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TIMBERCORP
AGRIBUSINESS
INVESTMENT MANAGERS

Submission to Productivity Commission Study

Rural Water Use and the Environment: the Role of Market Mechanisms

6 February 2006

INTRODUCTION

Timbercorp Limited, as a major irrigator in Australia, has taken an active role in the public debate over the National Water Initiative and the consultations that led to the Inter-Governmental Agreement and the terms of Clause 61(iii) which is the source of this inquiry.

Timbercorp's submission to the COAG Senior Officials Group on Water in April 2004 expressed strong doubt that the emphasis in water policy on perceived environmental improvements was necessary. Two years later those doubts remain and are not eased by the possibility of mechanisms being introduced to the water market to promote environmental outcomes, especially when the existing portfolio of mechanisms has not yet achieved the central aim of creating a uniform, transparent national market for irrigation water.

This submission has been prepared in response to the commission's Issues Paper published in December 2005. It seeks to assist the commission by setting out Timbercorp's concerns and offering a practical approach to achieving environmental outcomes.

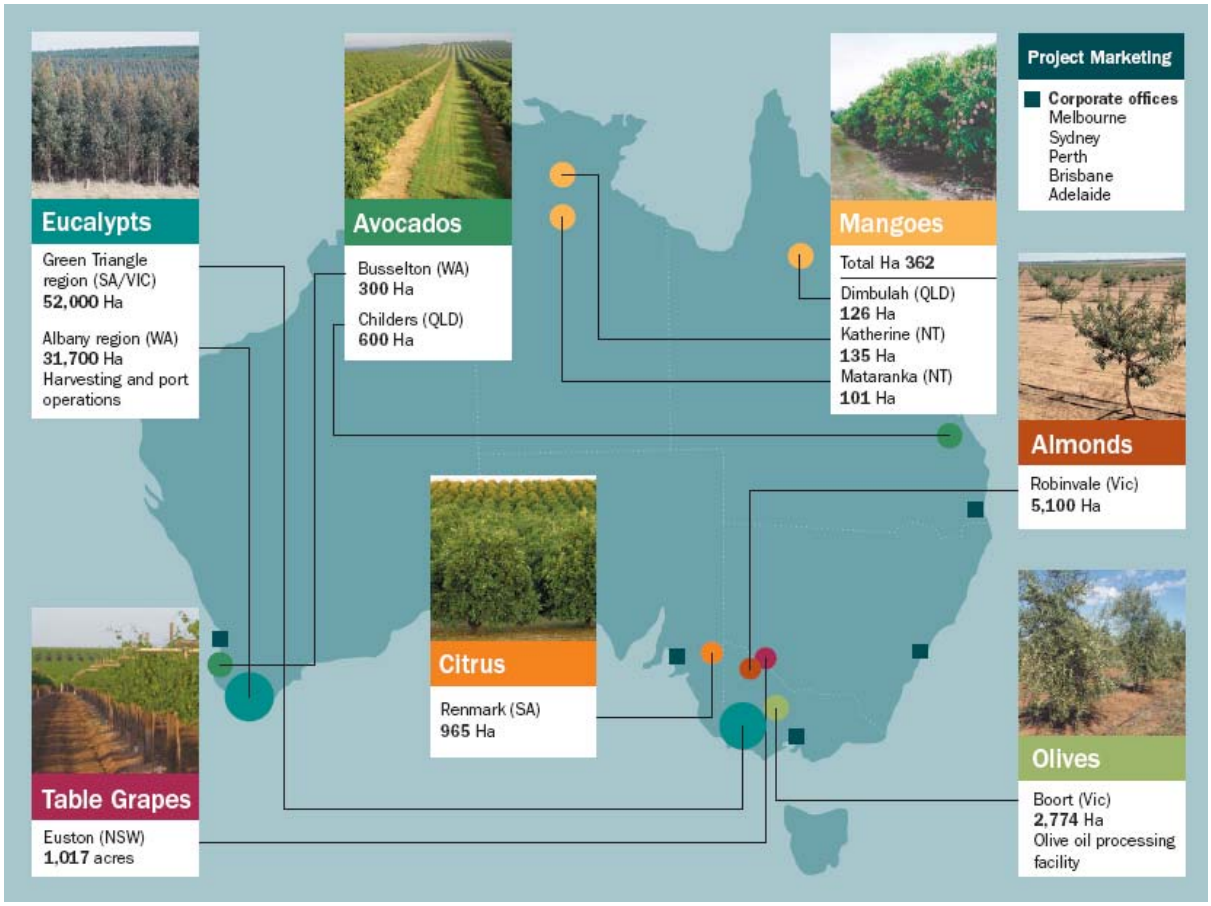
TIMBERCORP PROFILE

Timbercorp is a leader in Australia's rapidly expanding agribusiness sector, with more than $1 billion in assets under management in horticultural and eucalypt plantation projects. The group employs more than 180 staff directly and is responsible for the employment of more than 1500 people, including contractors, in regional Australia.

Snapshot

Established:	**1987**
ASX listed:	**1996**
Market capitalisation (incl preference shares):	**$1,040 million (3 Feb 06)**
Net assets:	**$426 million**
Relative size:	**ASX/S&P 200 Index**
Number of shareholders:	**9000 (ordinary)**
Number of project investors:	**15,000**

Timbercorp's irrigated horticultural projects are located in the Murray Basin regions of Victoria, New South Wales and South Australia, and in Queensland and the Northern Territory. They represent major new investment in large-scale agricultural operations directed at export or import-replacement markets. The company also develops and manages unirrigated eucalypt plantations in south-west Victoria, south-east South Australia and south-west Western Australia (see map).



Timbercorp's olive grove and 50,000 tonne processing facility at Boort in Victoria is one of the world's largest, representing a $110 million investment. The almond orchards, the largest outside of California, and new investments in citrus, table grapes, mangoes and avocados are managed in strategic alliances with ASX-listed companies Select Harvests Limited and Chiquita Brands South Pacific Limited and with dominant but unlisted participants in those industries.

These significant enterprises have been built up in less than 10 years on the basis of the managed investment scheme (MIS) funding model, through which new investment from thousands of mostly city-based investors has flowed into rural areas creating jobs and other business opportunities. Agribusiness is major Australian industrial sector, representing about $160 billion or 27 per cent of industry gross value[1]. MIS funding in the past four years has grown from $300 million to $1024 million in 2005. MIS horticulture attracted $197 million in funds in 2004-05, a surge of 65 per cent in just one year[2].

The key feature in this rapid expansion in horticulture is water – access, reliability and an operational market combined to produce a resource for efficient use in high-value production. Horticulture in the Murray Basin has benefited from the water reform process so far. As a recent report by the Victorian Department of Primary Industries notes: " . . . irrigation regions feature water markets that redistribute one of the major factors of wealth generation."[3]

[1] DAFF and ABS 2004, 2005; ABARE 2005.
[2] Australian Agribusiness Group 2005.
[3] *The Changing Rural Landscape of Victoria*, Department of Primary Industries, April 2005.

THE WATER MARKET

Timbercorp has experienced considerable structural change in water markets, most notably in Victoria where the Water (Resource Management) Act of 2005 has enshrined from July 2007 the concept of environmental allocation of water and has unbundled land ownership from water rights. Timbercorp did not favour these mechanisms when they were proposed, arguing in the first place that giving priority to environmental outcomes was likely to be counter-productive and in the second that water users would become prey to speculators.

The reformed Victorian regime is yet to be tested. However, our expectation is that the Victorian water market has a reasonable chance of delivering an effective outcome for industry, provided government (including government agencies) acts with restraint and stays out of the market.

Timbercorp supports the operation of a water market that is flexible, transparent and efficient. It is disappointing therefore that our operations in five State and Territory locations have to deal with five different water market regimes. We can only echo the Australian Financial Review: "Transparent water rights tradeable across state borders are the key to an efficient national water market that prices water consistently according to its economic value rather than its use.[4]"

It seems to Timbercorp that injecting mechanisms for environmental outcomes into this situation is likely only to delay even further the creation of an effective cross-border market which would add further to horticulture development in the Murray Basin and other areas. We believe that this should receive top priority and we are confident that once operating properly the "national" market would begin to produce the desired environmental outcomes without the need for extra "market mechanisms".

MARKET MECHANISMS

Timbercorp, as a company that derives funds from financial markets and sells its investors' produce into commodity markets, by its very nature favours accessible and efficient markets as the basis of its operations. At its best, this should mean government sets policy for the public/national interest and steps out of the way to let business get on with creating wealth.

In practice, of course, markets and government rarely interact in this way. The real issue is the level of government interference in markets. This has grown in recent years as government has taken into its policy deliberations the concept of market mechanisms (aka market-based mechanisms or market-based instruments) as the means of driving desirable behaviours, especially in environmental protection. These mechanisms are largely misunderstood among the broader public as equivalent to mechanisms that underpin daily commerce.

Timbercorp does not wish to devote this paper to a discussion of market mechanisms and market-based instruments (MBIs) but it does wish to note that these mechanisms often have very little to do with markets other than impede them.

[4] Editorial, *Water reform on slow drip*, AFR 20 January 2006.

The European Environment Agency says in a new paper: "MBIs provide a stimulus to consumers and producers to change their behaviour towards more eco-efficient use of natural resources by reducing consumption *per se*, by stimulating technological innovation and by encouraging greater transparency on how much we pay for what . . . some MBIs raise revenue . . .[5]" The paper then goes on to list five kinds of MBIs – tradable permits; environmental taxes designed to change prices; charges designed to cover costs of environmental services; environmental subsidies and incentives; and liability and compensation schemes.

This reads to us like a textbook for greater government interference. The new Victorian water regime, the National Water Initiative and the commentary in the Productivity Commission's issues paper seem to have much in common with it. We acknowledge that water markets in Australia already have a number of these policy-induced market mechanisms in place. The allocation of environmental water is a notable example. But it seems to us that market-based mechanisms in general increase the level of regulation and bureaucratic requirements for monitoring, measurement and sanctioning – thereby increasing compliance costs – and give officialdom an excuse for avoiding responsibility.

None of this is to say all such mechanisms are undesirable or ineffective. What Timbercorp has said consistently is that the emphasis in rural water policy should be directed at reliability and efficiency of supply, as well as at efficiency and high-value in use, leading to successful farming enterprises and in turn to better environmental management[6]. Giving "the environment" priority over people, we believe, actually undermines sustainability. Rural communities that are economically and socially strong because of industry will be more able to provide the resources and bear the costs of the environmental management that will maintain healthy rivers and catchments. Therefore, where an MBI is proposed it should be directed at a "people" outcome, not an abstract "environment" outcome.

EFFICIENCY AND EXTERNALITIES

Timbercorp has argued that any regulatory regime initiated to control unirrigated eucalypt plantations on the basis of the environmental effects of their interception of groundwater should take into account the effect of such regulation on the timber industry, the people who depend on it and the economic well being of those regions where plantations have been established. In other words, regulation should take account of plantation externalities other than perceived environmental impacts.

In principle, therefore, we can readily concur with the commission's wish to conduct a broad examination of the impacts that environmental market mechanisms might have. We fear, however, that in making the strong distinction that it does between physical and economic efficiency in water use, the commission risks losing sight of a key fact: "For irrigation farmers, it is water . . . that is the key resource for their production system.[7]"

It is axiomatic that efficient irrigators will seek to use their water efficiently. Of course, this is not the sole operational input but without physical water efficiency it is unlikely that an irrigation-based enterprise will succeed. If large enterprises such as Timbercorp's projects failed in such a way, the external impact could very large indeed.

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[5] *Using the market for cost-effective environmental policy*, European Environment Agency, January 2006.
[6] Timbercorp submission to COAG Senior Officials Group on Water, 2004.
[7] *The Changing Rural Landscape of Victoria*, Department of Primary Industries, April 2005.

Timbercorp's Boort Estate olive grove is a good example. It is the centrepiece of the Loddon-Murray region's New Mediterranean horticultural industry strategy, which includes regional infrastructure development in an expansion of the Waranga Western irrigation channel and a new power line. The State Government made a $4.174 million grant from the Rural Infrastructure Development Fund to local authorities to assist the regional industry expansion. The operation will ultimately produce about 8.5 million litres of olive oil a year and injects about $30 million a year in wages and services into the local economy[8].

Boort Estate uses state-of-the-art micro-irrigation that seeks to maximise the effectiveness of the investment in water – i.e. minimise waste and gain high crop yields. A decade ago, permanent water could be bought for about $300 a megalitre[9]. Today the price is around $1200. No doubt Timbercorp could continue to grow olives at Boort without being physically efficient but the long term future would be questionable.

Timbercorp notes the commission's focus on impediments to economic efficiency that may justify government intervention – as if governments intervene solely to improve markets. As the commission goes on to say "even the most appropriate form of intervention can create unintended distortions in resource allocation if poorly implemented".

GOVERNMENTS IN THE WATER MARKET

Government itself is often the impediment to economic efficiency and it can be expected that the proposal to allow governments to trade alongside water users in water markets will be generally opposed.

Last year, the South Australian Government stood in the market for permanent water rights, ostensibly to ensure South Australian users of Murray River water and "the environment" would have adequate and reliable supply in the face of excessive allocation to users upstream of South Australia. The price of water to Timbercorp, as a South Australian (and Victorian and NSW) user, then rose quickly to exceed the Government's de facto floor price of $1450 a megalitre (plus stamp duty, which the Government does not pay).

It is not appropriate for government and their agencies to compete for water with commercial entities. They have balance sheets and borrowing capacities unavailable to farmers and even companies such as Timbercorp. The National Electricity Market is worth examining, given its mix of private and government operators. The private generation companies, for example, have long complained about the absence of "competitive neutrality" – the level playing field – on a number of grounds but probably best summed up in the fact that government corporations can borrow at government (AAA) rates which are some points below commercial rates. It is suspected (but not proved) that some government generators have from time to time loss-led into the market to assure their place in it.

On the other hand, the settlement recently of the virtual barter trade between the Victorian Government and farmers of 145 million megalitres of water a year for return to the Murray at a cost to the Government of $93 million in water infrastructure spending – a phenomenally cheap outlay of $1.56 a megalitre – has been hailed as a great success. In a way, this could probably be called a market mechanism but in another way it may point to a more effective

[8] Access Economics report to Timbercorp, 2002.
[9] *The Changing Rural Landscape of Victoria*, Department of Primary Industries, April 2005.

method of meeting "people" and "environment" needs without adding greater complications to water markets than they already have.

OPTIONS UNDER NWI CLAUSE 61(iii)

Clause 61(iii) links market mechanisms to "incentives for investment in water-use efficiency and farm management strategies and for dealing with environmental externalities" and cites tradeable salinity and pollution credits as examples. The vision of the National Water Initiative is to sweep away State-based regimes and replace them with one set of regulations and a single water trading system, most particularly to deal with the four-state requirements of the Murray-Darling Basin.

This is a search for a "one size fits all" solution that, after 12 years, is proving futile. It is hardly surprising that people along thousands of kilometres of rivers and streams in the basin, from the Darling Downs and the NSW Central West to Lake Alexandrina and Boort, have diverse views on how their interests are best served. If environmental externalities have to be addressed via market mechanisms, will it be a surprise if the diversity of geography and environment in the Murray-Darling Basin cannot be encompassed simply, flexibly and cost-effectively in such mechanisms?

Bottom-up, regional approach

Timbercorp as a large, long term user of both Murray water and the water trading markets has had to take a practical approach to water business. The complexities of water regimes at State and local levels are such that very little is uniform. What has to be done to secure water varies from State to State and from region to region. Therefore we should like to suggest that in the implementation of the National Water Initiative, and in the operations of the National Water Commission, the inherent diversity and complexity be recognised. If market mechanisms do drive desired environmental behaviour, it is unlikely that the impacts will be uniform throughout the national water market.

Timbercorp believes desired environmental outcomes will be best achieved through practical, regional measures within the framework of the national water trading market (when and if it becomes a reality). This represents a bottom-up approach aimed at accommodating the diversity of interests and environments region by region. It would be somewhat similar to the approach taken by the Victorian Government in the recent much-praised barter exercise, except that it really would be directed at specific environments and not the broad generality of the Living Murray project.

Region-by-region, government would have to put to the people of each region a water use policy, detail its mechanisms and expected impacts and negotiate the implementation. Farmer groups are well organised, used to this kind of approach and able to enter agreements. The approach also puts government where it should be – forming and explaining policy proposals, and accepting accountability for its actions. The approach puts people first.

A flexible, transparent water trading market will not only be able to cope with the diversity of impacts from such a regime – existing markets do so – it should be the channel for ensuring equity among regions. The pricing mechanism should ensure, for example, that high costs in one region are not transferred to all.

EcoTender

The Victorian Department of Primary Industries is conducting a trial of a market-based instrument it calls EcoTender[10]. This is based on the Bush Tender program implemented as part of encouraging native revegetation for greenhouse gas sequestration purposes. Bush Tender has had limited application but has accounted for 5000 hectares of farmland being placed under long term management.

Under the EcoTender project, landholders submit bids, based on an agreed plan, to improve native vegetation management and revegetation works on their properties. Successful bidders receive periodic payments for their management actions under agreements with the Government.

The drawbacks to this MBI, demonstrated in the Bush Tender program, are that it is highly bureaucratic and time-consuming to the farmer. Government requires from bidders a high level of detail and disclosure about their land planning. Intrusion and cost can be excessive. The agreements themselves are very long term and effectively quarantine land for that period.

On the other hand, this is an MBI that actually takes a bottom-up approach. It is voluntary, costs can be factored into the tender and the agreement takes account of the level of activity required of the farmer. And of course farmers do get paid for their work.

Such a mechanism may have appealed to Timbercorp in its recent negotiations with the Victorian Government about the long term care and maintenance of river flats adjacent to its almond orchards near Robinvale, as part of gaining approvals for a substantial expansion of the orchards. Essentially Timbercorp is maintaining these lands at the company's cost in perpetuity.

Water Options

ABARE has proposed in a recent paper[11] a system of call options purchased by an environmental manager from irrigators to acquire water for environmental flows in streams. ABARE describes the mechanism this way: "Under this specification, the environmental manager pays the irrigator an option premium for the right, but not the obligation, to buy a quantity of water at a determined price when allocations are above a certain threshold (for example, 70 per cent of allocation), at specified periods during the year. The irrigator retains the permanent entitlement and, in addition to the option premium, receives further prespecified payment (the option exercise price) when the environmental manager exercises the option to buy water."

ABARE says a water options contract provides planning flexibility for the environmental manager and monetary compensation for the irrigator for losing some flexibility in farming decisions. Options offer a number of benefits. First, there is no need for the environmental manager to own a permanent water entitlement if the water is only required during periods of favorable seasonal conditions. Second, irrigators retain their permanent water entitlement, which is a natural hedge against the risk that the pool of water resources available to irrigators will decline in the future.

[10] www.dpi.vic.gov.au Go to Science Research and Development, then Economics and Policy Research.
[11] Water Options for environmental flows, ABARE for the Natural Resource Management Division, Australian Government Department of Agriculture, Fisheries and Forestry, November 2005.

Again, Timbercorp sees this proposed MBI as an illustration of a farmer-focused, bottom-up approach. We will need to study this in more detail but, on the face of it, the proposal seems to fit into the national water trading framework and it keeps government a step removed from market interference. An options contract should reflect the real price of water and not an artificial floor set under it by government, as in the recent South Australian experience.

SUMMATION

Timbercorp focuses in this paper on what it believes to be important in the consideration of introducing further market-based mechanisms to the as yet incomplete national water market in the name of environmental management. The company is sceptical that a broad array of such measures will produce either the environmental improvement deemed to be necessary or the economic efficiency sought by the Productivity Commission.

The company favours a practical, bottom-up approach to managing environmental externalities in irrigation-based agriculture. Government should engage with regions at a policy level to negotiate the terms and conditions of environmental management. Timbercorp believes the needs of people should remain paramount in policy-setting and that a proper operation of water markets will provide the environmental management perceived to be required.