

Submission to Department of Agriculture, Fisheries and Forestry on Agriculture and Land Sectoral Plan

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The WA Dairy Industry

The size and significance of the WA Dairy Industry can be seen in Figure 1 below.



Figure 1. The WA Dairy Industry 2022-2023. Source: Dairy Australia and Western Dairy.

In the last 20 years, the number of dairy farms has gone from 500 to 100. As can be seen in Figures 2 and 3, WA milk production has declined at a slower rate than the total WA dairy cow herd since 2000. This difference in rate of decline means an increase in the milk yield per cow, as shown in Figure 4. Furthermore, it can be argued that in WA the overall carbon intensity by cow and by state has decreased slightly due to these efficiency gains, although carbon intensity has not been measured directly for this whole period. There have been significant improvements in breeding for more efficient cows over time (Source, DA).

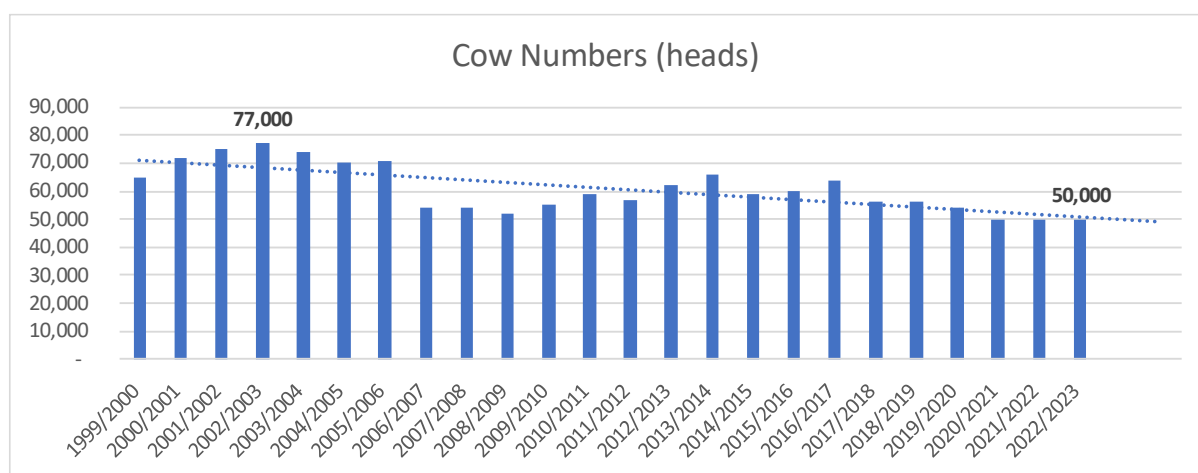


Figure 3. Dairy cow numbers in WA, by year since 2000. *Source, DA.*

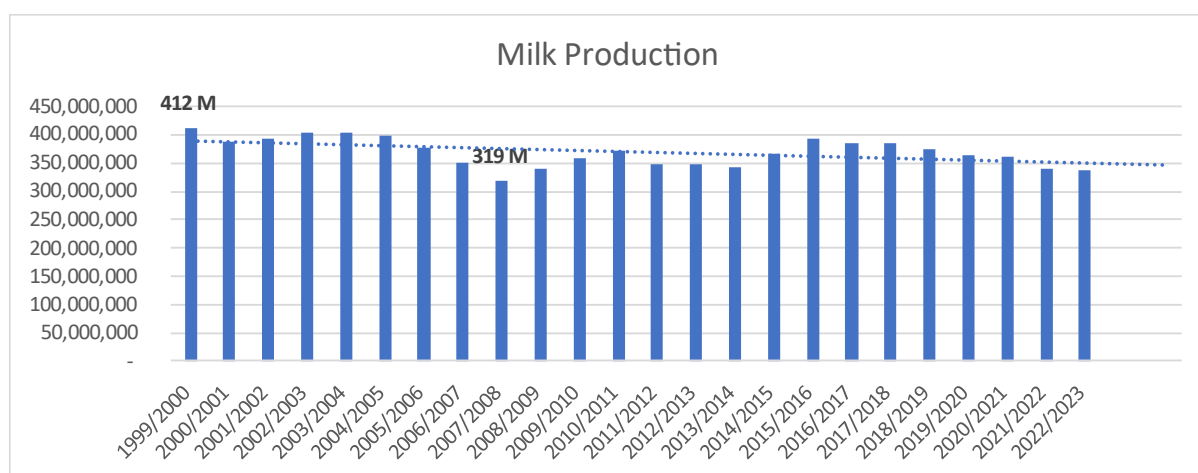


Figure 3. Milk production in WA, by year since 2000. *Source, DA.*

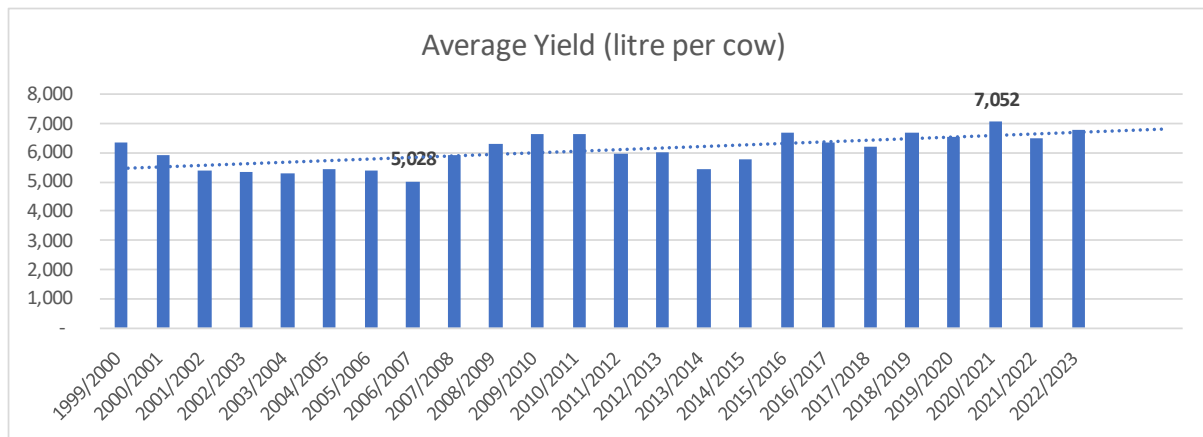


Figure 4. Average yield per cow (L) in WA, by year since 2000. *Source, DA.*

A Just Transition

Dairy farming will be one of the most impacted sectors: climate change impacts on productivity could be severe, therefore we need to focus not just on emissions reduction but on adaptation and resilience. If we can reduce emissions and increase resilience at the same time, then that will be a win. [REDACTED] wants to see a 'Just Transition'. **The government needs to ensure that the transition to a low carbon economy leaves no WA dairy farmers behind, and all dairy farmers can access adequate support through well-funded programs.**

A Sustainable Transition

It is important that emission reduction occurs within a sustainability framework. Our WA dairy industry supports, and is supported by, the Australian Dairy Sustainability Framework which seeks to achieve sustainability across four aspects: enhanced economic viability and livelihoods; improved wellbeing of people; best care for animals; and reduced environmental impact. It is not sustainable, by definition, to achieve emission reduction by trading off other aspects of sustainability. **Therefore, emission reduction programs should seek wins across all four aspects.**

A WA Based Dairy Industry

Food security is a key purpose of agriculture. The WA dairy industry produces affordable and nutritious food for our state. WA's food security is enhanced because dairy farmers produce almost all the fresh white milk consumed here. Furthermore, local production of milk means low food miles, fewer transport emissions, and greater contribution to rural economies and communities. **A flourishing WA based dairy industry must remain a key consideration in the development of any emission reduction programs.**

Emission Reduction in the WA Dairy Industry

In the dairy industry, there are increasing supply chain, banking and insurance pressures to reduce emissions on farm, and/or to report on scope 3 emissions, which for milk processors means farm emissions. However, as is well known, agricultural emissions are hard to abate and net zero may be challenging to achieve rapidly in the dairy sector without some offsetting. For example, dairy cows' enteric methane creates 60% of dairy farm emissions. Even with breeding, vaccines and feed additives we are unlikely to get methane production down to zero in the near future.

Nevertheless, the WA dairy industry (WAFarmers, Western Dairy, Dairy Australia, WA government and processors combined) has a pilot program in place to be the first Australian state with all of its farms having completed carbon baselines, with a view to monitoring emissions reduction. Lessons learned from the WA program could be applied to other Australian states.

The federal government needs to ensure the various carbon calculators are coordinated so we do not have the NZ situation where there are many different calculators available creating confusion and incompatibility.

Questions have also been raised as to whether carbon footprints are being measured correctly for high producing dairy farms where atmospheric carbon is fixed in the growing of rye grass.

Opportunities for Emission Reduction in the WA Dairy Industry

Continuous support for efficiency gains in dairy production systems helps reduce our carbon footprint. It is important to make this measurement per unit of production, that is carbon intensity, rather than in total. Dairy businesses rely on digital technology for monitoring pastures, irrigation systems, cow health and an increasing number of other features. These technologies drive efficiencies in production and support a sustainable dairy industry. Increasingly, smart technology will be needed for increased efficiencies and reduced emissions. Internet-enabled digital agriculture is a high priority. Cloud-based platforms and mobile applications require connectivity in-paddock as well as at home. **Universal access to telecommunications is essential to modern low-emission dairy farming. WA's dairy farmers need the federal government's *Better Connectivity for Rural and Regional Australia Plan* to be fast tracked.**

Other opportunities for emission reduction for WA dairy farmers include: improved low emissions livestock genetics, longer-lived cows, smart fertiliser use, home grown feed, increased soil carbon sequestration, energy efficiency, renewable energy plus batteries, methane vaccines and feed additives. In WA, many of these practices are already in place, such as pasture rotation. However, **we urgently need rapid research, commercialisation and greater cost-effectiveness in all these areas.**

Support Required

Dairy farmers need more support for extension. Some of the required changes need one-on-one support for farmers, at least initially. For example, for dairy farmers, calculating farm carbon baseline can be tricky regardless of the calculator. They need help knowing what it means and how it identifies opportunities. **Dairy farmers need ongoing help rolling out carbon baselining and emission reduction tools.**

Dairy farmers need better skilled tradespeople to support farmers to make the change, for example plumbers who know about heat pumps and electricians who can design and optimise solar installation etc.

The ERF scheme is unlikely to ever suit all farms, especially smaller farms. It has high transaction costs (audits), a very significant administrative burden, and high risk. The federal government needs to ensure a range of incentive programs so that all WA dairy farmers can participate in a program that suits them, including subsidies, tax incentives and grants. Dairy farmers will likely need to keep carbon credits they generate to offset against their own emissions.

Summary of Recommendations

- Ensure that the transition to a low carbon economy leaves no WA dairy farmers behind, and all dairy farmers can access adequate support through well-funded programs.
- Recognise that a flourishing WA-based dairy industry eliminates food-miles associated with importing milk, and is therefore a key to reducing emissions in this state.
- Ensure emission reduction programs do not create trade-offs against other aspects of sustainability; ideally they should create wins across all four aspects of dairy industry sustainability.
- Ensure consistency among carbon calculators.
- Ensure universal access to telecommunications to enable modern low-emission dairy farming. Fast-track the federal government's *Better Connectivity for Rural and Regional Australia Plan*.
- Urgently commercialise cost-effective emission-reduction tools and technologies, providing part-funding for these tools and technologies in the early stages.
- Provide one-on-one support to dairy farmers by creditable, reliable experts for rolling out technologies and tools on-farm.
- Ensure better availability of tradespeople and technicians with relevant skills.

