

## On Farm Connectivity: Water monitoring on remote NT station

## Description

## On Farm Connectivity Program case study: Remote water monitoring issue

The Northern Territory cattle station faced significant challenges in managing water resources across its vast 2.1 million-acre property. With reliance on numerous bores to supply water to their 14,000 organic rangeland cattle, the manual process of checking tank levels was both time-consuming and labour-intensive. The station's remote location exacerbated these challenges, as staff had to drive long distances to monitor and maintain the water supply, leading to inefficiencies and high operational costs.

Seasonal conditions further complicated water management, making it crucial to ensure that tanks did not run dry, which could have severe consequences for the cattle. The lack of reliable mobile coverage across 90 percent of the property meant that traditional communication methods were ineffective, hindering timely responses to any issues with the water supply. This situation highlighted the need for a more efficient and reliable system to monitor and manage water levels remotely.

The solution implemented on the Northern Territory cattle station was the installation of remote water monitoring technology to manage water levels across their extensive property. Recognising the inefficiencies and labour-intensive nature of manual bore runs, the station invested in 20 Agbot liquid monitors to remotely check tank water levels. Each tank is individually monitored via satellite connectivity, with set water levels triggering notifications if any tank drops below a predetermined point. This system ensures timely interventions and reduces the risk of cattle running out of water.

The decision to adopt this technology was significantly influenced by the Federal Government's On Farm Connectivity Program, which provided a 50 percent rebate on the cost of the sensor technology. The station utilised the grant to purchase and install their first 10 Agbot monitors and, impressed by the initial results, quickly acquired an additional 10 units under the same program. The grant effectively halved the investment cost, making the technology more accessible and accelerating its deployment across the property.

In addition to the water monitors, the station also integrated ZOLEO satellite communicators to maintain connectivity among their staff. Given that 90 percent of the property lacks mobile coverage, these communicators enable text messaging and other communications via satellite,



ensuring that the team remains connected and can respond promptly to any issues. This comprehensive approach to connectivity and monitoring has not only streamlined operations but also provided peace of mind, knowing that water levels are consistently maintained.

Overall, the implementation of Agbot monitors and satellite communicators has transformed water management on the station. The technology has reduced the need for frequent manual checks, saving thousands of kilometers in travel and significant labor costs. By receiving real-time alerts and being able to address issues promptly, the station has enhanced its operational efficiency and ensured a reliable water supply for their cattle, demonstrating the substantial benefits of integrating modern technology into traditional farming practices.

"The technology has proven simpler and more affordable than some older technology we had previously adopted through another provider."



## Category

1. Case Studies

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