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## **Agriculture in a Changing Climate**

**Tony Burke**

*Paper prepared for presentation at the “Agriculture in A Changing Climate: The New International Research Frontier” conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, Australia, September 3, 2008*

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## Agriculture in a Changing Climate

**THE HON. TONY BURKE MP**

MINISTER FOR AGRICULTURE, FISHERIES AND FORESTRY

### International agricultural research

The Crawford Fund has been working on significant issues such as those that are the theme of this conference since 1987, and in DOIng so commemorating the important work of the late Sir John Crawford and his outstanding services to international agricultural research.

The Fund depends on grants and donations — from government agencies, private companies, corporations and charitable trusts. It could not function, however, without the financial support and the time given by individual Australians. On this occasion, I want to particularly thank Bob Clements, the former Executive Director of the Fund, for his energetic leadership of the Fund and the organisation of this conference.

International agricultural research is at the centre of the way we now have to deal with the world food crisis. This crisis is fundamentally different to anything we have seen before. The world food shortage has causes that are different to those that much of the public commentary suggests. The world food shortage has different solutions to the famines of the past.

TONY BURKE was appointed as the Rudd Government's first Agriculture, Fisheries and Forestry Minister in November 2007, following the Labor election win. Since his appointment, he has made it a priority to get out of the office to meet Australia's primary producers and industry representatives in the field. That includes seeing at first hand the impact of climate change and drought on our rural industries and communities. Tony is focused on the job ahead, particularly in ensuring a strong and vibrant future for Australia's primary producers. He was elected to the Australian Parliament in 2004 as the Member for Watson and has served as the Shadow Minister for Small Business and Shadow Minister for Immigration, Integration and Citizenship.

### The global food supply

Many times over the past century the global community has had to deal with famine — in Kampuchea, Bangladesh, Ethiopia, Somalia. We saw the population of Mogadishu halve. But these food shortages were always relatively localised.

There was never actually not enough food globally. We were always dealing with problems of particular governments. Problems with lack of governance. Problems in those countries where there was in fact enough food but it simply wasn't being adequately distributed.

The situation is now different.

In past food shortages, the only people who felt the effects were the people in the nation of the famine and the people in wealthier nations who were making individual sacrifices to try to be part of the solution. Now everybody is affected in some way. In the poorest of nations there is just not enough food. In nations that are starting to become a bit wealthier, industries that were working suddenly can't deal with increased input costs.

There have been food riots in many countries over recent months. We see issues like the Government of Haiti falling, specifically over food prices; nations like Thailand earlier in the year having to put out an official call asking people to stop hoarding rice because the interest you could gain from storing rice under your bed was actually the best investment throughout Thailand.

These problems extend to wealthier countries throughout the world where people ask: 'How come the cost of food at the supermarket keeps going up?'

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This is an edited version of the Minister's speech

## Major influences on food availability

The public commentary on the world food shortage has focused disproportionately on biofuels as a cause. There is no doubt that the transfer of land from the production of food to the production of fuel has meant that a critical point has been reached sooner than would otherwise have been the case — but we have to acknowledge we were getting there anyway.

The fundamental problems are long-term structural ones, and that's why the responses and the solutions have to be different to those of the past. These long-term problems have occurred for a number of reasons, but two stand out: globalisation and climate change.

Globalisation means that when fuel prices and input costs go up, they go up around the globe. Fuel prices affect chemical prices and fertiliser prices. In wealthier nations, the cost of production goes up and that increase is passed through to the consumer. In poorer nations the question starts to be asked: 'To what extent can we continue to afford to produce?' These input costs are having a very real impact and are part of the long-term structural problem.

Food production is intimately linked to climate and climate change. We cannot underestimate the significance of the fact that long-term harvest averages around the world are not what they once were. It's not simply a case of cyclical drought in some countries. The droughts are getting longer, they are getting deeper and the interval between one drought and the next is not nearly as long as it used to be. That, by definition, creates long-term problems for food supply.

Many poorer nations have industrialised much of their economy, but almost without exception have neglected their agriculture sectors. As people have moved to the cities and become wealthier, they seek both more food and more protein in their diets, but supply is not keeping pace. The demand for meat results in transfer of land to livestock, and the land that's available for the cropping of staple food is increasingly growing food for the stock rather than food for people.

These factors indicate that problems were inevitable. Biofuel policies in North America and Europe have exacerbated difficulties, but it would be a mistake to think that a reversal of those policies will resolve the challenges of the global food shortage. It won't.

## Responses

The challenges that the world now faces demand that we do exactly the sort of work that the Crawford Fund is doing, plus a whole lot more. The problem is different to that of the past, and we have that problem at a time when global population is continuing to increase significantly.

The solution therefore isn't simply to wind back the clock on biofuels policies, or to provide aid dollars or to support capacity-building in poorer nations. These actions will help alleviate parts of the current crisis, but they won't change the fact that we do have a global food problem.

The provision of aid dollars targeting the areas facing famine is critical — but as a result of rising food and fuel prices our aid agencies are now buying less food with a given amount of money. This was not a problem in the past, because if food was purchased beyond the region of famine the prices were 'normal'. With a global problem, all prices are elevated and therefore the aid effort itself has been blunted.

### *Monetary assistance*

Australia has contributed \$30 million to the emergency appeal of the World Food Program to assist in food aid operations, in addition to the \$77 million that we gave in 2007–2008. This contribution helped the World Food Program reach its target of \$US755 million over two months, a result that indicates that the world is awake to the crisis that we have.

At the same time the World Bank's global food price crisis response program, which is worth \$US1.2 billion, is helping stimulate an immediate boost to food supplies, particularly in developing countries. In July of this year the Government announced that it would provide \$50 million to the World Bank Trust Fund to stimulate agricultural production in developing countries adversely affected by rising food prices.

### *Trade*

A contribution to alleviating the global food shortage would be to ensure freer movement of food around the world, for example through Free Trade Agreements. The collapse of the Doha FTA negotiations in July is a matter of regret, but Australia is pursuing bilateral agreements. Free trade agreements must cater for genuine social, economic, equity and biosecurity concerns, but they do help to alleviate restrictions on food movement.

The recent positive results of the ASEAN/Australia/New Zealand FTA negotiations are extraordinarily important. This regional agreement, coming as it did so soon after Doha, demonstrates that we are determined to ensure that trade becomes part of the solution of the serious humanitarian problem we face. My recent travels indicate that the significance of the movement of food in the world food shortage is well understood in Papua New Guinea and Indonesia.

Record prices encourage countries to let down their tariff barriers. There is no easier time for nations to do this than when their farmers are receiving high commodity prices — the political difficulties that countries around the world have faced in the past are somewhat alleviated now.

### **Producing and trading more food**

A part of the answer to the world food shortage is to simply produce more food — but there has never been a tougher time to produce more food. Climate change has made sure of that. Input prices have made sure of that. The National Farmers Federation CEO, Ben Fargher, uses the line that we need to get ‘more crop per drop’, and that research and development is more important than it has ever been.

As a food-exporting nation we can potentially contribute to the response to the challenges now facing the globe. While we need to exploit every opportunity offered by research and development and to open our minds to any avenue whereby we might improve productivity, it will always be important to make sure that we have robust regulation to ensure health standards.

There will be a growing acceptance of genetically modified crops as one piece of the jigsaw in dealing with the challenges of food production in an age of climate change.

The development of biofuels will continue, because these are not the source of the structural issues we face and because there will be economic attractions in biofuels as the oil price continues to rise. We have a responsibility to try to drive research and development in biofuels away from staple food crops as feedstocks and towards either second-generation processes or to crops that are not staple foods<sup>1</sup>. We can make sure that R&D for

biofuels complements core work on agricultural production of food, for both Australia and globally.

Discussions of technical market access have to continue. It is important that Australia adopts quarantine procedures that are *seen* to be science-based. That is something I am quite determined will be part of the Government’s response to the Beale report on quarantine and biosecurity when I receive it later this month.

### **Conclusion**

All of these issues come together in one simple concept: around the world it is becoming harder for families to feed themselves. That’s the core of everything that we are dealing with; the challenges of climate change and globalisation come together in the world food shortage.

All of the work that we are involved in — whether it be the scientific end of straight production, or at the trade end in trying to remove barriers, or at the issues of driving investment — will affect people sitting around tables: in wealthy nations looking at the food bill, or in a poor nation suffering the lack of food.

The work of this conference is an important element of the discussion of the underlying complex issues, far more complex than most people understand.

We want to be part of the solution. We are determined to be.

The work will not wait a moment longer, and I am happy to declare the conference open.

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<sup>1</sup> See Brown, A.G. (ed.) 2008. *Biofuels, Energy and Agriculture: Powering Towards or Away From Food Security?*. Record of a conference conducted by the ATSE

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Crawford Fund, Parliament House, Canberra, 15 August 2007. The ATSE Crawford Fund, Parkville, Vic. vi + 54 pp.