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Sir John Crawford Memorial Address

Bob McMullan

Paper prepared for presentation at the “World Food Security: Can Private Sector R&D Feed the Poor?” conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, Australia, October 27-28, 2009

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Sir John Crawford Memorial Address

THE HON. BOB McMULLAN MP
PARLIAMENTARY SECRETARY FOR INTERNATIONAL
DEVELOPMENT ASSISTANCE

It is an honour to respond to the invitation from the Crawford Fund to speak to you this evening to honour the memory of Sir John Crawford.

Sir John Crawford

2009 marks the 25th anniversary of the death of Sir John Crawford, a remarkable Australian who contributed at the highest levels to the development of Australia and other countries, and was a passionate supporter of international agricultural research for development.

I first met Sir John in 1975 as a (young) member of the first Advisory Board to the Australian Development Assistance Agency, which he chaired. He was an impressive and inclusive leader. Knowing of his extensive national and international experience and his standing, it was a daunting task for a young activist to debate these issues with him.

Writing about Sir John, Bruce Miller¹⁹ character-

BOB McMULLAN was sworn in as Senator for the Australian Capital Territory in February 1988, and went on to serve as a Cabinet Minister in the Keating Government, including a period as Minister for Trade. Following a redistribution in the House of Representatives, he stood for the seat of Canberra in 1996 and was elected and served in various shadow portfolios. Following a further redistribution in 1998, he became Member for Fraser, a position he holds today. As Parliamentary Secretary for International Development Assistance, he oversees the implementation of Australia's international development policy and is responsible for the day-to-day management of issues related to the aid program. This involves working closely with AusAID, the Australian Government agency responsible for international aid, international development partners, other donor governments and international organisations to advance Australia's development objectives.

ises him as a man reaching out for humanitarian goals and possessing a genuine desire for social and economic betterment. He saw Australia's future as a trusted and equal partner in our region, rather than a dominant colonial, mercantile or military force. He envisioned Australia as a source of principle and fairness in building new institutions for a global world.

He also cared deeply about the state of the post-war world, a third of whose citizens lived in abject poverty and hunger — and he feared the consequences if this continued. Eschewing the old paternalism, he helped to hammer out the new global model of aid based on the concept of 'partners for development', in which countries work side-by-side to solve development problems.

His very modern approach marks Sir John as a man ahead of his time.

Sir John was also central in the establishment of the Consultative Group on International Agricultural Research, whose International Agricultural Research Centres spearheaded the Green Revolution.

The Green Revolution

Although it has its critics, the Green Revolution was perhaps one of the most remarkable of all human achievements across history. It was an extraordinary display of a small group of people pulling their weight in time of difficulty. For the first time countries came together across the world in a global endeavour to try to end hunger, reduce poverty and the needless deaths of thousands, mainly children. And their success was truly remarkable:

- The proportion of the hungry in the global population was more than halved.
- Staple crop yields in developing countries rose by around 150% thanks to this extraordinary and selfless feat of scientific collaboration and agricultural enterprise.

Yet few, if any, of the quiet heroes who achieved these remarkable achievements are household names.

Perhaps the best-known is the late Dr Norman Borlaug, one of the creators of the high-yielding wheats that are said to have since nourished more than two billion people. Dr Borlaug passed away only last month aged 95 leaving, as his legacy, 80 million hectares of high-yielding disease-resistant wheat crops.

Yet in 1968, as starvation gripped the Indian subcontinent, American academic Paul Ehrlich wrote in his book *The Population Bomb*:

The battle to feed all of humanity is over. In the 1970s and 1980s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now. At this late date nothing can prevent a substantial increase in the world death rate ...

But Norman Borlaug and his colleague, the eminent Indian crop scientist M.S. Swaminathan, had other ideas. By 1974, barely six years after they helped to distribute the CGIAR's high-yielding wheat and rice varieties, India was meeting its own food needs and global hunger was in retreat — perhaps for the first time in history.

The power of partnership between the world's richest nations and its poorest to successfully address urgent and deadly challenges was proven beyond doubt. The power of partnerships in agricultural science to roll back the tide of poverty was demonstrated: it was scientists like Borlaug and Swaminathan who fed the world.

A new challenge

If we are to achieve the Millennium Development Goals we need to return to that priority, to that partnership approach, and to mobilising the power of science together with sound economics to lift agricultural productivity.

In his acceptance speech for the Nobel Peace Prize in 1970 Norman Borlaug sounded a warning:

... It is true that the tide of the battle against hunger has changed for the better ... but ebb tide could soon set in, if we become complacent ...

In the months before his death, he constantly repeated this warning to all who would listen, and the evidence is before us that his fears have been realised.

Recent events have shown the tide can turn quickly. In 2008, amid general complacency over world food security and some of the lowest real world food prices in human history, a food crisis seemed to erupt out of almost nowhere. The number of hungry people worldwide, which had been falling steadily to around 800 million, again surged to over a billion. Food prices soared, especially for rice in Asia. While the experts still argue over the precise contributors, primary factors include:

- drought in many growing regions, including Australia
- soaring farm fuel and fertiliser prices
- historically low world grain stocks
- the diversion of food crops to biofuels in the US, Europe and South America.

Some of the factors that caused the crisis have since dissipated: the ensuing economic crash brought down oil prices, while grain harvests have improved somewhat. But for the poorest of the world's poor, the problem has not gone away and global food security remains precariously balanced. In fact, all the signs suggest that the long-term trend for global food prices is for continuing increases and therefore continuing pressure on opportunities for the poor and disadvantaged in developing countries.

As Borlaug and others had understood and warned, powerful constraints were coming into play. These forces have profoundly altered the global food outlook from one of surplus and security to one of uncertainty and risk. They have changed the mood from one of complacency to one of concern. Large forces are now bearing down on the global food supply.

The human population will climb to 9.2 billion in 2050 and continue to rise thereafter. This trend, together with increasing living standards and consequent dietary changes, has generated serious upward demand pressure. This coincides with serious pressures on the supply side, for example the emerging global water crisis. City demand for

water has overtaken agricultural demand for the first time in history. Groundwater levels are falling in almost every country. There are signs the world's major grain-bowls are drying.

The global area of good food-producing land is shrinking. Cities and non-food uses are taking over the world's best farming land. The area of land affected by erosion and degradation has almost doubled in the past twenty years to 24% of the world's land area. Fertile, low-lying river deltas are at risk from accelerated sea-level rise.

At present, biofuels often compete directly with food for agricultural land and resources and, according to the World Bank, this greatly affects food prices. There is growing uncertainty over what energy sources we will use to grow and transport the world's food by the mid-century.

There has been a worldwide decline in agricultural R&D, in both developing and developed countries, including Australia. The impact of this can be seen in declining rates of yield increase in the main food crops. The CGIAR is receiving funding similar, in real terms, to what it received in the mid-1970s — when the world had only half the people now present.

Taken together, these factors constitute a 'perfect storm' for world agriculture. We are now in a situation where the world's farmers must almost double their output of food — using less land and less water, amid increasingly scarce supplies of fertiliser and energy, with limited technology, in the teeth of an uncertain climate. It is a challenge just as great as the one faced by the leaders of the Green Revolution half a century ago.

As Norman Borlaug feared, the world has been lulled by complacency into neglecting the one thing we can never afford to ignore: the need to put sufficient food on the table, sustainably. The magnitude of this challenge was debated in Rome only last week, where a high-level expert forum was hosted by the FAO on how we feed the world in 2050²⁰. Here evidence was presented that agriculture's share of overseas aid has declined, globally, from over 17% in 1980 to just 3.8% or less today. It underlines how agriculture has receded on the international agenda: how we have lost sight of the role of food in securing stability, peace and prosperity. It accentuates the prescience of Norman Borlaug, who saw this coming almost 40 years ago.

²⁰ <http://www.fao.org/news/story/en/item/36193/icode/>

An essential response

Investment in agricultural productivity needs to increase – and quickly. The areas identified as most in need of this investment are:

- agricultural research and development
- sectors strongly linked to agricultural productivity growth, such as agricultural institutions, extension services, roads and ports, and power, storage and irrigation systems
- non-agricultural investment with positive effects on human wellbeing, like the reduction of hunger and malnutrition, including education — particularly of women —, sanitation and clean water supply, and health care.

Many of these investments can only be made in the public sector. They alone, however, will not solve the problem. There needs to be equally extensive investment by the private sector, including by millions of farmers and their suppliers around the world — but the private sector will not invest unless it is profitable to do so.

In the modern parlance, we face a 'wicked' dilemma in that agriculture, worldwide, is not sufficiently profitable to generate the investment needed to secure the global food supply to the mid-century and beyond. We need to transform the evident need into effective economic demand. We have to devise new and better ways to encourage such investment, or it will not happen.

Of course as a first step we need to free up world trade, as Australia has advocated for decades, in order to allow food production to flow to the most efficient places and producers, and to allow supply to respond to the change in demand pressures.

Australian contributions

Australia remains wholeheartedly committed to the task of feeding the world sustainably, sharing the burden and raising investment levels in agricultural research for development. We were among the scientific leaders in the Green Revolution. Our scientists have staffed and led many of the international research centres at its heart. They continue to lead today.

Through ACIAR and AusAID we will fund and support the goals of food security, poverty reduction and stability. We are already increasing our commitment. We will continue to do so.

Like Sir John, we recognise that poverty, the loss of food security and resulting instability are among the primary ingredients in failed states. We understand that the impacts of state failure reverberate far beyond the borders of the country affected — as waves of desperate migrants and refugees; increases in military, terrorist and criminal threats; risk of disease; disruption to trade and travel; loss of critical resources.

Just last week, 25 years after the world rushed to limit the fallout of a major humanitarian crisis in Ethiopia, we heard reports that Ethiopia is again facing famine as a result of a severe drought. While we cannot make the rains come, we can help communities break the cycle of devastation by equipping them with the tools they need to be prepared for these disasters. With irrigation, grain stores and wells, drought-prone communities like those in the Horn of Africa can survive and prosper.

Australian projects

Australia has particular experience in adapting agriculture to harsh climatic conditions. Our expertise in this area has led to a number of successes in the aid program. Let me illustrate with an example of what we are now doing.

In Timor L'este a survey of subsistence farmers by Australian aid workers found that no family had sufficient food staples of rice or maize to last a full year — all families were forced to ration their food for a period of one to six months a year.

Australian aid is reversing this situation by introducing crop varieties better suited to local conditions and which yield more than current types. Working with CGIAR Centres, the Australian aid program procured a number of staple crop varieties from the region that were suited to the agro-ecological conditions in East Timor. As a result of this 'Seeds of Life' program, food security is improving in East Timor and through it, social and political stability.

In addition, the 2009 Federal Budget allocated \$464 million to an initiative called 'Food Security through Rural Development.'

This, on a broader scale, aims for the same results as those in Timor L'este — lifting agricultural productivity in developing countries by improving the way markets function, to build livelihoods and incomes for the rural poor.

There are other elements to this — governance, property rights, division of labour — but where there is an absence of surpluses there are no markets. Without surpluses and markets, assets cannot be built up, credit is almost impossible to obtain and poverty is endemic.

Partnerships

This brings me to the central importance of public-private partnerships in solving the problems of feeding the world. We need partnerships and alliances between government, the private sector and its companies, both large and small, for food production to flourish.

In addition, while the private philanthropic sector has long been involved in global food issues through the vision of the Rockefeller Foundation and other similar institutions, the field has been reinvigorated by the advent of Bill and Melinda Gates Foundation. To put the scale of the Gates' contribution in context, if they were a 'country', they would be the sixth largest donor to the CGIAR and international agricultural research in the world.

We need partnerships and alliances at all levels to deliver good science to the world's 1.8 billion farmers as rapidly, widely and effectively as possible, on a sound economic basis.

Some Australian examples

Not all private-sector activities are on a grand scale: some of them interact with public-sector aid delivery. Recently the Australian Centre for International Agricultural Research commenced a project working with Botanical Resources Australia to re-commercialise the pyrethrum industry in Papua New Guinea. Pyrethrum was introduced to PNG in the late 1950s, becoming a major highland industry employing as many as 80 000 people by the late 1980s. Local products were sold to a processing factory with marketing undertaken by the factory owners. When this factory closed demand disappeared, curtailing the industry.

Botanical Resources Australia, based in Tasmania, saw an opportunity to buy the PNG crop and help re-commercialise the industry. What BRA lacked, however, was knowledge of the local environment and the basis for establishing an agricultural crop to redevelop the industry — areas of expertise for ACIAR. The resulting project is working to introduce planting materials and improved agronomic practices to help with

the adoption of improved production and plant physiological factors.

Another example of ACIAR interacting with commercial business is a project linking with Mars Symbioscience. The project teams up researchers from La Trobe University and the University of Sydney with Mars Symbioscience to select varieties of cocoa resistant to the diseases limiting production in Indonesia's Sulawesi province and to test them in farmer fields.

Mars Symbioscience, which is making a significant financial and in-kind contribution to the cocoa program, has a long-term commitment to improving the environmental, economic and social sustainability of the cocoa industry in Sulawesi, from which it obtains cocoa.

The private-sector role

Where the private sector is engaged with producers in the developing world the imperatives to increase production are great. Such projects demonstrate that business and public-sector aid are viable companions. They are examples of development assistance and good science generating supply to respond to private-sector demand.

There are other innovative ways of engaging the private sector in the development task which are or might be applied in the agricultural sector.

Aid to assist private-sector infrastructure initiatives and investment is achieving some interesting results and generating lessons for us all.

Purchasing food in the country where the World Food Programme has operations has been policy for many years. The WFP's 'Purchase for Progress' initiative builds on local procurement and takes it a step further. It enables smallholder and low-income farmers to supply food to the WFP's global operations, gaining a sustainable economic benefit. The voucher and cash transfer programs allow the World Food Programme to address hunger when food is available but people are unable to afford it, and at the same time provide a financial stimulus to the local economy and a market for local farmers.

Australia provided \$5 million to the World Food Programme's relief operation for Zimbabwe for food assistance to vulnerable groups. Food was sourced through a regional tender. Through the participation, for the first time in over a decade, of Zimbabwean suppliers, the process assisted the rebuilding of the country's devastated agricultural sector.

The African Enterprise Challenge Fund is a \$50–\$100 million private-sector fund backed by some of the biggest names in development finance, and it is hosted by the Alliance for a Green Revolution in Africa. It is a competitive fund that is open to all countries in Africa with the aim of encouraging private-sector companies to compete for investment support for innovative business ideas.

Australia is currently working with the Africa Enterprise Challenge Fund (AECF) to design and implement an Australian Government funded Zimbabwe-specific window to the AECF.

Following a positive design mission undertaken in August of this year, it is anticipated Australia will contribute \$5 million to the first round of the competitive selection process of the Zimbabwe 'window' in January 2010, aimed at rehabilitating and reinvigorating agri-business and rural finance for the benefit of the rural poor.

Australia has developed a similar concept in the Enterprise Challenge Fund (ECF) in our region which is showing promise in several areas, including agriculture. The ECF provides grants of between \$100 000 and \$1.5 million, on a competitive basis, to business projects which directly benefit the poor. To secure funding, projects must also act as a positive model for other businesses to demonstrate the mutual benefits of working with the poor.

The ECF currently funds 24 projects in eight countries, benefiting over 900 000 lives throughout the Asia Pacific region through improved employment and livelihood opportunities and greater access to goods and services from the ECF. The Nature's Way Cooperative, based in Fiji, is a good example of the ECF in action. Established in 1995, the Cooperative undertakes mandatory quarantine treatment on behalf of Fiji's fruit export industry to allow 120 small-scale Fijian growers and exporters to access export markets. From an initial grant of \$264 000 from the ECF, it is anticipated the value of the Fijian export market will grow to seventeen times its size and directly employ an extra 1000 Fijians by 2012.

Another emerging area the Australian aid program is keen to explore is the idea of Advance Market Commitments (AMCs). AMCs are a way to deliver proprietary high-tech products like vaccines to countries and consumers who cannot afford them. They are public–private partnerships that tackle the inequity issue without reducing the

incentive to companies to develop new technologies and products that save and improve people's lives.

AMCs have proved a successful way of encouraging funding and research into cost-effective treatments and quality treatment of diseases that are particular to or prevalent in the developing world. They provide a legally binding commitment by donors to fully or partially finance the purchase of vaccines at a specified price, with a ceiling set on the maximum quantity of vaccines that will be subsidised.

A pilot AMC to tackle pneumococcal disease, launched in February 2007, is expected to prevent up to 5.8 million childhood deaths by 2030.

So far AMCs have been confined to pharmaceutical development, but there is scope to expand the principles that underpin their application into new and important areas. What if we could use AMCs in order to develop technology that has the potential to revolutionise agriculture in sub-Saharan Africa? Or to improve and develop drought resistant and higher yielding crops? Or medicines and methods to improve livestock production?

Australia has indicated our interest in contributing to future AMCs in the health sector.

I hope that following discussions that I have had with the Crawford Fund, and associated discussions over the past few days, we may find a way to apply the sound economic principles underpin-

ning this initiative to the vital task of enhancing agricultural productivity. The AMC approach represents an evolution of the 'partnership for development' Sir John envisioned. It combines the expertise and innovation of the private sector with public sector goodwill and, perhaps most importantly, financial backing.

Conclusion

We have made significant steps toward changing the way our development programs operate. We have had some difficulties, but these are far outweighed by our successes.

This is not a reason for complacency. We must do more, try harder and broaden and hasten our efforts. We must be more audacious in what we undertake. Ours is a time of great difficulty and challenge.

The combined effects of the global financial crisis and climate change have the potential to undo the significant progress we have made in reducing global poverty. We are compelled to continue to pull our weight, and we will. We will do so because it is the right thing to do. We will do so because it is the smart thing to do — a hungry world is a dangerous world; an inequitable world is an unstable world.

For many, freedom itself begins with an end to poverty — and ending poverty begins with the ability to satisfy our universal need for food.