www.ozprospect.org

The Australia-US Free Trade Agreement: An Environmental Impact Assessment

By Michael Cebon

October 2003

OzProspect
812/118 Russell St
Melbourne VIC 3000
Tel (03) 9654 0661
Fax (03) 8610 1258
Email: cebon@ozprospect.org
Website: www.ozprospect.org

Contents

Executive Summary

A free trade agreement between Australia and the US will bring with it significant environmental impacts. The Australian Federal government has commissioned two studies to assess the economic impact of the agreement, but unlike in the US where environmental reviews are legislated, it has not conducted any research into the potential environmental impact of the agreement. In the absence of any government-supported research, this report considers the environmental impacts of the proposed US-Australia Free Trade Agreement (FTA)

Increased Agricultural Production for Export

One key objective of the proposed agreement is to increase agricultural production for export. Australia at present exports 80% of its agriculture, but broad-scale, export-oriented agricultural land use has resulted in serious environmental degradation, including salinisation due to land clearing and over irrigation, water overuse, high greenhouse emissions, and flow on effects like biodiversity loss and water pollution due to increased pesticide and fertiliser use.

A FTA with the U.S. will exacerbate many of these problems. Government commissioned modelling shows large increases in exports of two of Australia's most damaging agricultural products – sugar and dairy – under the proposed agreement. The water and energy embodied in these exports are significant – the agreement will cause an increase of 7.5% in Australia's total agricultural water use, and an increase of 25% in energy-related greenhouse gas emissions from agriculture.

Increased exports of sugar and dairy – already some of Australia's biggest users of chemical fertilisers and pesticides – will increase the total volume of agricultural chemical use, increasing water pollution and soil acidification. These increases are in turn likely to have flow on effects such as an increasing frequency of algal blooms in Australian rivers and further damage to the Great Barrier Reef, already in danger from water pollution.

Transport Effects

A US-Australia FTA aims to substantially increase the movement of goods within and between Australia and the US. This will entail a significant increase in domestic and international transportation, which will result in flow-on environmental effects, including increased greenhouse gas and other pollution.

Greenhouse emissions from international transport to and from Australia have increased by 63% in the last decade – faster then any other sector. Global shipping already accounts for 5 percent of the world's sulfur oxides and 14 percent of the world's nitrogen oxide emissions from fossil fuels – equal to the nitrogen emissions from all the cars, trucks and other vehicles in the United States. The proposed FTA will only exacerbate further greenhouse and other pollution caused by international transport.

Legal and Policy Issues

A number of provisions in the agreement itself have the potential to severely impact Australia's environmental policies, and hence effects its natural environment.

The US Trade Representative has identified Australia's regulation of genetically modified organisms (GMOs) as a "barrier to trade", to be eliminated through the FTA. These products pose possible environmental and health risks to Australians, and the removal of the right to regulate them poses a threat to Australia's environment.

The US Trade Representative has also identified Australia's strict quarantine standards as a "barrier to trade" to be eliminated through the FTA. The undermining of quarantine rules will lead to the introduction of pest species and a greater incidence of exotic diseases in Australian agriculture and the general environment.

The inclusion of "investor-state" measures in the proposed agreement will give US investors the right to directly sue the Australian government to stop regulations which are "barriers to trade". In some other free trade agreements which have included such provisions, these challenges have been decided by international tribunals which have lacked transparency and overruled laws without parliamentary input . In the North American Free Trade Agreement (NAFTA) – in which such provisions are included – they have been used almost exclusively to challenge environmental regulations.

Introduction

By January 2004, Australia aims to have signed a Free Trade Agreement (FTA) with the United States of America, according to the most recent comments from both Australian and US negotiators.

In the lead up to the negotiations for the FTA, the Federal Government commissioned three studies of the economics impacts of the proposed agreement: one from the Centre for International Economics (CIE), one from ACIL Consulting and one from the APEC Study Centre. While all three studies considered the possible economic impacts of the agreement, the government commissioned no studies of non-economic, social or environmental impacts of the agreement.

In contrast, the US Trade Act of 2002 requires the United States Trade Representative (USTR) to conduct a review of the environmental impacts of most trade agreements which the government negotiates. Such reviews must include what the USTR describes as "significant opportunities for public involvement" including public submissions at a number of points and consultations with stakeholders to determine the scope of the review (USTR, 2003, p.8). The Trade Act demands that environmental considerations are incorporated into negotiations, and that the USTR report on its environmental review to Congress. According to the Trade Representative:

> *The environmental review process is designed to ensure that, through the consistent application of principles and procedures, environmental considerations are integrated into the development of U.S. trade negotiating objectives and positions. The process is intended to provide timely information that will enable trade policymakers and negotiators to understand the environmental implications of possible courses of action. A Draft Environmental Review, prepared and released during the course of negotiations, provides policymakers and negotiators with information concerning potentially significant environmental issues and seeks public comment to inform the development of negotiating positions. A Final Environmental Review, released after the trade agreement is concluded, describes the environmental review process and the Administration's conclusions regarding the agreement's potential environmental impacts.* (USTR, 2003, pp. 3-4)

In Australia, no such process exists, and the federal government is not required to take environmental considerations into account when negotiating trade agreements. As a result, there is little research about the environmental impacts of the trade agreements Australia negotiates. Environmental considerations play no formal role in Australia's negotiations of free trade agreements, and their is no opportunity for formal public comment.

In the absence of any government-supported research on this matter, this report considers the environmental impacts of the proposed US-Australia free trade agreement.

1. Increased Agricultural Production for Export

Of all Australian productive practices, agriculture takes the worst environmental toll. Salinity, water use, land clearing, biodiversity loss, water and soil pollution, erosion, even greenhouse gas emissions: in all of these, agriculture is a major contributor, if not the sole environmental culprit.

But take a step back and ask what drives Australian agriculture, and the answer is clear: global trade. Eighty percent of Australia's current agricultural production is exported, thus it is clear that environmental problems flowing from agriculture derive to a large degree from Australia's commitment to export agriculture. The large rise in agriculture exports in recent years – the volume of agriculture exports has increased 58% in the last decade (DFAT, 2003) – corresponds with a general decline in most environmental indicators. The US-Australia FTA aims to further increase agricultural production for export, without consideration for the substantial impact of this growth on Australia's natural environment.

In 2002, the Federal Government commissioned the Centre for International Economics (CIE) to model the economic impacts of the proposed FTA. Among tohre findings, the CIE's model predicted that the FTA would result in substantial increases in exports – and hence in production – in the dairy and sugar industries. For dairy the modelling estimated a 354% increase in exports to the US; for sugar, the estimated increase in exports to the US was 2550% (CIE, 2001).

Yet what the CIE report did not point out is that dairy and sugar are two of the most environmentally degrading industries in Australian agriculture. These large export increases will also correspond with large production increases in some of the most environmentally damaging Australian industries.

1.1 Current Trends in Agriculture & the Environment

"Production characteristics of the minerals and agriculture industries, and to a lesser extent forestry and fisheries, are driven not by domestic population levels, but by demand from global export markets. . . . the environmental effects of agricultural production are substantial and may become further evident from 2020 onwards. Modelling indicates that more than 10 million hectares of agricultural land may be lost to dryland salinity, irrigation salinity and soil acidification by 2050. This will produce a knock-on effect in making rivers and streams more saline and more acidic, which in turn may increase the difficulty and cost of water treatment for urban and industrial use and limit the productive potential of many irrigation areas."
– CSIRO Future Dilemmas, p. 115.

The environmental effects of Australia's current agricultural practices are significant, and growing sharply. These impacts are driven by demand from export markets, to which the vast bulk - eighty percent - of Australian agriculture flows. Compared to the impacts of global export markets, Australia's population has a minimal environmental impact on the Australian environment.

In 2002, the Department of Immigration, Multicultural and Indigenous Affairs commissioned the Future Dilemmas report from the CSIRO Sustainable Ecosystems group. The report, authored by Barney Foran and Franzi Poldy, confirmed the extent of export-derived environmental impacts, noting that "domestic population levels have relatively minor primary or direct effects on resource and environmental issues related to mining and agriculture . . . This is because production in the primary commodity sectors is geared to meeting the requirements of global trade" (Foran & Poldy, 2002, p. 115).

A quick survey of current environmental problems in Australia shows agricultural practices – and hence, the emphasis in Australian economic policy on increasing agricultural exports – are responsible for the bulk of the damage: salinity, water overuse, land clearing and biodiversity loss, water and soil pollution and greenhouse gas emissions.

Salinity

Export-oriented agriculture's emphasis on high volume production has lead to serious salinity problems. Dryland salinity already affects 2.5 million hectares and potentially more than 12.5 million hectares of prime agricultural land. The 2001 National Land and Water Audit estimates that by 2050, the area of land affected by dryland salinity in 2050 could by 17 million hectares (DAFFA, 2001).

Salinity also leads to the loss of Australia's biodiversity, as natural vegetation increasingly becomes threatened by degraded soil conditions.

Native Forest Logging

Australia's native forests are logged almost exclusively for export income. The National Association of Forest Industries estimates that 90% of woodchips from hardwood (native forest) logging are exported (NAFI, 2003). The 1996 State of the Environment Report noted that "It is the value of [export] woodchip sales that makes the logging of many coupes financially viable. Also, whereas almost all timber products are retained in Australia, most woodchips are exported" (SEAC, 1996, p. 6-42).

Water Overuse

In the driest continent on earth, agriculture utilises 75% of Australia's total freshwater use (Foran & Poldy, 2002, p. 192). From 1985 to 1997, agricultural water use increased by 5,300 billion litres per year (Ibid., p. 192). If eighty percent of this agriculture is then exported, then Australians get little benefit from this scarce resource – agriculture makes up only 3% of Australia's GDP (DFAT, 2003a). This massive water export also seems illogical at a time when many Australian cities and towns suffer severe water restrictions. Increased agricultural water use – mostly for irrigation – also adds to a number of environmental problems, including dryland salinity, water pollution (from pesticide run off), and blue-green algae in waterways (from fertiliser run off).

Chemical Overuse

Growth in export-agriculture has lead to exponential growth in agricultural chemical use. For instance, since 1981 nitrogen fertiliser use has more than quadrupled from 245 Mt to over 1,034 Mt annually. Since 1961, nitrogen use has grown by almost thirty times (UNFAO, 2003). Both fertilisers and pesticides have a propensity for run-off, and Australian waterways and coastal areas, together with the flora and fauna which inhabit them, have borne the brunt of the increased use. Nitrogen fertiliser use is a significant cause of increased soil acidification, with the 1996 State of the Environment Report estimating that 29 million hectares of Australian soil is already considered "significantly acidified" (SEAC, 1996, p.32). Increased incidence of blue-green algae in river systems and the serious threat to the Great Barrier Reef from pesticide and fertiliser run off are some other environmental impacts of increased chemical use.

Greenhouse Gas Emissions

Australia has the highest per-capita greenhouse gas emissions of any country on Earth, and emissions are increasing faster than almost any other OECD country. Agriculture alone is responsible for almost one fifth (18.4%) of Australia's total greenhouse emissions – 98.4 Mt of a total 535.3 Mt of CO_2-equivalent emissions (AGO, 2002). Including emissions generated by the conversion of forest & grassland for agriculture – 64.8 Mt (AGO, 2002) – agriculture can be seen as generating over 30% of Australia's greenhouse impact. Again, exports are responsible for up to 80% of these emissions. Further, 25% of energy-related emissions are generated in the production of goods and services for export, (ABS, 2003) representing an additional 17% of Australia's total emissions (AGO, 2002).

Land Clearing

Australia has the fourth highest rate of land clearing of any country in the world. The 2001 Australian State of the Environment Report estimates that during 2000, 564,800 hectares of native vegetation was cleared, almost all for agricultural purposes (ASEC, 2001). Land clearing for agriculture exacerbates the salinity crisis, causing more water to enter into the groundwater system, consequently causing water tables to rise, bringing salt to the surface and affecting crop growth. The 1996 State of the Environment report established the clearance of native vegetation for agriculture as the single most significant threat to biodiversity in Australia (SEAC, 1996).

As available water resources have been used up and millions of hectares of agricultural land have turned saline, Australian agriculture has been forced to look further afield to access sufficient land and water to maintain export growth. According to the CSIRO's Future Dilemmas report, projections for the next fifty years show "irrigated agriculture in northern Australia would need to expand, to meet the physical production expectations" (Foran & Poldy, 2002, p. 199). In northern Australia during the last two decades the government has opened up previously unspoilt areas for irrigated agriculture around the Ord River, the West Kimberly and the Katherine and Douglas Daly basins – 250,000 Ha Katherine Daly Basin alone (ABC, 2002). This irrigated agriculture is already bringing with it problems of land clearing, dryland salinity and soil acidification, as well as threats to local ecosystems and biodiversity (ABC, 2002).

1.2 Increased Water Use Under an FTA

Using the concept of water and energy "embodiment", it is possible to calculate the environmental impact of the proposed FTA in terms of water and energy use.

Barney Foran and Manfred Lenzen have produced a detailed analysis of the water and primary energy embodiment of Australia's economy. Their analytical procedure integrates the national input-output tables which describe the flows of dollars between economic sectors with national water and energy accounts to derive the total amount of water and energy embodied in the dollar value of various goods and services (Foran & Lenzen, 2001). This analysis can be incorporated with economic modelling of the economic impact of the proposed FTA to analyse its environmental impact in terms of water and energy use.

The CIE modelling commissioned by the federal government shows that the proposed FTA will significantly increase Australia's exports of sugar and dairy products and thus increase exports of Australia's water resources. The CIE's modelling estimates that the proposed agreement will increase Australia's sugar exports to the USA by US$442 million (A$631 million) per year. The same model predicts Australia's dairy exports to the US would rise by US$263 million (A$376) million per year (CIE, 2001, p. 44).

At the same time, Foran and Lenzen's analysis of the water and primary energy embodiment for Australia's agricultural sector shows that in terms of water use, dairy and sugar are some of the most costly products Australia can produce (Foran and Lenzen, 2001, p.325). According to their analysis, for every dollar of sugar cane Australia produces and sells, 1,239 litres of water are used. This water includes only managed water resources, and does not include soil water from rainfall. Dairy production needs 1,470 litres of water for every dollar of output. (Foran & Poldy, 2002, p. 193)

Thus, based on the government's economic models and the CSIRO's environmental models, the rises in these two commodities alone due to the proposed FTA would increase the amount of water used in Australia – and then exported to the US – by 1.34 trillion (1,340,000,000,000) litres per year. This is approximately equal to the volume of 3 Sydney Harbours-ful and represents a increase of 7.5% on Australia's current total agricultural water use of 17.9 gigalitres per year (Foran & Poldy, 2002, p. 192). This would be and an increase of almost 6% on Australia's total water use – a rise that would almost equal the total Australian domestic water use of 1.8 trillion litres (Foran & Poldy, 2002, p. 192).

1.3 Increased Energy Use Under an FTA

The same technique can be used to calculate the increase in embodied energy which would be exported to the US under the FTA. Foran and Lenzen's analysis shows that per dollar of output, sugar production uses 15.3 million Joules of energy (Foran & Poldy, 2002, p. 193). In laypersons' terms, that is the amount of energy needed to run a 100 watt light globe for 43 hours (4.25 kWh). Per dollar of output, dairy production uses 14.3 million Joules of energy (Foran & Poldy, 2002, p. 193), or the amount of energy needed to run a 100 watt light globe for 40 hours (3.97 kWh).

Based again on the CIE's modelling, the rise in just sugar and dairy production for export due to an Australia-US FTA would amount to an extra 15.0 PJ of energy – 15 thousand million million Joules – used in exports to the USA every year, from only two agricultural products.

This is again a significant amount. Based on data from the Australian Greenhouse office, (AGO, 1998) this extra consumption of energy would produce approximately 2 million tonnes of CO2-equivalent Greenhouse gas emissions every year. On the latest statistics available, Australia's annual energy-related CO2-equivalent greenhouse emissions from agriculture totalled 7.2 million tonnes (ABS, 2003). Thus the FTA is projected to increase energy-related emissions from agriculture by more that 25%.

Table 1: Summary of Energy and Water implications of the FTA

Sector	Megajoules of energy per dollar output (CSIRO)	Litres of water per dollar output (CSIRO)	Projected total increase in water use (litres)	Projected total increase in energy use (MJ)	Projected increase in output due to FTA (CIE)
Dairy	14.3	1,470	552 billion	5.4 billion	A$376 million
Sugar	15.3	1,239	782 billion	9.7 billion	A$631 million
			1.34 TRILLION	**15.0 BILLION**	**A$1.1 BILLION**

1.4 Other environmental impacts

Increases in sugar and dairy production which will occur under a FTA with the US will have environmental impacts far beyond increased water and energy use. For instance, both sugar and diary industries are among the nation's largest users of chemical fertilisers and pesticides. The National Land and Water Audit notes that "sugar cane . . . used substantially higher levels of fertiliser nutrients (kg nutrient/ha) than dryland crop and pasture systems" while the Fertiliser Industry Federation of Australia estimates that 48% of the total value of fertilisers applied to pastures in Australia are now applied on dairy farms" (DAFFA, 2001).

The overuse of chemical fertilisers is responsible for two main serious environmental problems – waterway eutrophication (an excessive or changed nutrient state) and soil acidification. Increases in sugar and dairy production under an FTA would thus have serious flow-on impacts:

1. Water pollution caused by chemical fertilisers and pesticides, in turn causes algal blooms in many Australian rivers, endangering native animals and plants. This pollution also ends up in Australian oceans, and has been identified as a serious threat to coral reef systems. The Queensland sugar and cattle grazing industry's use of such chemicals has been recognised as a significant threat to the Great Barrier Reef, endangering plants and animals, and as a result, the tourism industry in the area (Productivity Commission, 2003)

2. Soil acidification caused by excessive fertiliser use. Acidifying nitrogen fertilisers are a significant cause of soil acidification. Nitrogen fertiliser use has quadrupled since 1981, and the 1996 State of the Environment Report estimates that 29 million hectares of Australian soil is already considered "significantly acidified" (SEAC, 1996, p. 32).

Currently, government policies take no account of the water, energy or chemical embodiment in Australian exports. Such policies draw no distiction between environmentally extractive and environmentally benign production for export, and trade agreements are negotiated without pause for the environmental impacts that growth in water, energy or chemical intensive industries might have.

2. Transport Effects

Modelling by the CIE predicts the proposed FTA will create significant rises in two-way trade, with Australia increasing agricultural and some mineral exports, and the US increasing textile, motor vehicle and some agricultural and mineral exports. In turn, this increased trade will increase two-way transport across the Pacific, and contributing to increases in a number of environmental problems.

2.1 Increased Greenhouse Gas Emissions and Other Pollution

"Ship engines are thus among the world's highest-polluting combustion sources per ton of fuel consumed . . . Nitrogen emissions [from global shipping] are 14 percent of all fossil fuel combustion and the sulfur aerosol emissions [from global shipping] are about 16 percent of sulfur emissions from all petroleum use in the world."
– Corbett and Fischbeck, *Science*, 1997.

Increased trade under the proposed FTA – particularly large volumes of agricultural and mineral trade – would significantly increase both domestic, and in particular international transport between Australia and the US.

International shipping causes a wide variety of pollution, including carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O), as well as carbon monoxide (CO), nitrogen oxides (NOx), non-methane volatile organic compounds (NMVOCs) and sulphur oxides (SOx) (UNFCCC, 1999). Ships spew 5 percent of the world's sulfur oxides and 14 percent of the world's nitrogen oxide emissions from fossil fuels – equal to the nitrogen emissions from all the cars, trucks and other vehicles in the United States (Corbett & Fischbeck 1997). Environmental dangers from airborne sulfur and nitrogen oxides are serious. Sulfur particles cause acid rain, while nitrogen compounds – as well as being greenhouse gasses – can form ground-level ozone.

Aircraft, while carrying less international trade, cause far more pollution, emitting gases and particles directly into the upper troposphere and lower stratosphere where they have an impact on atmospheric composition. These gases and particles alter the concentration of atmospheric greenhouse gases, including carbon dioxide (CO2), ozone (O3) and methane (CH4), trigger formation of condensation trails, and may increase cirrus cloudiness - all of which contribute to climate change.

In Australia, domestic and international transport are major contributors to air pollution and to climate change: the domestic transport sector is already the

second largest producer of greenhouse gas emissions. In 2000 domestic transport produced an estimated 76.3 Mt of CO2-equivalent emissions, or 14.3% of net national emissions (AGO, 2002). Transport is also the fastest growing polluter of any sector, rising by 20.3 per cent in the decade between 1990 and 2000 (AGO, 2003).

But these figures conceal a significant contributor to Australia's greenhouse emissions - the pollution created by the transport of goods in international trade. International transport to and from Australia generated 10.2 Mt of CO2 emissions in 2000 (AGO, 2002). Unfortunately, these figures are not included in the national inventory prepared by the Australian Greenhouse Office. Were they to be included, they would increase Australia's transport-related emissions by 13.4%, or almost one seventh.

The failure to include emissions generated by international transport in Australia's national inventory also conceals the fact that these emissions are the fastest growing of any sector – far greater than the 20.3% rise in domestic transport emissions in the last decade (AGO, 2003). In fact, emissions generated by international transport to and from Australia leapt 63% – from 6.4 Mt to 10.2 Mt – between 1990 and 2000 (UNFCCC, 1999). This rise is over triple the rise in domestic transport emissions.

Increased air pollution from transport significantly effects air quality and thus human health. Of all ship emissions – which as shown above, account for up to 14% of NOx and SOx pollution world-wide – nearly 70% occur within 400 km of land regions, adding significantly to pollution above cities (Corbett & Fischbeck 1997). The World Health Organisation estimates that air pollution is responsible for the death of approximately 3 million people – and perhaps as many as 6 million people – every year (WHO, 2000).

The proposed FTA promises to continue these trends, further increasing Australia's contribution to global warming and to polluted air above major port cities.

3. Legal and Policy Issues

Specific provisions in the US-Australia Free Trade Agreement will also have implications for Australia's environment. This is obvious in a number of areas which have been confirmed as subjects for negotiations by US Trade Representative Robert Zoellick's statements to the US Congress (Zoellick, 2002). Provisions most likely to affect the environment are those relating to genetically modified foods (Technical Barriers to Trade), quarantine regulations (Sanitary and Phytosanitary measures), and investor-state provisions.

3.1 Regulation of Genetically Modified (GM) Food

"Genetically engineered crops represent a huge and uncontrolled experiment whose outcome is inherently unpredictable."
– Barry Commoner, biologist, City University of New York, 2002.

Australian Food Standard 1.5.2 currently requires the labelling of all foods containing significant amounts of genetically modified material. Such labelling allows consumers to chose whether or not to purchase food grown using this controversial technology. Unfortunately, the US – as the world's largest producer of GM agriculture – has tagged GM labelling and regulation as a "barrier to trade", and has signalled it will push for the removal of government rights to regulate GM products. In the words of the US Trade Representative Robert Zoellick, the US will push to "eliminate" any "unjustified" technical barriers to trade, "including those relating to labelling requirements on U.S. food and agricultural products produced through biotechnology" (Zoellick, 2002). The US is currently pursuing a similar case against European Union GM labelling laws though the World Trade Organisation's Dispute Settlement Procedure. The US itself has no labelling laws for GM products, and comparatively lax regulations regarding new GM crops.

Most Australian states have current moratoria on the production of GM food crops. It is not clear what status these moratoria would have under the FTA, but there is a case to be made that US GM seed companies like Monsanto could challenge the moratoria on the basis of their right to market access under the agreement. This would be possible since under the agreement Australia is viewed as a single market. The fact that some states might allow a GM crop would allow a US company to claim that they are being unfairly discriminated against by moratoria in other states. Such a claim could force the federal government to overturn state moratoria to allow market access for GM seed companies under the agreement.

The production of genetically modified crops have serious environmental implications. Once released, GM organisms cannot be recalled, so their environmental impacts are irreversible. GM crops have been show in a number of cases to endanger biodiversity, most famously in a May 1999 study published in the journal *Nature* which reported that genetically engineered corn killed 44 percent of the monarch butterfly caterpillars who fed on milkweed leaves dusted with it.

More recently, in the largest and most thorough field trials of their kind in the world, scientists from the Royal Society in Britain tested the environmental impacts of three types of GM crops – beet, canola and maize – in 273 different trials. According to press reports, the trials "showed that the [GM beet and canola] crops damaged wildlife, and would have a serious long-term effect on bee, butterfly and bird populations." (Brown & Vidal, 2003). Other environmental concerns include the ability of GM plants engineered to be herbicide resistant to pass on to weeds their herbicide resistance, creating "superweeds".

3.2 Proposed Quarantine Provisions

"Although trade is vital to Australia, quarantine services should not be compromised. The trend towards free trade places many additional pressures on maintaining our quarantine standards, but if these are weakened through international pressures and short-term savings measures, we will no longer have an international reputation as a 'clean country'. We must balance short term economic considerations affecting trade and export markets with the longer term interests of sustainable agriculture, human health and environmental protection."
– Professor Gustav Nossal, Ex-President of the Australian Academy of Science (AAS, 1996)

Australia's quarantine policy plays a vitally important role in ensuring the protection of human, animal and plant health. Australia's current policy is scientifically sound and based on the "precautionary principle" which allows it to act on the side of caution if there is no scientific certainty about potential threats to human health and the environment. Without such restrictive measures, Australia would have no way of safeguarding against exotic pests and disease that may be introduced by agricultural products.

Unfortunately the USA has specifically stated that it considers Australia's stringent quarantine barriers to be a 'technical trade barrier' alongside its wish to "eliminate" any quarantine restrictions it judges "unjustified" (Zoellick, 2002).

Australian quarantine laws are based on the strictest scientific standards, and any changes would endanger the Australian environment, native wildlife and the farming sector, with serious implications for the tourism and food production industries.

There is are strong precedents for the use of trade agreements to challenge quarantine laws. In 1999, Canada challenged Australia's quarantine laws on imports of Canadian Salmon as a "barrier to trade" in a case brought in the World Trade Organisation. The WTO upheld Canada's claim, and Australia was forced to change its regulations to allow the import of a product which the quarantine service sees as a danger to local salmon populations. In the wake of the 1999 WTO ruling against Australia's ban on Canadian salmon, the Senate Rural and Regional Affairs and Transport Legislation Committee Report of June 2000 commented that the decision could "set a precedent which may undermine the [Australian] quarantine requirements in other areas" (SRRATLC, 2000, p. 179). The proposed FTA has the potential to further dilute Australia's strong quarantine rules if they are seen to be "barriers to trade".

3.4 Proposed Investor-State Provisions

"The template for an Australia-US free trade agreement allows American corporations to sue the Australian Government over laws they believe breach the trade deal. Sources close to negotiations over the deal - which resume in Hawaii next week - say the negotiating text is based on existing US trade agreements with Mexico, Canada, Chile and Singapore. The agreements have led to controversy after corporations challenged environmental and services regulations in court."
– "US trade deal may end in court" Sydney Morning Herald, 18 July 2003.

In July 2003, the Sydney Morning Herald confirmed that "investor-state" provisions had been included in a template for an Australia-US free trade agreement. The article noted that "The agreements have led to controversy after corporations challenged environmental and services regulations in court." (Garnaut & Overington, 2003)

Investor-state provisions establish a process by which individual investors – rather than the FTA's signatory governments – can sue foreign governments for compensation for breaches of the trade agreement. In effect, investor-state provisions give foreign investors rights to challenge domestic legislation enacted by state, local or federal governments. Given that domestic investors have no such rights, it effectively puts foreign investors on a level above not only local investors, but sovereign governments themselves.

The North American Free Trade Agreement (NAFTA) was the first FTA to include "investor-state" provisions. Under Chapter 11 of NAFTA, foreign corporations can sue governments over government measures which allegedly limit the value of their investments. When corporations use investor-state provisions, they by-pass governments altogether by appealing to international tribunals that operate entirely outside of national laws and constitutional guarantees of justice and equality. These tribunals meet in secret, and are under no obligation to allow public scrutiny, or to release any information about their deliberations, apart from a decision.

Under NAFTA, investor-state provisions have been overwhelmingly used to challenge environmental legislation in signatory countries. Such cases have been based on "national treatment" and "expropriation" rules within NAFTA. The Australian government has included investor-state provisions in the free trade agreement in concluded with Singapore in 2003, and has stated that it will consider similar provisions in the proposed US-Australia FTA.

The inclusion of investor-state provisions in the FTA would allow US corporations to sue Australian governments for loss of income which results from environmental, health or labour laws which Australian Governments have made or might make. Under NAFTA, investor-state tribunals have ruled environmental and health regulations in breach national treatment rules, or ruled them as being tantamount to expropriation, and governments have had to compensate firms for millions of dollars. For example:

- In 1997, a NAFTA Tribunal awarded US-based Metalclad Corporation US$16.7 million in compensation in a dispute with the Mexican government. Metalclad had sued the Mexican Government for $90 million dollars after being denied permission to operate a hazardous waste facility in the municipality of Guadalcazar, on land that had been declared a "special ecological zone."

- In 1999, Methanex Corporation, a Canadian-based multinational, sued the U.S. government for US$970 million because of a ban by California and other states on a fuel additive (MTBE) containing Methanol, a chemical which the company manufactures. MTBE has become a major groundwater contaminant, but Methanex has argued that since there are less trade-restrictive ways of solving the water contamination problem – whatever their cost – MTBE must be allowed in fuel, or $970 million must be paid in compensation. The case is still pending.

- In 1999, Sun Belt Water Inc., a US-based multinational, sued the Canadian government for US$10 billion after the government restricted the bulk export of Canadian fresh water. Although it had never exported Canadian water, Sun Belt sued for the company's expected future losses, which it claimed resulted from the domestic legislation. The case is still pending. (Public Citizen, 2001)

Based in this evidence, should investor-state provisions be included in the proposed FTA, they would constitute a clear threat to Australia's environmental regulations.

4. Policy Recommendations

Consequent to the concerns raised above, this report recommends that the Australian government:

- Immediately commission a comprehensive review of the environmental impacts of a free trade agreement with the US.

- Legislate to ensure a comprehensive environmental impact review is mandatory before the signing of all significant international trade agreements. The process for such a review should include public participation and consultation at all practical opportunities. The results of such a review should also inform and influence the negotiations on the agreement, and negotiators should ensure that environmental considerations are taken into account during negotiations.

- Clearly exclude from the proposed agreement changes to any regulations concerning bio-safety and Genetically Modified Organisms, and changes to Australia's quarantine regulations.

- Clearly exclude from the proposed agreement any form of "investor-state" provisions, or any provisions providing investor rights to challenge domestic regulations or technical standards. Designate Australian and US courts as the sole arbitration bodies for disputes under the agreement.

- Legislate to make all international trade agreements subject to parliamentary scrutiny and dependent on passage through both houses of Federal parliament before taking effect.

REFERENCES

AAS (Australian Academy of Science) (1996), *The price of free trade and a healthy environment is eternal vigilance*, Media Release, 13 December 1996: http://www.science.org.au/academy/media/aqis.htm

ABC (Australian Broadcasting Corporation) (2002), "Top End Land Clearing", *Earth Beat*, Radio National, 7 December 2002: http://www.abc.net.au/rn/science/earth/stories/s740428.htm

ABS (Australian Bureau of Statistics) (1998), *Australian Social Trends 1998: People & the Environment - Use of Resources: Household Energy Use,* Canberra, Australia: http://www.abs.gov.au/ausstats/abs@.nsf/0/1DDF10C29E1C558ACA2569AD000402D6?Open

ABS (Australian Bureau of Statistics) (2001), *Energy and greenhouse gas emissions accounts,* Canberra, Australia: http://www.abs.gov.au/ausstats/abs@.nsf/0/3C48092D51139CD6CA256A4E000198B7?Open

ABS (Australian Bureau of Statistics) (2002), "Australian energy consumption allocated to final use," *Australian Bureau of Statistics Yearbook 2002*, Canberra, Australia: http://www.abs.gov.au/ausstats/abs@.nsf/0/ECA9F6260DC0B2D7CA256B35007B4F33?Open

ABS (Australian Bureau of Statistics) (2003), "Energy and the Environment - Greenhouse gas emissions", *Australian Bureau of Statistics Yearbook 2003*, Canberra, Australia: http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/13DFCAA2FFF83FC1CA256CAE0015A73F

AGO (Australian Greenhouse Office) (1998), *Strategic Study of Household Energy and Greenhouse Issues*, Canberra, Australia, June 1998: http://www.greenhouse.gov.au/coolcommunities/strategic/chapter2.htm

AGO (Australian Greenhouse Office) (2002), *National Greenhouse Gas Inventory 2000 with Methodology Supplements*, Canberra, Australia: http://www.greenhouse.gov.au/inventory/2000/emissions2000.html

AGO (Australian Greenhouse Office) (2003), *Sustainable Transport Homepage,* Canberra, Australia: http://www.greenhouse.gov.au/transport/index.html

ASEC (Australian State of the Environment Committee) (2001), *Australia State of the Environment 2001*, Department of Environment and Heritage, Canberra, Australia: http://www.deh.gov.au/soe/2001/contents.html

Brown, Paul & Vidal, John (2003), "Two GM crops face ban for damaging wildlife" *The Guardian,* October 17, 2003, London, UK, http://www.guardian.co.uk/guardianpolitics/story/0,3605,1064936,00.html

CIE (Centre for International Economics) (2001) *The Economic Impact of an Australian US Free Trade Area,* Canberra, Australia: http://www.intecon.com.au/pdf/Final%20DFAT%20report.pdf

Corbett J & Fischbeck P (1997), "Emissions from Ships", *Science,* American Association for the Advancement of Science, Washington, DC, USA, 31 October, 1997.

Foran, Barney & Lenzen, Manfred (2001), "An Input-Output Analysis of Australian Water Usage", *Water Policy* 3 (2001), Elsevier Science Ltd, pp. 321-340.

Foran, Barney & Poldy, Franzi (2002), *Future Dilemmas: Options to 2050 for Australia's population, technology, resources and environment*, Resource Futures Program, CSIRO Sustainable Ecosystems, Canberra, Australia: http://www.cse.csiro.au/research/Program5/futuredilemmas/index.htm

DAFFA (Commonwealth Department of Agriculture, Fisheries and Forestry) (2001), "Australian Agriculture Assessment 2001", *National Land and Water Resource Audit*, Bureau of Rural Sciences, Canberra, Australia: http://audit.ea.gov.au/anra/agriculture/docs/national/Agriculture_Contents.html

DFAT (Commonwealth Department of Foreign Affairs and Trade) (2003), *Trade in Agriculture: Agriculture and the WTO,* Canberra, Australia, http://www.dfat.gov.au/trade/negotiations/trade_in_agriculture.html

DFAT (Commonwealth Department of Foreign Affairs and Trade) (2003a), *Australia: Well Placed in the Global New Economy*, Innovative Australia Fact Sheets, Canberra, Australia, http://www.dfat.gov.au/facts/innovative/fs03.html

Garnaut, John & Overington, Caroline (2003), "US trade deal may end in court" *Sydney Morning Herald*, Sydney, Australia, 18 July 2003, http://www.smh.com.au/text/articles/2003/07/17/1058035139206.htm

NAFI (National Association of Forest Industries) (2003), *Facts and Figures: Woodchipping:* http://www.nafi.com.au/faq/index.php3?fact=9

Productivity Commission (2003), *Industries, Land Use and Water Quality in the Great Barrier Reef Catchment,* Research Report, Canberra, Australia, February 2003: http://www.pc.gov.au/study/gbr/finalreport/index.html

SRRATLC (Senate Rural and Regional Affairs and Transport Legislation Committee) (2000), *An Appropriate Level of Protection? The Importation of Salmon Products: A case study of the Administration of Australian Quarantine and the Impact of International Trade Arrangements*, Canberra, Australia, 5 June 2000, http://www.aph.gov.au/senate/committee/rrat_ctte/salmon_final/report/contents.htm

SEAC (State of the Environment Advisory Council) 1996 – *Australia State of the Environment 1996: An Independent Report Presented to the Commonwealth Minister for the Environment*, Department of Environment and Heritage, Canberra, Australia: http://www.deh.gov.au/soe/soe96/index.html

UNFAO (United Nations Food and Agriculture Organisation) (2003), "Fertilisers", *FAOSTAT Agriculture Database*, Rome, Italy, http://apps.fao.org/page/collections?subset=agriculture

UNFCCC (United Nations Framework Convention on Climate Change) (1999), *Methodological Issues: Emissions Resulting from Fuel Used for International Transportation – Note by the Secretariat*, 11 May 1999, http://unfccc.int/resource/docs/1999/sbsta/inf04.pdf

USTR (United States Trade Representative) (2003), *Final Environmental Review of the U.S.-Chile Free Trade Agreement*, Washington, DC, USA, June 2003: http://www.ustr.gov/environment/tpa/chile-environment.pdf

WHO (World Health Organisation) (2000), *Fact Sheet No 187: Air Pollution*, Geneva, Switzerland, September 2000: http://www.who.int/inf-fs/en/fact187.html

Zoellick, Robert B (2002), *Letter to US Senator Robert C. Byrd*, Office of the United States Trade Representative, Washington, DC, USA, 14 November 2002, http://www.ustr.gov/releases/2002/11/2002-11-13-australia-byrd.PDF