



BAYLEYS

RURAL Insight

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THE EVOLVING BENEFITS OF CONNECTIVITY

New Zealand's high-speed broadband infrastructure can be held up as a national project that has linked up a country where communities, businesses and individuals are distanced by geography and journey times.

The fibre-based backbone of this superhighway has done much to substitute for the often less than ideal physical roading network that would otherwise be relied upon for business and leisure, particularly for rural communities. It has enabled farms to become more connected with the emerging 'internet of things' (IoT) technology and allowed rural-based businesses to thrive in ways never anticipated.

The Rural Broadband Initiative, first launched over a decade ago, is now hailed as a world-leading example.

Estimates from the Telecommunication Users Association of NZ (TUANZ) are that 85% of New Zealand enjoys high-speed, ultrafast broadband delivered through the fibre network, with only about 12% of users nationally having access to the less superior traditional broadband.

The annual Federated Farmers survey on rural connectivity conducted last August indicated about 60% of rural users are still experiencing traditional broadband speeds. Meanwhile, the remaining 3% of eligible households nationally are proving the toughest to resolve for connectivity and speed.

Some of the final solutions to improving connectivity for the country's more remote rural areas are being resolved through the Rural Connectivity Group (RCG) network. The RCG comprises the three telcos all contributing to 'one tower-one hill', where they share the tower and install their own equipment upon it.

This globally unique approach has now resulted in over 300 of these towers going live, delivering 4G coverage to some of the country's more remote districts and expanding the geographic coverage of that network from 49% to 62%.

With a final goal of 500 towers by next year, many rural communities and farms will be welcoming the opportunity to leverage off the connectivity, after years of being stymied by painstakingly slow speeds that make day-to-day tasks like online banking and livestock record keeping nearly impossible.

Those farms unable to benefit from the tower upgrades may also soon find wireless offers an opportunity, thanks to the recent \$47 million grant from government to improve connectivity, with wireless operators among the companies receiving funding.

TUANZ CEO Craig Young fully expects to see more customised, bespoke networks in rural areas evolve from this funding as local internet providers leverage their local knowledge and contacts to integrate wireless, fibre and cellular networks to catch the remaining users missing out on high-speed broadband to date.

Bayleys' National Rural Director, Nick Hawken, says this is pleasing to see as connectivity is a key enabler to improving productivity in the rural sector. It can provide better access to IoT, putting more control in the hands of rural producers.

In practice within the farm boundary, more farmers are looking at their own networks to improve the connectivity between boundaries, given that even at a cellular level only two-thirds of farms have 50%-100% coverage across the entire farm's area.

With IoT has come sensors and monitors for many aspects of farm operations that demand connectivity, even in the most remote parts, and advances in technology and local network designs are doing much to link that last step for the technology.

Better connectivity will preserve or even enhance a farm business' value. It will provide capability to better manage compliance demands for areas like water quality, emissions levels, and fertiliser placement, but more importantly provide access to real time information enabling better decision making. That should drive productivity gains and ideally add positively to the farm's bottom line.

Hawken says that a farm's connectivity and collection of data can provide a deeper insight to support a farming operations track record, which is integral to the sale process.

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“There is a bit more to fast and reliable internet connection than watching the latest Netflix series uninterrupted. Productivity gains obtained through better connectivity might not necessarily directly add value to farms and orchards, however, it can often be easier to justify value for a farming enterprise.”

IoT technology provides proof of placement, data and real time updates, which all help build a valuable management history of the farm's operations and add a layer of IP value to the intrinsic asset and earning capacity of that property.

Improved connectivity also adds to a farm business' appeal to prospective employees, where internet speeds are as valued as good road access at both a personal and professional level.

As wider stakeholders such as insurers and financiers respond to climate change legislation and demands to better understand the impact of global warming on their clients, better records and proof of compliance may also help ensure a farm property is a more bankable or insurable enterprise.

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