



Game-changing digital connectivity for farms and businesses in rural Scotland

Capturing useful data is a vital part of modern farming, but too often it gets pushed down the day-to-day priority list. Through SmartRural, SAOS has initiated a nationwide project that will help farmers capture and access data to help them make better decisions and improve their business returns. We now want to hear from Scotland's farmers with ideas for different ways in which we can help you.

It's clear from our discussions with farmers and those associated more widely with the industry, that there is now a greater understanding that we need to change what we do and how we do it, and we need to do it quickly. The case for change has a number of critical drivers:

- **Climate emergency** – this is bringing greater pressure (informed or otherwise) from public and regulators, to change how we farm
- **Brexit uncertainty** - even if we ourselves have not investigated how resilient our businesses are, it is certain that the banks have a darkening view regarding farms as a 'risk' in their portfolio
- **Efficiency 'plateau'** - although increasingly embracing methods like precision agriculture, on average Scotland is still behind its competitors in terms of efficiency and, without action, will only slip further.

In response to these drivers, not only do we have to work differently, but we must also provide clear evidence that what we are doing is making a positive difference.

A common theme, to both the doing and the evidence, is gathering appropriate data (at this point we expect there to be a collective groan from readers). Gathering agricultural data has too often been an end-of-the-day chore, logging figures in a book, where they languish and possibly never get used, certainly not as effectively as they could be. But what if there was a way of automating how that data is gathered and having it turned into informed action for you?

Let's take a simple example:

If you want to understand your fixed cost allocation on a crop by crop basis, you need to make a note of which field you were working on, the time spent, fuel consumed etc. At the end of the day, do you have the time to do that? How much easier would it be if a device could be added to your vehicle that could do all of that for you? On top of that, what if you are able to share that data confidentially with other farmers working the same soil type/crop and find out if what you are doing is better or worse than average?

Through SmartRural, gathering data that helps you to improve your business is simple, even where conventional communication systems fail to reach.

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A Transformational Project Making Rural “Smart”

We know that conducting business in many rural areas continues to be held back by limited or non-existent digital connectivity. Through SmartRural’s new digital infrastructure, those living and working in rural areas could benefit from the digital innovations currently only available in cities.

SmartRural is a user-owned co-op, whose objective is to deliver connectivity across the entirety of rural Scotland, gathering data through a new telecoms infrastructure. As a co-op, the ownership, control and value of the data gathered are all retained by the farmer members who generate it.

The current pilot area is the Stonehaven basin (pictured above and right). The middle image shows a typical mast used to collect data from sensors performing various tasks at different locations around the farm. The bottom picture shows that ‘nowhere is too rural’ - SmartRural has developed a fully off-grid unit, capable of powering all forms of digital communications, even in the most remote locations.

In parallel with moving on the structural work, SmartRural has an equally important task that requires your involvement. We want to hear from you, the farmer, to decide how best to gather data that would really help you, without you having to worry about how to get that data from the field to your phone or PC.

SmartRural is currently engaging with a wide variety of the farming community to understand where the ‘pain points’ are. This could be as simple as measuring the level of liquid in a remote diesel tank or the status of a snare, or more complex issues such as irrigation optimisation or livestock health monitoring.

Whilst this activity is generating valuable feedback, we have only just scratched the surface with regard to possible uses, and we need more input to find other things, whether simple or not, that really drive you mad on farm. We’re asking for help through a really short survey to find ways in to help make your life simpler, and our efforts more effective.



Tell us how we could help you! Take our short survey by clicking on the link at **www.smartrural.coop**. The survey will take less than five minutes to complete and you could win two free places to the SAOS dinner in January with guest speaker, farmer comedian Jim Smith.



Working together to shape the future of farming and food.
For more information go to: **www.saos.coop** or call us on **0131 472 4100**