

WORKING TOGETHER IN AN AUSTRALIAN LANDSCAPE

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In June this year, I spent three days in a light aircraft traversing what seemed like the length of the country, looking at cotton farms and meeting with the people who are making their living out of these enterprises. I have had a unique privilege of being invited to be on the judging panel for your cotton grower of the year awards.

May I take the opportunity to thank the organisers of the awards for inviting me onto your panel. And can I especially thank the families who so kindly welcomed me onto your properties.

It is truly a sign of the times that an industry such as yours cares to invite someone like me, who is pigeon holed as a greenie by many, to participate in this showcasing of your industry to the rest of the world.

It was an excellent opportunity to see first hand how your industry works on the ground.

What struck me most about all the properties we visited was that the people who were making their living from these enterprises and investing in their families future were doing so with great pride in their achievements. And deservedly so.

They are creating wealth from our country's bountiful natural capital, not only for their families but also for countless other families who provide products and services to the cotton industry. They are producing products for other Australians and people around the world – shirts, jeans, you name it. All were concerned about the impact their management practices were having on the long term viability of their property and the environment around them.

But the other thing that really struck me was they, as individuals, can only do so much.

Herein lies our greatest problem today when it comes to managing our environment.

Whilst we are going about our daily business, there are other processes going on across our landscape, which we as individuals are powerless to stop. They are a combination of things other people are doing to the landscape and things that were done, sometimes decades ago, largely out of ignorance.

It doesn't matter what anyone says, or what laws are passed, if we as individuals, don't work together, we simply cannot fix these problems.

As individuals we can do little but watch landscape degradation processes work their way through time. As a community we can confront these mistakes of the past and correct them. And once fixed, they are fixed for all time.

A capital investment in the future.

The Sustainability Debate

Sustainability has been debated for well over a decade now, not only in Australia, but across the globe. The issues of water, biodiversity and climate change are set to dominate the 21st century.

We're seeing major global conflict beginning over water resources in Africa, we watch the world procrastinate over climate change, and the Biodiversity Convention signed in 1990 sits on shelves gathering dust whilst the world's biodiversity disappears before our eyes.

Let me give you just a few statistics to put this in context.

Climate Change

Starting with climate change: Over the past century human activity has increased CO₂ levels in the atmosphere by over 30%. That increase in little over a century has already created a 0.6°C increase in average global temperatures and it has locked in another 0.5°C over the coming decades.

A trivial figure to most people: Trivial except that scientists believe that it has already caused a drop in rainfall over southern Australia. In the last 20 years, rainfall in Perth has already fallen by 15% over that experienced over the previous 70 years. Significantly, this 15% drop in rainfall has resulted in a 30 to 50% reduction in runoff. Scientists believe a similar trend is now starting in eastern Australia.

This has major economic implications, not only for the cotton industry, but for the entire Australian economy.

Only last week the National Farmers Federation changed their position on climate change, with Peter Corrish being reported as saying that the "greatest risk facing farmers is climate change and global warming".

If a 30% increase in CO₂ concentrations produces a 0.6°C shift in little over one century and this induces climate shifts such as we've experienced in Perth, what will happen if we increase CO₂ levels by 100% or 300%?

We still live on a planet where almost half the world's 6 billion people live on less than \$2 a day. If the developing world were to reach our standard of living, using our technological pathway, we would need to massively reduce emissions worldwide – way beyond the 20% reduction being called for under the Kyoto Protocol.

Just image if China and India increase their per capita greenhouse emissions to our levels.

When it comes to environmental issues – there is none bigger confronting humanity than the prospect, however remote, of climate shifts as a result of global warming.

Water and Biodiversity

Water and biodiversity are the other two big global environmental issues.

A few statistics will put these in a global context for you:

- 50% of the planet's forest cover has already been cleared;
- over 40% of the earth's population is living in water-stressed river basins;

and perhaps the most stunning statistic of all:

- after only just over a century of industrialisation, already 40 to 50% of the earth's total biological productivity is diverted to human use.

We are without any doubt, in the middle of one of the greatest extinction processes the earth has experienced in its 4 billion years of existence.

I'm sure you get the picture.

Fresh water is fundamental to all life on earth and biodiversity is not just an issue of tigers, polar bears and thylacines going extinct. It's much more than these aesthetics – it's about maintaining the health of environmental systems that underpin our civilisation.

In a report published in *Nature*, a team of economists estimated that the total value of ecosystem services to the global economy was around US\$33 trillion a year – nearly twice the value of global gross national product of US\$18 trillion.

Yet we have built economies that don't value these ecosystems services on which our life support systems depend and as a consequence they are being degraded. This is not some fancy academic theory - it's what your mother taught you from a young age - if you don't value something, you won't look after it.

These ecosystem services are finite resources on a finite planet. We cannot continue to deplete this natural capital without serious consequences for our civilisation.

The reason I'm giving you a global perspective should be obvious to you by now. The issues we are dealing with in Australia – and the issues confronting the cotton industry - are the same as those confronting the rest of the world.

If taking all the water out of the Narran Lakes was the only wetland we destroyed in Australia to grow cotton, very few people would worry. That's the price of progress.

But the Narran Lakes are but one of countless examples across the world of the destruction of biodiversity. And for that reason, the restoration of the Narran Lakes takes on a different perspective – it becomes a significant national issue because people say enough is enough: we need to at least protect our national icons. And the Narran Lakes are a national icon – they are one of 64 wetlands listed as being of international significance in Australia.

The Reform Agenda

A little under 2 years ago, the future of our continent hit the headlines, when in the midst of the worst drought in a century, debate raged between the Wentworth Group of Concerned Scientists and prominent public figures calling for coastal rivers to be diverted inland to 'droughtproof Australia'.

That debate hit the front pages of national newspapers with the Wentworth Group saying that Australia cannot be drought proofed, that we need to start living sustainably in Australia, that we need to learn to live in harmony with the landscape not fight against it.

Our solutions went to the core of the problem – not enough water for the environment and a dysfunctional water title system making life a misery for irrigators because of the uncertainty.

We called on governmentsⁱ.

- to clarify water property rights and the obligations associated with those rights to give farmers some certainty and to enable water to be recovered for the environment; and
- to restore environmental flows to stressed rivers, such as the River Murray and its tributaries.

We called for a National Water Plan.

Since those public debates, we have seen a dramatic shift in thinking in our political institutions. Governments across Australia are now embarking on a major overhaul for managing our landscapes and our fresh water resources.

These reforms recognise that the challenge for environmental sustainability is to set signals that both encourage economic growth and at the same time draw market decisions towards better environmental outcomes.

Australians have now come to recognise that we need new strategies for managing water in the 21st century because the ways of the 19th and 20th centuries are no longer appropriate. Our southern working rivers do not have enough water to sustain their health and we must not make the same mistakes in our northern rivers.

Current systems of access rights to use water lack clarity and, in many cases, are not consistent with natural processes. These are discouraging the investment and reallocation of water required to achieve river health, and to create financial security and opportunities for water users.

Under the leadership of the Deputy Prime Minister John Anderson and State Ministers such as Craig Knowles from NSW, a radical new water reform agenda was carved out last year, culminating in COAG signing off on the National Water Initiative and committing \$500 million to restore environmental flows to rivers in the Murray Darling Basin.

Your industry representatives played an important and constructive role in this process.

This agreement contains some remarkable changes:

- It has agreed to improve the security of water access entitlements and return overallocated systems to sustainable allocation levels;
- It has agreed to ensure ecosystem health by implementing regimes to protect environmental assets at a whole-of-basin, aquifer or catchment scale;
- It has agreed to ensure water is put to best use by encouraging the expansion of water markets and trading; and
- It has agreed to encourage water conservation in our cities, including better use of stormwater and recycled water.

It agreed that a framework be established to address water use where water is intercepted before entering ground or surface water systems due to changes in land use (for example, large scale plantation forestry and harvesting of surface water flows). In other words, a water title system based on the hydrological cycle.

Truly profound changes in the way we manage water.

In May this year, Minister Knowles introduced into the New South Wales Parliament changes to the Water Management Act to operationalise many of the National Water Initiative reforms.

For irrigators:

- Most water licenses will now be issued in perpetuity – a profound and fundamental change 200 years in the making;

For the environment:

- Water Sharing Plans have been produced – some 220 GL to be returned to the environment; and
- The new Catchment Management Authorities will establish trust funds to buy water for the environment.

Changes that industry and environment groups have been calling for for years, in a practical package of reforms that will fundamentally change the way we manage water in the 21st century.

Turning Principles into Outcomes

You are part of an industry much maligned in the Australian community. At just about every conference I attend at least one person asks me if I think cotton should be banned in Australia. My answer is “what are you wearing”.

But it's only when Australian's see your industry actively involved in repairing our damaged rivers and wetlands that these attitudes towards your industry will change.

We can only do this by working together and we can only work together when we agree on what we are working towards.

There are things you can do as individual farmers and there are things you can do as an industry.

When judging the awards I used three criteria for evaluating sustainability on the farm:

- the impact of the farm operations on local biodiversity, particularly those parts of the landscape - the riparian corridors - which hold our landscape and rivers together;
- the use of ecosystem services rather than chemicals; and
- any impact on downstream river ecology.

My challenge to the cotton industry is:

- to become part of the solution by bringing your practical skills and ingenuity to the table;
- to get involved in the catchment authorities and help design solutions for repairing and managing your rivers and wetlands; and
- to then help other farmers deliver these reforms on their farms.

Let us not let this moment in history pass us by. Let us work together, irrigators and greenies, country and city, to create healthy and productive landscapes that will stand the test of generations.

ⁱ Wentworth Group of Concerned Scientists (2002): *Blueprint for a Living Continent*, WWF Australia.