information and for third parties (e.g. purchaser).
Livestock / dairy - monitoring systems	All require a good connection to be used to maximum effect and to monitor and control efficiencies and feedback initiatives.
Poultry - monitoring systems	These systems are complex and create a lot of data that needs to be uploaded and analysed.
Arable - in field sensors and GPS systems	Precision agriculture systems, combined with data analytics, enable farmers to improve the productivity of their operations. Farmers use this information to direct GPS-enabled tractors to plant and fertilize every inch of the field and avoid even the slightest overlap. This saves time, decreases the amount spent on seeds, inputs and fuel and reduces wear on the equipment.

NFU Cymru members' key message to the government from the 2018 survey

- Lack of access to digital technology is a major barrier to improving farm productivity
- Rural communities should have the same level of service and infrastructure as urban ones
- Rural businesses should be able to run as effectively as those in urban areas
- Access to a reliable mobile signal is paramount for farm safety and wellbeing

