

CLIMATE CHANGE POSES MAJOR CHALLENGE FOR ANIMAL AGRICULTURE

The world's livestock industries will face a tough future as they come to grips with climate change.

This is the message that livestock industry expert Shaun Coffey will give to the 2008 Crawford Fund conference *Agriculture in a Changing Climate* in Canberra on 3 September. Keynote speakers include Ms Katherine Sierra, Vice President for Sustainable Development, World Bank; and Prof Ross Garnaut, author of the Garnaut Climate Change Review.

"Livestock enterprises are simultaneously being doubly impacted – affected by climate change and contributing to climate change" said Mr Coffey, Chief Executive, Industrial Research in New Zealand.

Whilst animal farming has ready options to adapt to climate change, the same is not true for mitigating the impact of livestock on greenhouse gas (GHG) emissions, Mr Coffey said.

"In a world where livestock numbers are tipped to double in the next 40 years to meet global food demand, it is not unreasonable to expect GHG emissions from animals will also rise."

"The task of reducing or maintaining emissions at current levels from livestock is daunting."

One study, for example, suggests that the high-wealth developed countries of the world, such as the US, Australia and New Zealand may need to reduce meat consumption by up to 2/3 by 2050.

This has enormous implications in social and cultural terms, and brings into stark reality the investment needed to achieve such a shift.

Already some technical success has been achieved in reducing GHG emission from sheep and cattle by about 20%, but these gains will be difficult to deliver on a global basis.

A significant, rate limiting problem is that much more research is needed to understand basic animal performance, such as species and genome effects, the efficiency of nutrition in ruminants like cattle, and physiological traits enabling animals to cope with extremes of temperature. Unfortunately much of this research is incremental in nature; the very type of research that now seems to be out of favour with some national research bodies.

Mr Coffey will outline other impacts such as the re-emergence of Rift Valley disease in Africa and the spread of new diseases such as Blue Tongue into parts of Europe.

He will also discuss possibilities for farming of wild life such as kangaroos.

Mr Coffey concludes by suggesting that the livestock industries will not be able to easily respond to climate change.

"It is not a simple technological issue, but involves complex adjustments to social and cultural norms, will require significant capital reinvestment, and depend on a more concerted research effort to understand the basic function of animals."

Conference info and media materials at <http://www.crawfordfund.org/events/conference08media.htm>

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