Initial Submission
to the

Productivity Commission
Study on Market mechanisms for
Recovering Water in the Murray-Darling Basin

By

Australian Dairy Industry Council & Dairy Australia

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Recovering Water in the MDB
Productivity Commission
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To the Recovering Water in the MDB Inquiry,

Australian Dairy Industry Council and Dairy Australia initial submission on Market Mechanisms for Recovering Water in the Murray-Darling Basin

On behalf of the Australian Dairy Industry Council (ADIC) I welcome this opportunity to participate in the Productivity Commission study into market mechanisms for recovering water in the Murray-Darling Basin.

As the national policy body of the Australian dairy industry, ADIC represents the interests of Australian dairy farm families and businesses, dairy manufacturers and traders across all states and territories.

We are pleased to provide a dairy industry perspective on the recovery of water in the Murray-Darling Basin. As an industry vulnerable to drought, the dairy industry has endured considerable hardship over the last decade and continues to meet domestic and international dairy food supply needs against the challenges of continued drought. With a history of supportive relationships and adaptation to change, the industry has responded to support its members through drought and begin planning for the future, with significant innovation occurring in water management and feeding strategies.

This submission should be read as an adjunct to the NFF submission, outlining some of the specific issues, impacts and ramifications in the dairy industry. ADIC believes a comprehensive communication plan to inform industry members of the changes, implications and opportunities is a vital part of any implementation process.

We would welcome the opportunity to contribute further should the opportunity arise.

Yours sincerely,

Wes Judd
Chairman

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1. EXECUTIVE SUMMARY

- Dairy farming is the second largest irrigated water user in the Murray-Darling Basin (MDB) accounting for 1,287 GL in 2005-06, ranking behind cotton as the major agricultural water user and on a par with rice and pasture for livestock (excluding dairy). Irrigated dairying in the MDB accounts for 68% of water used by dairying in Australia, with the majority of water for dairy farming used in the MDB used in Victoria (82%).
- 276,000 hectares of pasture for dairy farming, including irrigated pasture for grazing, fodder and seed, was irrigated in the MDB in 2005-06. This accounted for 39% of the total irrigated area of pasture in the MDB. The majority of this area was in Victoria (226,000 hectares or 82%), with 14% in NSW, 3% in SA and 1% in Queensland.
- The highest Gross Value of Irrigated Agricultural Production (GVIAP) in the MDB in 2005-06 was generated from dairy farming ($938 million), which represented 20% of the MDB's GVIAP.
- 52% of the GVIAP from dairy farming in Australia is generated in the Murray Darling Basin.
- The dairy industry considers that a single market mechanism can not effectively adjust to deliver the variety of responses needed to deliver improved health for all of the Basin's rivers, wetlands and floodplains.
- The industry favours a mix of both market mechanisms and water products to appropriately meet environmental needs. Any mechanism adopted should draw only on willing sellers, represent true value for money (taking into account the cost of infrastructure and land use productivity), protect regional communities and deliver genuine environmental improvements.
- ADIC and DA seeks further clarity from Government about the future operation of the water market and how the impacts on dairy farmers (and all irrigators) will be addressed.

ADIC supports Government measures to restore the balance between consumptive water use and water required to maintain river, wetland and floodplain health, provided:

- Individual property rights for land and water are respected by any water recovery mechanisms considered or adopted;
- An open and efficient water trading market is achieved, with the reduction or removal of artificial barriers to trade, and timely and transparent market information;
- There is coordination between buyback programs and infrastructure reform programs;
- Scientific evidence underpins the quantification of environmental needs and the consequent acquisition of water; and
- The human dimensions of water reform are considered, with community and stakeholder engagement inherent in the process.

ADIC seeks the opportunity to be further involved in the consultative process to develop the policies and programs that will guide water allocations, buybacks and markets in the Basin, noting the intrinsic impact this will have on the regions dairy farmers.

2. INTRODUCTION

The **Australian Dairy Industry Council** (ADIC) welcomes the opportunity to provide a submission on behalf of the whole dairy industry supply chain and research and development corporation to the Productivity Commission (PC) Issues paper on *Market Mechanisms for Recovering Water in the Murray-Darling Basin*.

- ADIC is the peak industry organisation where dairy farmers and dairy companies come together to agree whole of industry policy. ADIC comprises Australian Dairy Farmers Limited (ADF) and the Australian Dairy Products Federation Inc. (ADPF) which are the peak policy bodies for Australian dairy farmers and dairy companies, respectively. Policy agreed through the ADIC is used to represent and advocate the interests of all sectors of the dairy industry to state, national and international Governments and organisations.
- **Australian Dairy Farmers Limited** (ADF) is the peak industry body of Australia's dairy farmers constituted from the six state dairy farmer organisations (NSW Farmers' Association Dairy Committee, Queensland Dairyfarmers Organisation, United Dairyfarmers of Victoria, Tasmanian Farmers & Graziers Association Dairy Council, South Australian Dairyfarmers' Association and Western Australian Farmers Federation Dairy Section). ADF's primary purpose is to represent the interests of dairy farming families and is the long established voice of Australian dairy farmers.
- **Australian Dairy Products Federation Inc**. (ADPF) is the peak policy body for the post-farmgate sector of the Australian dairy industry and is open to entities operating in Australia that are engaged in the manufacture, marketing or trading of dairy products and/or dairy related products. It currently has 26 member companies that account for 90% of all milk processed in Australia.

ADF has contributed as a member to the development of the submission by the National Farmers Federation (NFF). ADIC supports the key principles of the NFF submission and asks that this submission be read as a dairy industry-specific submission to add to the views expressed via the NFF.

ADIC acknowledges the support of Dairy Australia in the preparation of this submission.

Dairy Australia (DA) is the dairy industry's national service company, owned by the industry and whose members are farmers and industry bodies. All Dairy Service Levy payers can become members. Limited by guarantee, the Company is governed by a Board of nine Directors chosen by its members. Dairy Australia's nationwide and international activities are directed from its Melbourne office. Since 1 July 2003, the Company has invested on average $50 million of dairy farmer levy payments and taxpayer funds into projects and services for the benefit of the Australian dairy industry.

Dairy Australia is committed to helping the dairy industry to be collaborative, innovative, sustainable and competitive against both international dairy industries and substitute products. The Company undertakes industry-level activities where a collective approach delivers more effective and valuable commercial and social outcomes than action taken by individual members. This collective approach also generates synergies and savings through cost economies and the effective capture and sharing of knowledge.

3. BACKGROUND

a. The dairy industry

Internationally competitive with its product in high demand, the dairy industry is the largest decentralised industry in Australia with processing and value-adding done within Australia rather than being exported in raw form. The industry consists of over 8000 producers, nationally employing about 40,000 people directly and 60,000 indirectly, with billions of dollars invested in on-farm assets.

The Australian dairy industry was projected to produce 9.1 billion litres in 2007/08, down 5% on the previous year. In 2006-07, dairy was the third most important agricultural industry with a farmgate value of $3.2 billion and domestic retail sales valued at over $4 billion. Over 50% was exported

after processing with an export value of $2.5 billion making dairy the fifth largest agricultural export industry.

b. Water, drought and the dairy industry

Irrigation water is a key resource used by the industry with approximately 52% of the national milk production coming from irrigation farms, and 36% from farms with more than 20% of land irrigated (Dairy Situation and Outlook report 2006).

The dairy industry is the single largest irrigated agricultural industry in Australia, accounting for 16% of agricultural water consumption (or 1,893 GL) in 2005-06. Pasture for other livestock has a higher aggregated water consumption figures, but this is spread across several agricultural industries.

Water is used by dairy farmers for irrigating pastures for grazing, fodder conservation and seed production, stock water and dairy shed cleaning and hygiene.

Murray-Darling Basin

Dairy farming is the second largest irrigated water user in the Murray-Darling Basin (MDB) accounting for 1,287 GL in 2005-06, ranking behind cotton as the major agricultural water user and on a par with rice and pasture for livestock (excluding dairy). Irrigated dairying in the MDB accounts for 68% of water used by dairying in Australia, with the majority of water for dairy farming used in the MDB used in Victoria (82%).

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Drought

The dairy industry has shown considerable resilience during the recent drought years, maintaining modest losses in milk production levels compared to other highly water-dependent industries such as cotton and rice, but this has come at a cost that is not immediately visible. Dairy farms have suffered considerable erosion in equity and disposable cash, reduction in cow numbers (their current and future means of earning capacity) and lowered levels of confidence in individual farmers. Being an intensely integrated industry, impacts on wealth generation and asset value on the dairy farm resonate through the whole value chain from farm to factory and community.

c. Outlook and challenges

In an environment with many challenges and uncertainties, good support and information will allow dairy farmers to adapt to the increasingly complex decision-making required and understand the implications for their business, risk management strategies and choice of farming system in relation to areas such as water reform, drought policy and the Carbon Pollution Reduction Scheme.

The dairy industry has strong fundamentals, with demand exceeding supply both domestically and internationally. This is likely to remain so for some time, meaning the industry is viable in the long-term, given a breathing space to adjust. Dairy farmers are capable of reaching reasonable self-reliance given sufficient time and assistance to adjust to changed policies and new challenges, learn new strategies and rebuild some of the buffers and resources essential to be prepared for a variable / changing climate.

4. The Objectives of the *Restoring the Balance* program

DEWHA states that the specific aim of the Restoring the Balance (RTB) program is the

"Acquisition of water entitlements for the environment:

The goal of Restoring the Balance in the Murray-Darling Basin is to acquire water entitlements from willing sellers that represent value for money, and use the water allocated to them for the environment. This will improve the health of the Basin's rivers, wetlands and floodplains."[1]

The ADIC considers that this approach is overly simplistic. At present, the RTB approach fails to take into account that environmental water demands can vary significantly between years and locations. Environmental demands should be measured in terms of timing, regularity, quantity, duration and sensitivity to 'missing waterings' rather than a single volumetric requirement. Furthermore, environmental outcomes should be clarified for each site of significance, including consideration of connectivity or complementarities between sites. A framework for allocations could be based on these metrics and cross-referenced with the annual and seasonal volumes of water to meet these needs.

On this basis, the dairy industry considers that a single market mechanism can not effectively adjust to deliver the variety of responses needed to deliver improved health for all of the Basin's rivers, wetlands and floodplains. The industry favours a mix of both market mechanisms and water products to appropriately meet environmental needs. Any mechanism adopted should draw only on willing sellers (meaning comfortable with the decision to sell), represent true value for money (taking into account the cost of infrastructure and land use productivity), protect regional communities and deliver genuine environmental improvements.

The dairy industry is concerned that there is considerable scope for overlap between the proposed Basin Plan, RTB and irrigation modernisation programs. The wording of the Commonwealth *Water Act 2007* emphasises "optimising economic, social and environmental outcomes" and is designed to clearly specify environmental water needs and the 'sustainable diversion limits' for agriculture.

There will be an important transition period through which current entitlements are adjusted to move towards the final sustainable diversion limits. It is not yet clear whether the RTB is being considered as a mechanism to return environmentally sustainable levels of extraction under the Plan or whether a package for compensation for reduced entitlements will be the preferred mechanism. Continuing the RTB buyback once the Basin Plan is implemented may risk over-allocation of water to the environment. There is an urgent need to clarify to stakeholders how the RTB and Basin Plan will interact.

Another risk identified by the dairy industry is the potential social and economic structural adjustment that may be driven by the RTB water buyback. While the impacts and coverage of the buyback will be different for different irrigated industries, the pressures of adjustment are likely to be uniform across industries. The dairy industry recommends that the economic and social impacts of water buybacks to date be examined to assess the impact on structural adjustment (labour skills and availability, land use, economic returns to communities, depopulation, etc). Better understanding how previous sales of water have been used by farmers will better prepare us to analyse the potential risks associated with the proposed RTB.

5. The market for water

As the overall water market is Government-dominated, the impact of the Restoring the Balance program has been distortionary:

- The higher price of water is drawing sales from entitlement holders that have traditionally made their water available to the temporary water market. Buyback is therefore eroding the volume of water available for purchase, placing further upwards pressure on water price. The temporary water market has played an important role in facilitating adjustment and optimising business decisions, for example through the growing of opportunistic crops. In drier years, much of this

[1] PC Issues paper, page 13

water has been sold to dairy farmers to supplement reduced allocations and maintain permanent pasture.

- The volume of water available for trade appears to be growing, with the Victorian Government indicating that it will facilitate the sale of 300 giga litres of water above the 4 percent cap over five years. This would effectively double the volume of water that is available for trade, further distorting the operation of the water market over the next five years.
    - Balanced against this is the limited volume of water the Government purchased from the Queensland MDB catchment.
    - Discrepancies across states makes planning for farmers in the Basin difficult and some further engagement with irrigators and state jurisdictions is needed to avoid 'surprises' and assist planning.
- Improved transparency on water sale information is favoured by the dairy industry, however to be of value this information must include the price and volume of water sold and be available in a timely fashion. For example, if the reporting detail were to be consistent with that found in the stock market, we would anticipate that the outcome would be more appropriate asking prices in the expression of interest stage of water sales.

The ADIC seeks further clarity from Government about the future operation of the water market and how the impacts on dairy farmers (and all irrigators) will be addressed.

6. What market mechanisms should be considered?

The ADIC considers that the RTB buyback be either refined or supplemented by other programs to avoid the following risks:

- Reduction in productivity where water is taken from highly productive soils, ideally suited to irrigation with low environmental impacts, while leaving other less-suitable areas heavily irrigated
- Higher unit costs for remaining water users
- The creation of boom/bust water markets by the sudden entry or exit of a dominant player (as Government is in this situation)
- The undermining of communities through the creation of uneconomic properties with no water and unable to form part of a coherent regional plan. (We note that the management of the point above would assist with resolving this issue.)
- The potential lack of continued investment in water infrastructure
- Undermining the value of water infrastructure when water is purchased directly from a new automated backbone
- Eroded community confidence in the process, with little coherence or commitment to bigger-picture environmental outcomes and the long term viability of the region.

As a suggestion, the Government may wish to examine the approach of purchasing environmental water outcomes or services. Tendering out services to deliver specific environmental needs (for example, timing, regularity, quantity, duration, etc) would allow water entitlement holders to make a commercial decision on delivering environmental services compared to water trading or irrigated agricultural production. This may also give regions the opportunity to build regional plans that achieve structural requirements (community and economy) alongside environmental outcomes.

7. Do we need a portfolio of mechanisms and water products? Other mechanisms

While it is clear from responses made in this submission that the ADIC considers that one blunt policy instrument is insufficient to deliver the sensitive environmental outcomes that is the objective of the RTB, the dairy industry is concerned that there are currently a number of different water buyback programs operating simultaneously that are not well coordinated. For example, further coordination between the Federal and State Governments over the Water for Rivers, RTB, Riverbank, Living Murray and other programs will assist to promote environmental outcomes by resolving areas of conflict and/or competition between programs.

It is important to note that most dairy farmers do not meet the eligibility criteria for the Small Block Irrigators Exit Grant Package (which stipulates farmers must own forty hectares of farm land or less.) Therefore, the usefulness of this grant as a water recovery tool may be questioned as due to the small size of land farmed, the water entitlement attached is correspondingly small. However, perceived as a special adjustment package, it may be more effective.

8. Upgrading infrastructure

The dairy industry supports greater coordination between buyback programs and irrigation infrastructure reform as a key principle moving forward. It would be a poor use of public or private investment to improve water infrastructure where that infrastructure will not be fully utilised or required in the future as water moves out of the irrigation area.

Targeting water purchasing from regions that are not covered by irrigation infrastructure modernisation programs or areas that have been identified as less productive is an option to improve outcomes from both the buyback and infrastructure upgrades. However, a more cost-reflective approach to the pricing of water delivery than that currently in use would be required.

Further improvements to infrastructure could be achieved by providing professional support for the development of proposals and greater use of farmer groups and other entities to coordinate a proposal and negotiate directly with the Commonwealth.

9. Impediments to the use of market mechanisms

The ADIC supports the need for the orderly transition of water use from within geographic areas for environmental or consumptive use. The establishment of the 4 per cent limit has provided a basis for this orderly transition. Any intentions by Government to purchase significant volumes of water from Northern Victoria or Southern New South Wales for environmental use should be evaluated in terms of community impacts and impacts on industry, including processing facilities and the capacity to service key markets. This analysis would inform any appropriate change to the current trade limitations.

Under the new agreement between the Victorian Government and the Commonwealth it is proposed that some 460 giga litres should be purchased from the GMID through the Buyback program over a five year period. That is equivalent to 25 per cent of the total available entitlement. That is a very large percentage change in a short period of time.

The Victorian Farmers Federation Water Council has suggested that farmers wishing to permanently trade low reliability water shares not be restricted to the 4 per cent trade out limit. The ADIC supports the VFF position.

10. Termination Fees and Transaction Costs

The ADIC considers any termination fees must be appropriate and consistent across state boundaries for the fair trade in water and to ensure irrigators do not suffer from rising prices when water is traded out of an area. Termination fees collected within a district should be quarantined within that district, accounted for separately and should be used to cover any increase in charges to irrigators remaining on the system.

The ADIC agrees with the VFF that the factor used for the calculation of termination fees should be set to ensure sufficient funds to maintain water supply infrastructure over a suitable period and for structural readjustment so that remaining users are not required to absorb these costs.

The ADIC supports the VFF position on transaction costs. A National register, not unlike how information is presented on the Stock Exchange, may be an effective approach that could address all transparency issues surrounding water trading. A national register may consist of information regarding current price of High and Low Reliability water, permanent and temporary trade in respect to different systems around Australia, and could also incorporate information regarding individual irrigation system's seasonal allocations. This would allow all willing buyers and sellers to have access to comprehensive information regarding all water trade within Australia, Murray-Darling Basin.

All water brokers would then be brokers to the exchange, with similar regulation as a stock exchange broker.

This also ties in well with the key principles underpinning an efficient free market which is 'well informed decision making in the part of the market participants'.

10. CONCLUSION

The ADIC supports Government measures to restore the balance between consumptive water use and water required to maintain river, wetland and floodplain health, provided:

- Individual property rights for land and water are respected by any water recovery mechanisms considered or adopted;
- An open and efficient water trading market is achieved, with the reduction or removal of artificial barriers to trade, and timely and transparent market information;
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The ADIC seeks the opportunity to be further involved in the consultative process to develop the policies and programs that will guide water allocations, buybacks and markets in the Basin, noting the intrinsic impact this will have on the regions dairy farmers.