

## Preface

Climate change has emerged as an issue with potentially major effects on the physical and social environment of earth. Global structures of experts such as the Intergovernmental Panel on Climate Change (IPCC) have been established to understand climate, and agreements such as the United Nations Framework on Climate Change and the Kyoto Protocol have been implemented to curtail anthropogenic contributions of greenhouse gas (GHG) emissions to climate change.

The agricultural sector's expansive land use and dependence on reliable rainfall and temperature conditions means that agriculture is more exposed to the physical elements of climate change than any other industry. Agriculture is also exposed in the policy arena, as it is both a major source of diffuse GHG emissions with the vagaries of biological variability and a GHG sink, so does not conveniently fit into carbon accounting and trading systems being developed.

Greenhouse Gases and Animal Agriculture 2007 (GGAA) was developed with a 3-fold purpose, being the display of scientific advances in understanding of GHGs from animal systems, presentation and facilitation of related GHG policy and collation of information on practical GHG mitigation. As such it provided a unique forum for the interface of scientists, policy makers and livestock producers. Occurring immediately before the start of the first accounting period of the Kyoto Protocol, GGAA served to equip countries to operate at the forefront of GHG research as well as to be aware of policies and technologies

that could be implemented to reduce emissions of methane and nitrous oxide from livestock systems.

GGAA was conducted under the Australia–New Zealand Bilateral Climate Change Partnership and was co-sponsored by a range of New Zealand and Australian government and industry organisations. Over 230 delegates from 46 countries attended. GGAA represented another milestone in the trans-Tasman collaborations on pastoral GHG emissions, with the conference being held in Christchurch, New Zealand (27–29 November 2007) and a suite of invited and offered papers being published in the *Australian Journal of Experimental Agriculture*.

The speaking program was augmented by a range of specialist workshops before and during the conference. The program covered measurement and management of GHG emissions, rumen microbiology, systems modelling, GHG policy and the opportunity for biogas production from animal waste. This issue of the *Australian Journal of Experimental Agriculture* provides a substantive collation of presented papers and text of all shorter or otherwise unrefereed papers is available for download from the online version of this issue.

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For GGAA Local Organising Committee and International Scientific Committee



**Australian Government**  
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**and Water Resources**

