

Leveraging technology from horseback

These questions use the article called Leveraging technology from horseback from Country Wide – Winter 2025.

Questions.

1. How has good cell phone coverage helped the farming business adopt technology across the farm?
2. What key areas has the technology focus on?
3. What is the potential risk of over reliance on technology?
4. How has electronic identification (EID) of sheep helped improve their flock?
5. What specific improvements in livestock performance has EID technology enabled?
6. Why is collecting lifetime data on animals important for decision-making?
7. How does technology help them use water more efficiently and meet environmental rules?
8. What farm tasks are now easier or more efficient because of mobile technology and apps?
9. How has virtual fencing helped protect the Ahuriri River and adapt to flooding?
10. What are some extra benefits the farm has gained from using virtual fencing?
11. How do you think technology and internet connectivity helped Omarama Station future proof their farming business?

Answers

1. How has good cell phone coverage helped the farmers adopt technology across the farm?

Good cell phone coverage across Omarama Station has been the backbone for implementing various technologies. It allows real-time data transfer, remote monitoring, and instant communication with staff over their vast 12,000-hectare property. This connectivity supports tools like mobile apps, GPS tracking, irrigation control systems, and digital compliance tools.

2. What key areas has the technology focus on?

Technology at Omarama Station focused on three key areas:

- Livestock performance – using EID to track and improve animal productivity.
- Irrigation management – using sensors and weather data to water efficiently.
- Environmental compliance – monitoring soil, water, and animal movement to protect natural resources and meet regulations.

3. What is the potential risk of over-reliance on technology?

Over-reliance on technology can lead to farmers neglecting basic farming knowledge and observation. Richard Subtil warned that using tech like remote irrigation control is helpful, but if farmers don't still walk their paddocks and observe the land, they could miss important problems. There's also the risk of system failures, loss of skills, and dependence on strong connectivity.

4. How has electronic identification (EID) of sheep helped improve their flock?

EID tagging allows each sheep to be individually tracked for genetics, health, and productivity. This helps make informed breeding and culling decisions. The data helps identify top-performing animals and improves overall flock health and performance.

5. What specific improvements in livestock performance has EID technology enabled?

Thanks to EID and better management:

- Weaning percentages improved from 90% to 120%.
- Lamb weights increased from 16 kg to 19.5 kg.
- Ewes producing twins are now prioritised for better feeding, boosting survival and performance, while underperforming ones are removed.

6. Why is collecting lifetime data on animals important for decision-making?

Lifetime data helps farmers understand long-term trends in each animal's productivity and health. It supports:

- Better breeding choices.
- Smarter culling decisions.
- Targeted feeding and care for high-performing animals.
- This ensures the flock improves generation after generation.

7. How does technology help them use water more efficiently and meet environmental rules?

Omarama uses soil moisture sensors, lysimeters, and weather stations to irrigate only when needed. This results in 99% water use efficiency, meaning very little water leaches beyond the root zone. These tools provide evidence to regional authorities that they are not polluting groundwater, which helps them keep their irrigation consent.

8. What farm tasks are now easier or more efficient because of mobile technology and apps?

Mobile technology helps with:

- Electronic Animal Status Declaration (ASD) forms – sent directly from the yards.
- Mob tracking through apps like FarmIQ.
- Chemical inventory management using barcode scanning.
- Staff communication and scheduling.

These tools reduce paperwork and save time, allowing staff to focus on hands-on farm work.

9. How has virtual fencing helped protect the Ahuriri River and adapt to flooding?

Using eShepherd virtual fencing, cattle are kept out of the Ahuriri River without physical fences. The collars use GPS and sound cues to train cattle to stay in certain areas. In floods, they help move cattle to higher ground without needing new fences, protecting both the river and livestock.

10. What are some extra benefits the farm has gained from using virtual fencing?

Additional benefits include:

- Better pasture management by rotating cattle more precisely.
- Increased cattle numbers due to improved land use.

- Easier and faster mustering using GPS data.
- Reduced cost and maintenance compared to building physical fences, especially in flood-prone areas.

11. How do you think technology and internet connectivity helped Omarama Station future-proof their farming business?

Technology and connectivity have helped Omarama Station become more productive, efficient, meet stringent quality and sustainably standards. By using tools like EID, irrigation sensors, and virtual fencing, they've:

- Improved animal performance and farm profitability.
- Ensured their merino wool consistently meets icebreaker's specific standards.
- Met and stringent quality and sustainably standards, protecting water and soil.
- Adapted to climate challenges, such as flooding.
- Reduced admin work, saving time for more valuable tasks.
- Prepared the next generation to take over a modern, resilient farming operation.