

Moxey Farms

CASE STUDY

Property Snapshot

Moxey Farms is one of the largest dairies in Australia employing over 200 full time staff. The journey started in 1919 by the Moxey family in Richmond on 24 acres with 20 cows. In 1992, the family expanded the farm to Gooloogong, near Cowra in central west NSW, with milk production starting six years later. Today, Moxey Farms is home to a milking herd of 5500 cows.

Location: Gooloogong in the Lachlan Valley Central West NSW

Size: 4,750 ha

Enterprise: Dairy

"The requirements for removing paddock trees was that we had to put some set asides out throughout our farm which worked out really well because we could link up other corridors of our farming. There are plenty of paddock trees being set aside in areas that make sense for wildlife movements."

Josh Ziser, Head of Farm at Moxey Farms



Challenge

Moxey Farm is the largest single site dairy in Australia and is expanding its operations with a new centre pivot irrigation system and construction of a Bio-Digester that can support up to 8000 milking cows. Moxey Farms is investing over \$50 million dollars to support continued growth and innovation.

Removal of isolated existing paddock trees was necessary to install a new centre pivot irrigation system. Approval was provided through a Farm Plan Division 1 Certificate under the Farm Plan Code within the Land Management (Native Vegetation) Code. It enabled the removal of isolated paddock trees in exchange for set aside areas.

Fact file:

- 4,750 ha property supporting dairy operations.
- Currently operating with 11,000 head of cattle, incorporating 5,500 milking cows.
- Dairy operation is currently milking 5,500 cows producing 40 litres/cow/day.
- Annual milk production of 80 million litres or 220,000 litres produced per day.
- Feed requirements for the dairy operation include; 60,000 tonnes corn silage, 30,000 tonnes cereal silage and 20,000 tonnes of Lucerne silage.
- Moxey Farms is investing \$50 million to install 18 new centre pivot irrigators and a new Bio-Digester.
- Improved water and energy use as well as nutrient recycling on farm will deliver fodder security and a raft of environmental benefits.
- Removal of 1.4 hectares of isolated paddock trees will be offset with the establishment of an 11 hectare revegetation site.

CASE STUDY



Works undertaken

Installation of 18 new centre pivot irrigators has increased fodder security and safety for farm workers. The system has improved energy and water use efficiency for Moxey Farms while providing additional flexibility to adapt and manage different plant production systems as required.

To accommodate the new centre pivot system, 1.4 hectares of isolated paddock trees have been cleared. In return, 11 hectares of set aside areas are being established. The set aside areas will be actively managed to maintain vegetation integrity in perpetuity.

A Bio-Digester is also being constructed that will reduce local methane emissions and generate electricity and farm fertiliser from waste products.

On-ground Achievements

For Moxey Farms, a key driver of profitability is having control of home grown irrigated feed crops. Moxey Farms anticipates the investment will deliver an increase in dry matter available for feed as well as improving water use efficiency.

The pivot system increases production through better water distribution, scheduling and volume of irrigation.

By increasing fodder availability and security, Moxey Farms is able to continue growing the dairy herd.

Moxey Farms is committed to sustainable farming practices through investment in new technologies and environmental management like the Bio-Digester. The organisation is ISO accredited (AS/NZS ISO 14001:2015). The new Land Management (Native Vegetation) Code has enabled on site efficiencies allowing Moxey Farms to continue its environmental legacy in the region.

Benefits

Social

The new centre pivot irrigation system provides safer working conditions for staff.

Growth of the business through long term investment provides additional local and regional employment opportunities.

Economic

Moxey Farms is investing \$50 million to install 18 new centre pivot irrigators, construct a 3MW Bio-Digester and continue expanding the dairy herd.

Along with improved fodder security, it is expected Moxey Farms will see a return on investment of approximately \$400,000 per annum due to the installation of the centre pivot system.

Environmental

The centre pivot irrigation delivers improved efficiency in water and energy use.

The new Bio-Digester will facilitate the adaptive re-use of waste products for energy and fertiliser while reducing local methane emissions.

The establishment of 11 hectares of set aside areas with 6 native species will allow better connectivity of vegetation across the farm. This area will be managed for conservation in perpetuity.