

ANNUAL CRAWFORD CONFERENCE SOUNDS FOOD SECURITY ALARM

BY GIO BRAIDOTTI

In the 1960s the world faced the challenge of feeding a rapidly growing global population in part by establishing an international agriculture research network, coordinated by the Consultative Group on International Agricultural Research (CGIAR). In the 2000s, the same network that delivered the Green Revolution is at the forefront of efforts to deal with the negative impacts of climate change on food security.

This expanded mandate was the focus of policy discussions at the 2008 Crawford Fund's 'Agriculture in a Changing Climate Conference', held in Canberra during September. Meeting at this year's event were Katherine Sierra of the World Bank; Dr Cary Fowler of the Global Crop Diversity Trust; Tony Burke, Minister for Agriculture, Fisheries and Forestry; several directors-general of CGIAR centres; Dr Mark Howden of CSIRO's Climate Adaptation Flagship; and Professor Ross Garnaut from the Climate Change Review.

Dr Fowler, who heads the organisation responsible for safeguarding the world's agricultural biodiversity in the Svalbard Global Seed Vault, said that agriculture was facing a "perfect storm"—climate change exacerbating the pressure on food production from population growth, land development and degradation, low food stockpiles, and an overdraft of water from aquifers and rivers.

He further noted that the Green Revolution's success had spawned complacency towards agricultural R&D, resulting in chronic under-investment in agricultural research in recent decades.

Professor Garnaut said that, worldwide, public-sector resources going into the international agricultural research system have declined alarmingly in real terms. "The realisation over the past year of a very large global challenge of food supplies is beginning to get people thinking again about how we need to arrest the decline in that effort, strengthening it and its institutional base."

A strategy to revitalise agricultural research efforts was the main focus of the World Bank

presentation by Katherine Sierra, vice-president for sustainable development. Ms Sierra, who also chairs CGIAR, placed under-investment in agricultural science at the heart of the food crisis and acknowledged the World Bank's own role in the neglect, adding that "a lack of research has cost us a couple of decades of development".

With the World Bank committed to doubling its investment in CGIAR's 15 research centres to \$1 billion in five years, the initiative is seeing CGIAR's poverty-reduction mandate expanded to include alleviating food security threats posed by climate change.

At the national level, Professor Garnaut recommended an expanded role for ACIAR—into climate change, in line with international changes to the agricultural research network.

"I think part of what Australia needs to think about, going forward as it addresses the issue of climate change, is how it contributes to the international research effort in scientific areas that are closely related to our old interest in agriculture and forestry," he said. "The Climate Change Review recommends that the mandate of ACIAR be explicitly expanded to encompass climate change, in its biological, biophysical and social science dimensions." ■

ACIAR has been called on to join global efforts to stem climate change threats to the world's food production.

Dr Cary Fowler, executive director of the Global Crop Diversity Trust.



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Professor Ross Garnaut

Garnaut Review recommends expanded mandate for ACIAR

Acknowledging the difficulties climate change poses for developing countries, Professor Ross Garnaut identifies in his final report the intersection of climate change with sustainable development and agriculture as an appropriate focus for action.

He argues that in developing countries incentives, such as a price or cap on emissions, are unlikely to drive innovation in mitigation, and improved climate science will struggle to promote adaptation. Instead, international and Australian funding should, "as a matter of priority", fund a collaborative research endeavour based around agriculture.

The Climate Change Review offers three reasons for this focus: "First, agriculture is one of the sectors most vulnerable to climate change. Second, it is one of the most important sectors for developing countries. And finally, there is also significant mitigation potential in changed agricultural practices."

Noting ACIAR's success in promoting development-relevant agricultural research, the review recommends that ACIAR's mandate be explicitly expanded to encompass climate change. The review further notes potential benefits of the inclusion of broader environmental issues—such as air quality and waste management—and ACIAR involvement in translating climate projections into forms meaningful to local decision-makers.

ACIAR's involvement in developing scientific capacity in developing countries was also noted in the review. Since this capacity-building relies on collaborative projects with Australian scientific institutions, the review recommends that ACIAR consider future partnerships with Australian research centres working on climate change. These include CSIRO's Climate Adaptation Flagship, the National Climate Change Adaptation Research Facility based at Griffith University, and the proposed Australian climate policy research institute.

More information: Garnaut Climate Change Review, www.garnautreview.org.au

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