SUBMISSION TO
SENATE SELECT COMMITTEE
ON CLIMATE POLICY

~ Inquiry into policies relating to climate change and emissions trading to reduce Australia's carbon pollution~

MARCH 2009

WHY ENTERIC METHANE SHOULD NOT BE INCLUDED IN AN EMMISSIONS TRADING SCHEME.

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Introduction

Alistair Todd operates a beef cattle farm located at Boggabri NSW in partnership with one brother and both parents. This property has been owned by the Todd Family since the 1920's.
Alistair strongly believes that Enteric Methane produced by Ruminant Livestock should not be included in any carbon pollution reduction scheme in Australia.

Supporting Comments

1. Ruminant livestock production is generated from a renewable source ie: annual and perennial plants. This is in contrast to our coal fired electricity generators and crude oil based transport systems that mine carbon, stored millions of years ago.

2. Ruminant livestock eat plants that have converted atmospheric carbon dioxide into leaves, stems and roots.

3. During digestion rumen microbes ferment carbohydrates from plants to produce energy for animal maintenance and growth. This natural process produces excess hydrogen which must be removed to maintain a pH neutral rumen.

4. Methanogenic microbes in the rumen convert carbohydrates and surplus hydrogen into methane gas which is belched and breathed out by the animal.

5. Enteric fermentation emissions by livestock (methane gas) have a lifespan in our atmosphere of approximately 12 years before being oxidized into carbon dioxide and water, continuing the carbon cycle. For example methane gas emitted during 1997 is now oxidizing and reentering the carbon cycle as pasture growth, animal production (meat and wool), continuing the closed loop of the soil organic carbon cycle. **Therefore methane emitted in 1992 when I began my farming career no longer exists in the Earth's atmosphere.**

6. Enteric methane "pollution" can only increase with an increase in the ruminant livestock population. The Australian herd/flock has actually declined since 1990. In 2009, there are about 90 million fewer sheep (equal to 9 million cattle) and similar numbers of cattle compared to 1990.

7. The productive capacity of Australia's pastures has possibly peaked and will reduce with predicted climate change not withstanding land use change such as higher rainfall land being devoted to urban expansion, timber plantations, property purchases for flora, fauna and water conservation and more intensive cropping.

It is these facts that lead me to the conclusion that, it is impossible for the enteric methane volume produced by Australia's ruminant herd/flock to be increasing, in fact DCC analysis published by ABARE shows an 8.1% decline in 2005 compared to 1990.

Research by soil scientist Dr Christine Jones, Allan Savory and others has shown that sustainable grazing practices and the correction of soil mineral deficiency's can actually increase the soils ability to store carbon long term and intermittent grazing plays a key role in this process.

If enteric methane is included in the carbon pollution reduction scheme it has the potential to stress the

financial viability of grazing businesses. This may lead to either ungrazed grasslands presenting an enormous fire risk and/or more grain crop production in higher rainfall areas resulting in huge areas of productive perennial grasslands being cultivated therefore releasing the more labile pool of soil carbon into the atmosphere.

I believe if enteric methane gas is included in Australia's carbon trading scheme and is taxed as a greenhouse gas then graziers should have every right to claim back any tax paid after 12 years (atmospheric methane gas life) because it is then reentering the carbon cycle as grass then meat and or wool, providing the size of the herd/flock has not increased.

Conclusion

1. To liken the natural carbon cycle undertaken by a pasture based ruminant livestock enterprise with the emissions resulting from the burning of fossilised fuel is not a valid one.

2. The burning of fossil fuels is the release of carbon from a much earlier period of our earth's history into our present day. **This is our greenhouse gas problem**.

3. Ruminant livestock emissions are the direct result of living organisms and as previously explained are ultimately recycled back to carbon dioxide then return to the carbon cycle for plant growth starting the process again.

4. To include ruminant livestock emissions in the carbon pollution reduction scheme is ill conceived and fails to differentiate between polluters and recyclers.

Acknowledgements

All facts, figures and quotations are freely available via The Farming Ahead Magazine (December 2008, No 203, Carbon Farming : Fact & Fallacies) published by the Kondinin Group, Allan Savory (A Global Strategy for Addressing Global Climate Change), Dr Christine Jones (www.amazingcarbon.com) the Australian Rural Media, The Land Newspaper, The Australian Farm Journal by Rural Press Group, and Federal Government Publications.