



Agricultural Competitiveness Taskforce
Department of the Prime Minister and Cabinet
PO Box 6500
CANBERRA ACT 2600

17 April 2014

Submission on the Agricultural Competitiveness Issues Paper

To the Agricultural Competitiveness Taskforce,

WWF-Australia has engaged with the Australian agricultural sector over many years, particularly in the areas of sugar and beef production, forestry and fisheries (noting the last two are outside the scope of the White Paper) and looks forward to engaging further with the development of the Agricultural Competitiveness Green and White Papers over the coming months.

This letter is to highlight one area that warrants further investigation in the Green Paper – the impact of climate change and the need for adaptation and emissions reductions. We are concerned that there is little discussion of these issues in the Issues Paper.

As highlighted in the recent Intergovernmental Panel on Climate Change (IPCC) Working Group 2 (WGII) report on impacts, adaptation and vulnerability, agriculture is already experiencing the impacts of climate change and is expected to face more serious impacts in the future.

At the global level the IPCC found¹:

- 'negative impacts of climate change on crop yields have been more common than positive impacts'
- 'Climate change has negatively affected wheat and maize yields for many regions and in the global aggregate.'
- 'For the major crops (wheat, rice, and maize) in tropical and temperate regions, climate change without adaptation is projected to negatively impact production for local temperature increases of 2°C or more above late-20th-century levels, although individual locations may benefit.'
- 'After 2050 the risk of more severe yield impacts increases and depends on the level of warming.'
- The majority of studies found a decrease in yield of 10 to 50% by the end of the century.
- 'Climate change is projected to progressively increase inter-annual variability of crop yields in many regions.'

For Australia, the findings cited by the IPCC include²:

- 'rainfall changes and rising temperatures will shift agricultural production zones'
- the dry end of scenarios would have severe implications for agriculture and rural livelihoods, significantly reducing agricultural production in the Murray-Darling Basin and far south-eastern and south-western Australia

¹ IPCC WGII AR5, Summary for Policy Makers

² IPCC WGII AR5, Chapter 25

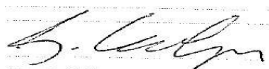
- regional GDP in the southern Murray Darling Basin was below forecast by about 5.7% in 2007/08 during the 1997-2009 drought
- a 3°C temperature increase (from a 1980-99 baseline) is expected to reduce the gross value of the beef, sheep and wool sector by 4%
- 'Dairy output is projected to decline in all regions of Australia other than Tasmania under a 1°C increase by 2030'
- Crop yields will be dependent on water availability. With adaptation wheat yields could be maintained or increased but 'under the more severe climate scenarios and without adaptation, Australia could become a net importer of wheat'.

The Agriculture and land sectors account for around 17 per cent of Australia's emissions.³ Emissions reductions may be required as Australia and the world move to lower emissions economies, however these sectors also have a wide range of abatement opportunities. WWF-Australia is a strong supporter of the Carbon Farming Initiative (CFI) and welcomes the Government's long-standing support for the scheme. Our view is that the CFI has the potential to play an important role in unlocking the full abatement potential of the land sector. It can also provide additional revenue streams to landholders.

WWF-Australia recently commissioned market analysts, Reputex, to assess the outlook for the CFI under the Emissions Reduction Fund (ERF) (attached). In short, in the absence of a long-term price incentive under the ERF it appears unlikely that farmers and other landholders participate in the CFI at scale. As such, the ERF, as currently proposed, is unlikely to drive significant levels of abatement in the land sector and opportunities for additional revenue streams.

WWF-Australia sees the impact of climate change and the need for adaptation and emissions reduction as important issues affecting the competitiveness of Australian agriculture. However WWF-Australia's work on a number of other issues relevant to the Agriculture Competitiveness White Paper, particularly sugar and beef production, is not discussed in this letter. We look forward to providing further details on this work and engaging with the development of the Agricultural Competitiveness Green and White Papers over the coming months. We would be happy to discuss these issues in more detail.

Yours sincerely,



Gilly Llewellyn
Conservation Director, WWF-Australia

³ Department of Environment 2013, Emissions Reduction Fund Green Paper.