**Submission No 1**

# INQUIRY INTO SUSTAINABILITY OF THE DAIRY INDUSTRY IN NEW SOUTH WALES

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**A brief Response to the Senate Committee Regarding the Pricing of Milk from Dairy Farms: Inquiry into the sustainability of the dairy industry in New South Wales**

**Personal Background**

1. I have a long-standing interest and publications on the profitability of dairy production. I consult to farmers and corporations nationally and internationally and am a graduate veterinarian. I am a past president of the Australian Association of Cattle Veterinarians and the Cattle Chapter of the Australian College of Veterinary Scientists and been on boards including the Australian Veterinary Association, Dairy NSW and Dairy Connect. I have been on faculty at Universities of California and the University of Sydney and completed my PhD in 1990 at University of California in with majors in Nutrition and Epidemiology. In 2012, I received a DVSc from the University for excellence in published works. I am a registered specialist in Medicine and Management of Cattle, have over 200 scientific articles in international scientific journals and am an Adjunct Professor in Veterinary Science with the University of Sydney. I have acted on the scientific boards of three international companies and was awarded in 2009 the Gilruth Prize, the Australian veterinary professions highest honour, the Australian Dairy Science award in 2010 and in 2018 the American Dairy Science American Feed Industry Award for excellence in published research over the past 10 years. In the context of this submission, I have published for more than 30 years on aspects of dairy economics.

2. I apologize for the brief nature of this response. It reflects the very limited time available to prepare this document. Similarly, I have not had sufficient opportunity to thoroughly reference this document.

3. I have not solely focussed on NSW as the problems with the industry are, in substantive part, national and quality data are often lacking for NSW alone.

**Industry Background and the nature of, and relationship within, the value chain between farmers, processors, logistics companies and retailers and their respective influence on price;**

4. The price paid for dairy products reflects two distinct market entities – the internal market for dairy products (milk, yoghurts, flavoured milk products etc) and the external or export market dominated by sale of milk powders, butter and cheese.

5. Milk for the internal market is ideally of highest quality; changes in the organoleptic qualities influence product quality and consumer acceptance. The vast majority of milk in NSW is produced for internal consumption and can be considered to be generally of very high quality.

6. Dairy farmers that provide a more even, ie less seasonal, calving pattern (ie that have cows calving in batches or small groups throughout the year, are more capable of producing milk that fits these needs. Inevitably, these producers feed grains, byproducts and conserved grass (either hay or silage) because grass growth is seasonal, even with the use of irrigation.

7. The costs of producing milk all year round are higher in cents per litre or kilogram of milk solids (fat and protein) than a strictly seasonal pattern. The latter does not ensure, though, that such producers are less profitable, as these often produce more milk than seasonal suppliers. It does ensure that they need a higher underlying price for milk than seasonal suppliers to remain profitable.

8. The price received for milk by processors for the external market is, in general, much less predictable than for the internal market as the major products sold are sold largely as commodities on the corrupted, that is subsidized, international market. Therefore, market signals do not, necessarily, reflect the costs of production of product.

9. It is important to recognize that despite the best efforts of Australia to produce 'an even playing field' for international markets, we have not succeeded over a period of 30 years. Therefore, there is no protection for producers in regards to the value of export product against subsidized milk / milk product production. Major economies that continue to subsidize milk production include the EU, USA and Canada and these, especially the EU with whom we regularly compete for international markets, are unlikely to change policy.

10. In a series of presentations (Lean 1996, 1997, 1999) it was noted that there was a convergence of input costs for dairy production world-wide ie that grain, fertiliser, seed and other major costs were now similar among countries.

11. The corollary of the convergence in costs of inputs and competition against subsidized markets is, if milk is priced at export pricing our farmers will be vastly disadvantaged. This is the case.

12. Australia has a highly concentrated internal market for agricultural products. Coles and Woolworths have an approximately 80% market share. This concentration of purchasing power has been used to reduce returns to farmers (In an Interview of Roger Corbett, Woolworths reported in the Australian newspaper (March 3, 2003), Corbett noted that he had transferred $500 million per annum of income from dairy farmers in Australia to

Woolworths; This interview was subsequent to deregulation of the milk market and following the establishment of the Woolworths home brand milk and the $1 per litre milk initiative of Coles.

13. In my view, this unique oligoscopy of Supermarket ownership results in a disproportionate position in regard to negotiation for supply of milk. In the US and UK there is a far more diverse internal market for whole milk. The problems of the disproportionate power of the supermarkets is recognized in the ACCC report (2017).

14. The ACCC (2017) to the Senate noted, 'For domestic dairy supply, supermarkets have superior bargaining power in negotiations with processors. Supermarkets use their bargaining power with processors to maintain their margins, despite lowering retail prices. This is particularly evident in relation to private label milk, where wholesale prices have been approaching average costs of production.' Simply, the disparity in negotiating power has resulted in lower returns to farms.

15. It is notable that all major milk companies have changed hands or structure in the last 10-15 years with the demise of Australian owned co-operatives and a marked lack of Australian ownership of the processing sector. While Bega (now publicly listed), Norco (co-operative) are still in Australian hands, Saputo, Lion, Fonterra and Parmalat, representing the vast majority of milk control are foreign owned.

16. The implications of this foreign ownership are tangible – the former Fonterra's CEO, Theo Speirings defended the price cut to Australian dairy farmers in 2016 on the grounds that their strategy is to repatriate profit for the benefit of their New Zealand shareholders. This statement overlooked that the majority that of tradeable shares are held by Australian superannuation funds and that Fonterra's Australian suppliers had to be subsidising their New Zealand counterparts. How else could a 30% increase in farm gate price in New Zealand be explained? (Lochart et al., The Conversation May 23 2016 http://theconversation.com/murray-goulburn-and-fonterra-are-playing-chicken-with-dairy-farmers-59595).

17. There has also been a reduction in the number of large milk companies. This limits the number of companies to which farmers can supply. The relatively low number of potential buyers places dairy farmers at a very substantial disadvantage in negotiation and this is regionally very evident in NSW.

18. The ACCC (2107) highlighted the inappropriate negotiation between farmers (which I can attest to) and milk companies leading to a recommendation for establishment of a mandatory code of conduct.

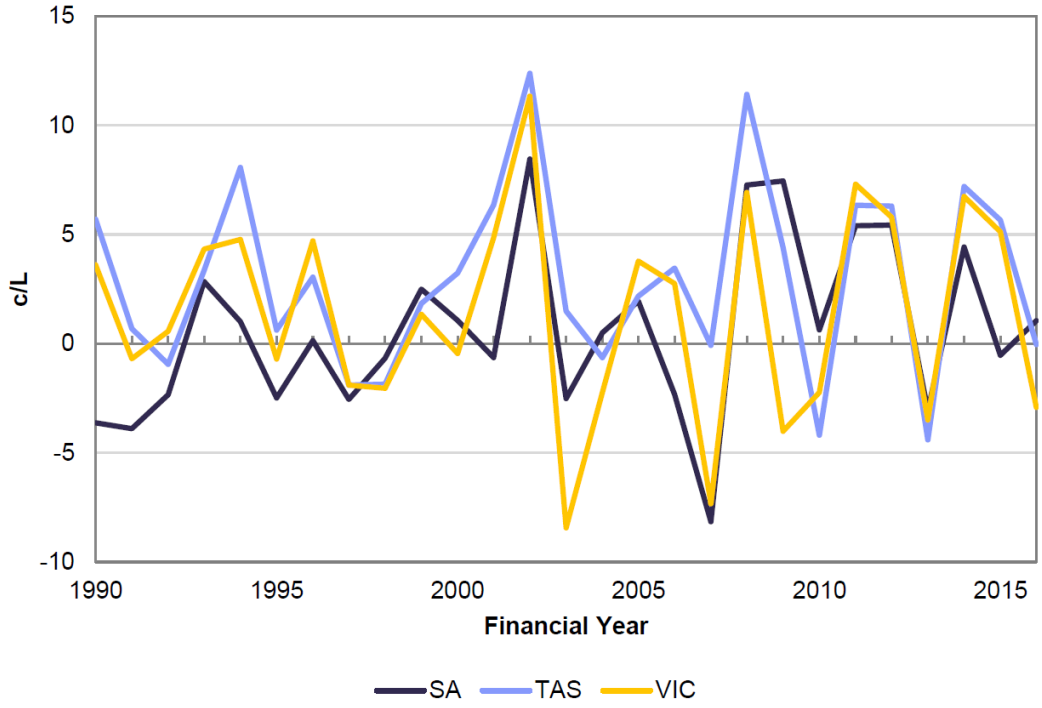
19. Milk prices have regularly dropped well below the average costs of production in most markets in Australia during the last 10 years and have been subject to a number of State Government enquiries and Federal Senate enquiries.

20. These parliamentary enquiries have been characterised by a lack of tangible outcomes. In my view, that outcome is unsurprising as the prevailing paradigm has been that 'markets will fix this'. Clearly as evident in this document, the markets have not fixed this. The situation with regards to the milk industry is now parlous, particularly in regard to human resources and capital and consequently potential to rejuvenate (with rare, but notable, exceptions).

**Outcomes**

21. All States have lost cows (~25%), farms (~50%), and volume of milk (~17%), since 2000. There have been droughts, corporate collapses and inter-generational change that is yet to fully express. There are regional differences with the particular collapse of Qld milk with only 25% of farms and 50% of the cows. Farms, however, are much larger and many are more professional in their approach to the business.

22. The following Figure 1 from the ABARE analysis (2017) report absolutely clearly explains the problem that farmers are facing. While the results are focussed on the Southern States, a similar chart would be relevant to NSW, but more complex to create.




Source: ABARES data, ACCC analysis

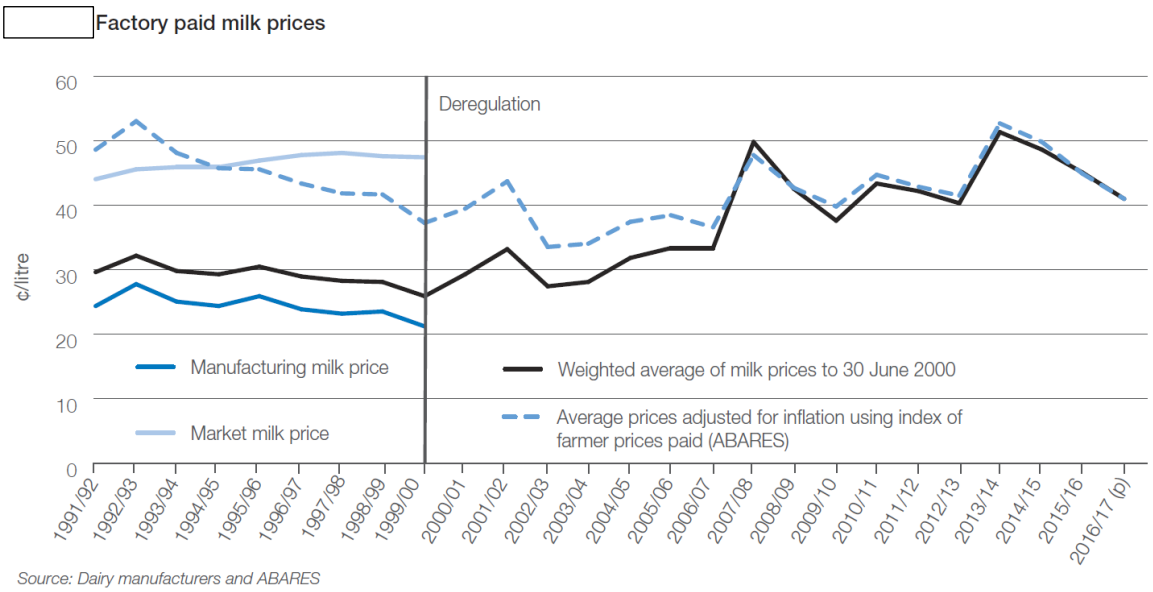
Figure 1. Volatility in farm profits over time South Australia, Tasmania and Victoria in real terms (2016 dollars). From Anon (2017).

23. The simple message from Figure 1 is profound. Farmers returns from 1990 are essentially zero and are markedly volatile.

24. The implication of Figure 1 is that investment and adoption of new technology will and has stalled. With aging facilities (now common in NSW) and an inability/ unwillingness to risk

innovation, the industry will be less efficient. Simply milk prices received by NSW producers have not recovered to those received before deregulation and do not even slightly approach those received over 20 years ago in real dollar terms. The following Figure 2 shows this.

Figure 2. Factory paid milk prices over time Anon (2017).



Source: Dairy manufacturers and ABARES

25. The overall situation is highlighted using data (Lean 1987), that reported levels of equity for producers in 1983. Producers in all States except Victoria were >90% equity, that were ~88% and <10% had 68%. Currently, with **only approximately 33 % of farms remaining**, the Victorian dairies involved in the Dairy Farm Monitor have less than 66% equity on average (Dairy Farm Monitor 2017).

**Key Points**

26. The combination of limited numbers of processors competing for milk and concentration of buying power in Coles and Woolworths places Australian dairy producers in an extremely disadvantaged position.

27. There is no equity of scale of enterprise in the negotiations on milk pricing between dairy farmers and milk processors.

28. The economic cycles that determine supply and demand reflect international production pressures and a corrupted international market. While the long-term trends for milk production, and probably price, are positive, (based on future Asian demand), these will remain volatile and determine export pricing. The export prices, in turn, are used, to a large degree, to determine internal pricing by dairy companies and supermarkets.

29. Prices for milk, therefore, do not reflect costs of production which are determined by natural cycles (weather), the biological constraints of cattle and costs of key inputs (fertilisers, other feeds and labour).

30. The biological cycle of cattle is i) annual – reflecting the average lactation length of a cows (approximately 305 days) and a need for the cow to rest before calving again (dry period, approximately 60 days) ii) Approximately, tri-annual, a period reflecting the time between getting a cow pregnant and that calf entering the herd as a calving cow.

31. Decisions to increase production by increasing stocking numbers require, therefore, either considerable investment and biological risk (disease introduction) from purchase of cattle, or extended periods of investment in growing cattle before these enter the herds.

32. Therefore, farmers deciding to respond to positive signals sent by dairy companies who encourage them to produce, face significant risks – i) invest in extra cattle, incurring debt or expending capital, and risk of disease entry, or ii) increase inventory ie grow more heifer calves, thereby incurring increased costs on the basis of future potential returns from an expanded enterprise.

33. A lack of knowledge of future markets makes these decisions, inherently much more risky (see Figure 1). Given, that the value of milk has dropped, regularly in recent years, well below costs of production.

34. In 1996-9, a series of presentations was made on economics of the Australian Dairy Industry looking at the effects of globalization and deregulation (Lean 1996, Lean 1997, Lean 1999). Input and output costs were compared across a number of the world dairy industries and the conclusions were that farms would continue to intensify, that there would be fewer farms and that favoured farms with superior natural attributes ie rainfall, water access, soils would be favoured. Perhaps the more controversial findings were in regard to costs and earnings equilibrating world-wide and positing the question whether labour costs would be a key determinant of viability; and did this proscribe rural poverty? It is still pertinent to ask this question given the recent history, lack of negotiating power for farmers and decline in numbers of agricultural enterprises. Simply, returns to farmers in dairy, beef and other commodities have been poor.

35. Without substantial changes in government policy, that is to plan for a farming future, the outcome of increasing rural poverty may continue and ultimately result in much higher food costs to the consumer as productivity continues to decline.

**Matters particularly pertaining to drought, water, energy and price setting**

36. Drought acts to amplify and highlight the effects of the limited capacity for farmers to negotiate a price for milk that is sustainable.

37. Recently prices of fodder and grain have increased by 100%. There has only been rare increases in the value of milk (eg Norco granted a 5c per litre increase). Given that the costs of feed represent approximately 45% of variable costs of farming, it is evident that many farms will produce milk at a loss in the coming year.

38. Without a sustainable income, key vulnerabilities arise especially in drought i) animals are at greater risk of mismanagement and undernutrition ii) soil and land degradation are at greater risk iii) mental health problems among farmers and advisors are likely to increase iv) opportunities to rejuvenate the industry with new entrants decrease.

39. Looking forward, there are two major influences that will shape our industry.

**Increased demand for animal protein**

40. There are increasing demands for animal protein in emerging nations and increasing affluence in Asia suggest that we will require 100% more food for the planet than is currently produced by 2050. A more sanguine assessment by DEFRA in the UK (DEFRA 2010) suggests that a 70% increase in food production is required, based on gains in post-harvest efficiency and using some different assumptions to the Food Agriculture Organisation of the United Nations (FAO). Several workers have noted the potential for geopolitical instability resulting from food shortages. Notwithstanding differences in estimates of the amount of food that will be required in the future, we can be confident that the increases in production will not be achieved by increasing the area of land set aside for food production. The Beddington report (2011) noted that more land will be lost to urban encroachment, salinity, desertification and sea level rise in the future. The highly fertile San Joaquin Valley of California, for example, has lost 21% of the available arable land to housing since peak land availability in 1986 (Anon 2011).

41. There are also challenges in regard to water (we see the impacts of competing demands for environment and people in Australia), energy supply and phosphorus and potassium supplies for food production. In Australia we are seeing increased loss of dairy land to urbanisation and 'tree and sea change' along the coastal valleys of NSW where dairy has been based.

**Adverse climate change**

42. Should climate changes be adverse, the challenges of meeting increased global demand for food will rise markedly. The planning horizon needs to be at least 20 years to allow new enterprise development and old enterprise rejuvenation and to attract and develop skilled workers and leaders. We are already in need, therefore, of urgent planning to meet increased internal and external demand.

**Impact of deregulation**

43. I have estimated the combined effects of deregulation, occurring in two major waves to be a loss in income to Australian farmers to be approximately $A1.2 Billion per annum, based on Roger Corbett's statements referenced above (In an Interview of Roger Corbett, Woolworths

reported in the Australian newspaper (March 3, 2003) and adjusting this for 17 years of inflation, coupled with a further approximately ($500 million) per annum loss through the $1 per litre milk initiative. This amount relates to about a $0.10 c/L loss, a figure completely consistent with the lack of increase in milk returns in real $ terms over the 20 year period.

44. The transfer in milk value has benefitted the supermarkets (as stated by Corbett) and the consumer.

**Suggestions for Government to help rejuvenate NSW dairy production**

1. Accept that the market is not a plan. There is a need to plan for Australia's agricultural future, including that of dairy.

2. Support the development of the mandatory code for negotiation between processors and the dairy farmers (This is Federal legislation).

3. Allow for parity in negotiation – large farmer groups that will have sufficient milk under control are essential to provide some degree of parity.

4. Terms of negotiation need to ensure that there is sufficient lag time for fair negotiation, as some processors have used unreasonable pressure through allowing farms to run out of contract before negotiating.

5. Australia has approximately 70% internal consumption of milk and export markets are corrupt and risky. Allowing the price of milk to be subject to market forces considerably influenced by export markets has not worked, as indicated by profound losses of farms, cows and milk production and minimal profit or loss (Figure 1).

6. Therefore, allow farmers who are supplying milk for internal supply, that is inherently more expensive to supply, to negotiate milk pricing based on being priced above or, minimally, equal to the **cost of production** of milk produced by export milk producers on an annual basis. If external markets drop below costs of production for a prolonged period, the more expensively produced internal market is buffered, allowing NSW/ Australia to maintain a basal level of milk production to meet internal needs. This may require legislation.

7. The suggestion presented in (6), maintains an effect of exposing producers to international market pressures, but recognizes the challenges of producing milk of higher quality and the value of maintaining a dairy industry. It also recognises the disparity in negotiating power between the dairy farmers and milk companies. Further, it recognizes that milk prices in the supermarket are not closely linked to fluctuations in farm gate pricing.

8. Protection for the milk processors in negotiation with the Supermarkets will need to be considered, as a flow on effect of (6). Otherwise, companies largely collecting milk for export could use the lower price of milk for export to gain supermarket share.

9. Inherent to this is a need for a control of supermarket power in negotiation with manufacturers. With only two major outlets, the pressure is extreme on milk and milk product manufacturers to capture the Coles and/ or Woolworths markets, leading to a lowering of price that is then applied to the farmers. I trust that others with an intimate knowledge of this problem will tender evidence (the ACCC 2017 report could be used), however, one example is the Murray Goulburn and Coles tender.

10. Establish a rolling average system of milk pricing to reduce spiking in the market, either up or down. While this will reduce potential for 'windfall profit', this is difficult to achieve in dairy systems due to the underlying biology (see above). More importantly, it may act to reduce the effect of profound drops in milk value observed over the last 20 years. Again, this suggestion will need to be related to protection for the milk processors involved in their positioning as largely 'internal suppliers of milk products', rather than whole milk suppliers.

11. A small increase in whole milk (c/L) perhaps of 10c/L on all milk and similar effects on cheese and other product pricing (c/Kg) would have profound benefits for producers and little effect on consumers or supermarkets.

**Unique attributes of NSW that need recognition in planning**

12. Given that the coastal and peri-urban areas where dairy farming once dominated are under pressure, identifying new dairy regions or rejuvenating old areas eg the Hunter Valley should become a priority. Given that there is a deficit in milk production in NSW and Qld compared to consumption, it appears logical to address this. This initiative may require government support and regional planning. It certainly requires high-level advisory input.

13. The climate in NSW differs to the Southern States and there is a need for research and innovation directed towards this as recognized by the industry (CIAG 2016). There are a raft of differences including heat stress, differences in pasture species, insect bourne diseases all of which need addressing in a NSW context.

14. There has been very substantial loss of academic resource for the industry. For example, the University of Sydney had 13 staff dedicated to dairy research in 1997/8; it now has one. There is an urgent need to rejuvenate this group and others – a targeted grant to re-initiate research in this State, involving the Camden research hub, is needed to compete with Victorian and Tasmanian government grants that have secured dairy research (of limited relevance to NSW) to those States.

15. Continued support is required for Biosecurity – the EMAI Laboratory in Camden. This is unique in Australia in delivering high-quality, industry focussed support to the dairy industry in NSW. The situation in regard to Biosecurity is parlous in many Australian States and this facility is critically important not just to NSW.

**Final Perspectives**

16. I have been fortunate to be involved in dairy farms in most of the leading dairy regions of the world. In my view, NSW is one of the more uniquely favoured regions for dairy production, being similarly, or better placed than Victoria in this regard. However, the aged infra-structure on many farms has placed NSW producers at a disadvantage. This gap has closed over time with many Victorian farms reaching a similarly impaired position. There is a promising future if we plan, but this requires some certainty in regards to markets. The history of milk price crashes and climate challenge as exemplified in Figure 1 needs to be overcome to provide certainty for internal supply, let alone export and the increased demand over the next 15 to 30 years.

17. Planning towards a dairy/ agricultural future to meet the growth in demand within Australia, and critically for export, is now needed. This will require a change in policy settings at the State and Federal level to ensure greater equity in negotiation to allow more income to flow to milk producers. It will also require a detailed understanding of the dairy industry from a northern perspective as this differs from that expressed in the Southern States.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