

Submission to Senate Inquiry into Food Production in Australia

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Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 irrigation farmers across NSW. These irrigators use regulated, unregulated and groundwater systems. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

In making this Submission to the Senate Inquiry NSWIC is promoting the views of its members. However each member reserves the right to make independent submission on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

Background

Water is a key input to any agricultural pursuit. As a result, irrigated agriculture is a vital component of Australia's overall agricultural production.

Figures are often quoted of the value of agricultural production to the national economy. The Australian Government Department of the Environment, Water, Heritage and the Arts states that 04/05 gross production was \$35.6 billion, with a gross value of \$9 billion attributed to irrigated agriculture.¹ The Australian Bureau of Agricultural and Resource Economics (ABARE) estimates that the annual gross production in 07/08 is approximately \$40 billion². Using the same ratio, this would produce a value of \$10.1 billion attributable to irrigated agriculture.

Irrigated agriculture produces both food and fibre. As a result, not all of the \$10.1 billion can be attributed to food. It is important to recognize, however, that irrigators involved in annual cropping do have options in what they grow.

Key Challenges

Farmers – and irrigators in particular – deal on a regular basis with uncertainty, particularly with respect to weather. Irrigators, by definition, are reliant upon rainfall in catchments and the availability of water at times required by their operations. Irrigators businesses are structured to cope with variability.

There are a range of external factors, however, that are dramatically increasing the uncertainty that irrigators face. The results of this uncertainty are potentially severe not only for Australia's economic prospects with respect to exports, but potentially to the social and economic fabric of rural and regional Australia and, at the extreme, the food security of the nation.

Current externalities include:

¹ DEWHA website – www.environment.gov.au/water/agriculture/index.html

² "Australian Commodities" June Quarter 08 – ABARE Publication

- Climate change;
- Input costs;
- Exchange rates;
- Perception of agriculture
- Federal Government policy directions;
 - Environmental versus agricultural water
 - Development of a market in water
 - Regulation of water charges
 - Drought support approaches
 - Emissions trading schemes
- State Government policy direction
 - Drought support approaches
 - Fixed charges requirements

The “New” Farmer

Agriculture in the twenty first century is an enormously complex business. It is no longer simply a case of growing food or fibre. Farmers – and irrigators in particular – manage significant infrastructure operations. The asset base is far more significant than it was historically.

In recent times, water has come to be part of that asset base. As rights to water have been separated from the land on which they were based and have become a tradeable right, irrigators have had to manage that asset also.

Asset management, in its simplest form, requires the asset owner to determine how the best return on that asset can be achieved. In its simplest terms, this question was answered by determining which crop would produce the highest fiscal yield. The range of options has now expanded considerably – and now includes the option of not producing an agricultural yield with the asset, but transferring the benefit to the government for environmental use in return for fiscal yield.

Balance of This Paper

NSWIC recognises the three questions that the Inquiry has posed, viz:

How can Australia produce food that is:

- a. affordable to consumers;
- b. viable for production by farmers; and
- c. of sustainable impact on the environment.

In answering those questions, NSWIC addresses the externalities identified above and assess their impacts. Particular emphasis is given to those externalities identified as “Federal Government policy directions” given the nature of the Inquiry.

1. How can Australia produce food that is affordable to consumers?

To answer this question, the concept of “affordability” needs to be further considered. Is the question whether Australians *can afford* to pay more for food, or is it whether Australians *are prepared* to pay more for food?

At the same time, the Inquiry must ask who is a consumer in the context of the question. A significant proportion of Australia’s agricultural production is exported. Does Australia have an obligation to provide “affordable” food to those consumers?

Price of Water Equals Price of Food

Like every business, irrigators are faced with an array of costs. That array varies dependant on the crop that they choose to grow.³ As a result of that choice, irrigators are faced with an array of revenue options. Their decision, then, is based on the highest return that they can achieve with respect to their assets employed.

Historically, water was simply another input. Irrigators recognise that water is a finite resource and that there are multiple users – human, stock, industrial, environment and agriculture. Further, we recognise that markets are an efficient manner in which finite resources can be allocated. Australia must make choices with respect to its allocation of those resources – but in doing so must be aware of the impacts that such allocation will produce.

An array of federal government policy initiatives will have an inflationary impact on the cost of agricultural production. These include:

- Government involvement in the water market to divert water to the environment;
- An Emissions Trading Scheme⁴; and
- Increased market compliance costs for infrastructure operators that will be passed on.

Market Activity

With the advent of a water market that varies the price of that input dependant on availability (in economic terms “scarcity pricing”), the price will fluctuate more readily. That market is still quite young and relatively thin. At present, only a relatively small percentage of agricultural production relies on traded water. It is possible that this percentage could grow considerably, meaning significant price spikes are possible.

³ Although note that operators are restricted to certain crops due to the nature of their infrastructure.

⁴ NSWIC recognises that the Green Paper on an ETS notes agriculture will be excluded until at least 2015. Impacts will still be felt in agriculture as the price of energy and transport increases.

Government policy – both state and federal – to enter the water market will naturally have an affect on prices. Whilst the supply curve evidenced in the recent \$50m buyback by the federal government was relatively flat across the portion purchased, \$50m is but a small percentage of the \$3.2 billion that the government have earmarked for purchase.⁵ Continued government activity will clearly dramatically increase the price of permanent water.

NSWIC supports government entry into the water market as a means to obtain environmental water. We are unanimously opposed to compulsory acquisition.

The increase in price of water will result in;

- An increase in the price of agricultural output (food); and/or
- A decrease in the amount of agricultural output.

In essence, if the cost of production increases then the price received for that produce must increase. Consumers, therefore, must pay more for their food or that food will not be produced.

Whilst irrigators accept that water is required for environmental use, Australia needs to understand that this will only come at a price – and the price is an increase in food costs and/or a decrease in food production.

Emissions Trading Scheme

NSWIC recognises that the current Green Paper proposes that agriculture will not be covered by the ETS until at least 2015. Even so, critical inputs to production, such as energy and transport, will be covered. As their prices rise, so will the price of agricultural production.

The ETS will also potentially result in a significant market impact as emitters attempt to derive yield from carbon credits.

We identified an important issue during the briefing this morning that I believe is of significant concern. That issue is to do with the definition of “forest.”

There are potentially significant impacts on agriculture – and irrigated agriculture in particular – due to increased levels of “forestry” in order to obtain carbon credits.

When “forests” are planted, carbon credits will be allocated over a period of time in their early life to reflect their storage capacity. Upon harvest of a plantation forest, those credits will expire (as carbon is effectively “released”) and the emitter will be required to re-purchase that carbon in the market. As a result, DAFF⁶ does not believe that there will be a significant increase in plantation forestry due to the implementation of the ETS. What the scheme aims to achieve with respect to forestry is long term carbon “sinks”. That is,

⁵ <http://www.environment.gov.au/water/mdb/entitlement-purchasing/index.html>

⁶ Department of Agriculture, Fisheries and Forestry

permanent forests that aren't harvested. They anticipate "strip plantings" will occur in agricultural entities to create carbon credits.

However the definition of "forest" is a permanent planting that is capable of exceeding 2 metres in height with a ground coverage in excess of 20%. This definition would appear to *include* certain permanent agricultural plantings.

New plantings require water – most probably high security given their permanent nature – that will need to be purchased from existing users. The "upside" is unlikely to appeal to existing agricultural operations due to the risk (traditional agricultural risk, plus the risk of having to purchase carbon credits if the permanent plantings die). The "upside" is more likely to appeal to large scale emitters outside of agriculture who have a choice of purchasing carbon credits in the market, creating carbon credits through planting non-productive forests or creating carbon credits through planting productive plants. The further upside of the latter is the yield that it will produce over the course of its life. For example, an almond tree provides an income where a mallee doesn't.

As well as receiving carbon credits progressively over the early life of the permanent planting to offset the costs of establishment, the tax advantages of a managed investment scheme can potentially be accessed.

The results are:

- A shift of resources (water) to a product based not on value but on an external consideration (potentially a perverse economic outcome);
- An increase in demand on high-security water (potentially a perverse environmental outcome); and
- Further competition for resources from the tax-sheltered MIS's (potentially a perverse economic outcome).

In essence, an ETS potentially has a twofold impact on food production – it will increase the costs of water and will shift production to certain types of food based on economic factors outside of food demand.

Increased Market Compliance Costs

The federal government has asked the ACCC⁷ to develop a series of market rules and a separate series of charging rules with respect to water. Whilst unlikely to be implemented until early 2009 at the earliest, it is likely that these rules will see irrigation infrastructure operators face increased compliance burdens and hence costs. Those costs will undoubtedly be passed on to their consumers – irrigators.

The Results of These Policies

⁷ Australian Competition and Consumer Commission

Market compliance and an ETS will have a direct affect on the price of production and hence the return required.

Redirection of water to the environment will have an effect on both price and level of production. An increase in the price of water entitlement (as demand is increased by government purchase) requires a higher dollar value on the same rate of return on assets employed. At the same time, water diverted to the environment from agriculture will result in less water available for production and hence less food produced.

The majority of Australia's agricultural production is exported. A decrease in production will obviously lead to a decrease in exports with the resultant economic affects.

In context, though, it is unlikely that a decrease in food production will have a significant affect on the *availability* of food *in Australia*.

The same cannot be said of the countries to which Australia exports its food production. If production decreases, the market will determine to where food is allocated. Fundamental economic theory dictates that it will be those markets unable to pay the increase in price that results from lowered supply. Unfortunately, those markets are likely to be those that can least afford a reduction in the availability of food.

In terms of diverting more water to environmental use in Australia, we must consider the impacts on the food security of our export partners.

This must be considered in the context of the global market where major food producers are enforcing severe restrictions. Note, in particular, that world stocks of rice and wheat are at record lows. Export restrictions on the former have been imposed by the largest producers, and anti-hoarding regulations are in place in several consumer nations.

Positive Government Policy

NSWIC is supportive of government policy to increase the efficient use of water both on and off farm. Our Council has long supported the provision of environmental water from infrastructure investment savings.

If the Inquiry commences from the assumption that food is currently affordable for consumers, then the question is not so much "how do we make food affordable" as "how do we keep it affordable"?

In essence, there are two options:

- (i) Choose not to pursue policy options that will result in an increase in prices or a drop in production; or
- (ii) Invest in infrastructure such that the irrigators are able to produce more with less.

NSWIC recognises that both federal and state governments are pursuing the latter option and remains committed to working with them to ensure that their aims are met. At the same time, we urge all parties to ensure that the timing of these programs matches the timeframes of the policies outlined below such that the **inflationary and deflationary pressures are equivalent**. Only in this environment can food price and security remain at the levels that we currently enjoy.

2. How can Australia produce food that is viable for production by farmers?

Farmers will not produce food that is not viable for them.

Viability, in this context, is a two sided equation – cost on one side and revenue on the other. “Viability”, in essence, is the gap in between the two.

Revenue

Government can, in reality, affect revenue in two ways – subsidy and regulation.

Basic economic theory shows that subsidy is an inefficient way of achieving desirable outcomes. For government to subsidise food only results in payment for that food being sourced from both direct consumer expenditure and through the taxation system. The result is inefficient production.

Government can, however, ensure that farmers are not subject to unfair pricing practices at “farm gate” and are not victims of monopoly abuse in terms of the prices that they receive.

Cost

Government must be mindful of the cost implications that will result from their policy directions, as described previously.

Alternately, consumers must be prepared to pay more for food.

3. How can Australia produce food that is of sustainable impact on the environment?

There is a popular misconception that agriculture – and irrigated agriculture in particular – is necessarily incompatible with sound environmental outcomes.

Little could be further from the truth.

Irrigators have not only a social but an economic stake in sound environmental management of river systems. It is that very system that delivers them their most critical input.

At the same time, the development of river regulation (dams, weirs, channels and the like) for the purposes of irrigation are certainly not of entirely negative consequence to the environment. The ability of state governments to regulate flows in river systems, to manage water and to minimise water losses through evaporation has resulted in positive environmental outcomes. Outside of the current severe drought that has caused an overall lack of water, regulated systems have allowed government to target the delivery of water to environmental assets in quantities and at times that result in maximum benefits.