

Australian Government

**Department of the Environment and Heritage
Australian Greenhouse Office**

Economic Diversification and Sustainable Development in Developing Countries: An Australian Perspective

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UNFCCC Expert Meeting on Economic Diversification
16-17 May 2006



Introduction

- Economic diversification is an issue for all countries – not only developing countries
- Climate change is a driver of economic diversification – but not the only or main one



The impacts of response measures, or the impacts of climate change?

The issue of climate change and economic diversification has typically been focused on impact of response measures and oil-exporting countries – does that focus match reality?

- Issues of impact of climate change on economies
 - Agriculture (either subsistence or export-oriented)
 - Tourism (eg SIDs and diving/beaches)
- Issues around impact of response measures
 - Fossil fuel exports



An Australian perspective

An Australian perspective may be instructive, as while we have a comparatively diverse economy, we do share several of these aspects with developing countries, including:

- significance of the agriculture sector
- role of tourism in generating exports
- world's second largest exporter of fossil fuels



Agriculture in Australia

Like many countries:

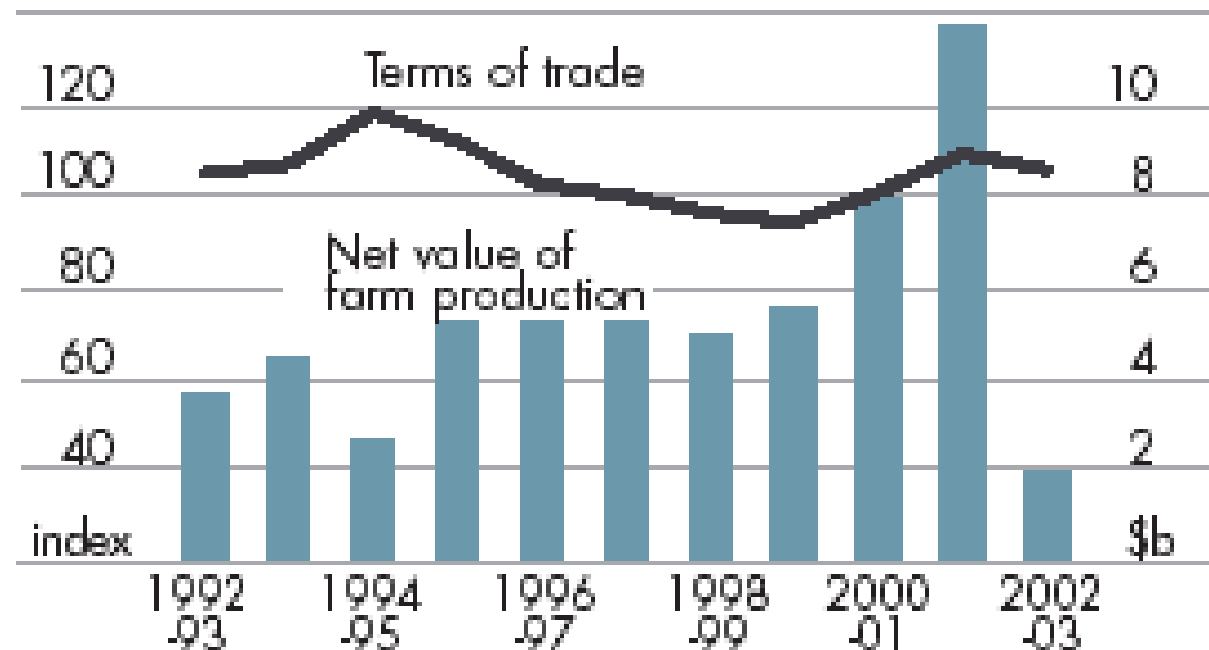
- Agriculture is a vital sector in Australia's economy
- Plays a major role in exports
- Agriculture is the life-blood of regional prosperity and rural communities in Australia

Agriculture covers 60% of Australia's land mass
113,000 individual enterprises

Australian agriculture is vulnerable to climate variability & change

- A land of 'droughts and flooding rains' and the occasional good season in between
- During the 2002-03 drought, the value of agricultural production fell 77% - significant future risks

Australian farms incomes



YES, we have no bananas . . .

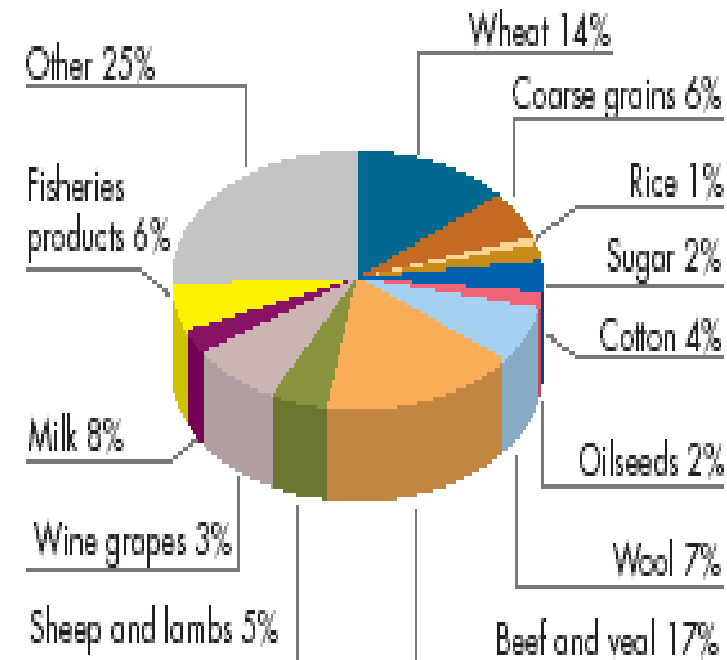


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Australian Agriculture – final thoughts and lessons learned

- Agriculture diversification is important – it helps to enhance economic resilience
- However, broad climate impacts can still have dramatic impacts on the sector
- Diversification needs to be across sectors, not just within

Gross value of production





Tourism: a few key facts

- In 2003-04 tourism represented 12% of Australia's export income
- Nearly 6% of employment directly related to tourism
- Sector is significantly exposed to climate change, for example the Great Barrier Reef and the Snowy Mountains

Tourism: the Great Barrier Reef as a case study

- almost as big as the total land area of Japan;
- tourism generates about one billion dollars annually and is the leading employer in the region;
- adaptation actions aim to reduce pressure on reef;
- but, if the climate warms more than 2°C, it is doubtful that the reef will survive

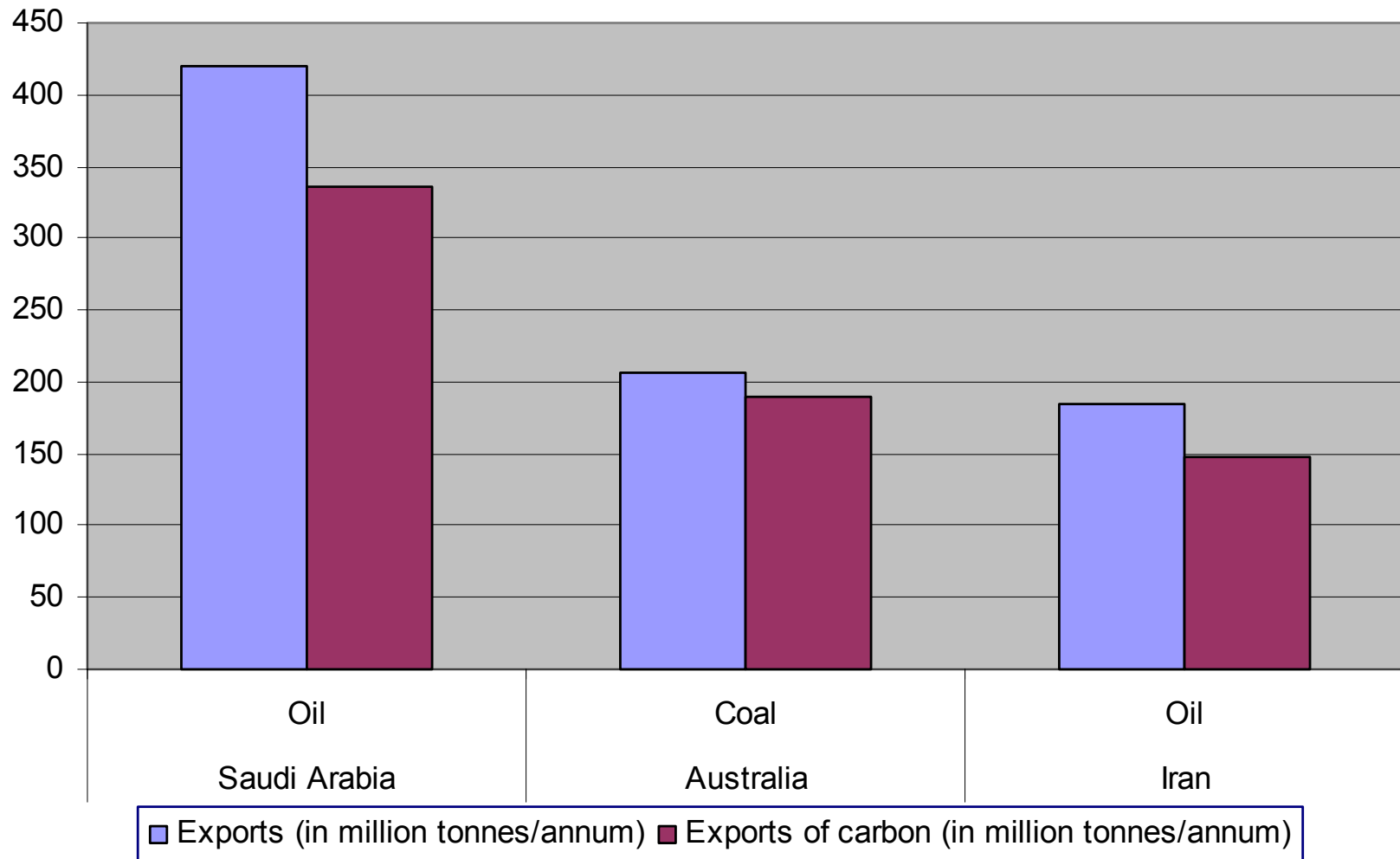




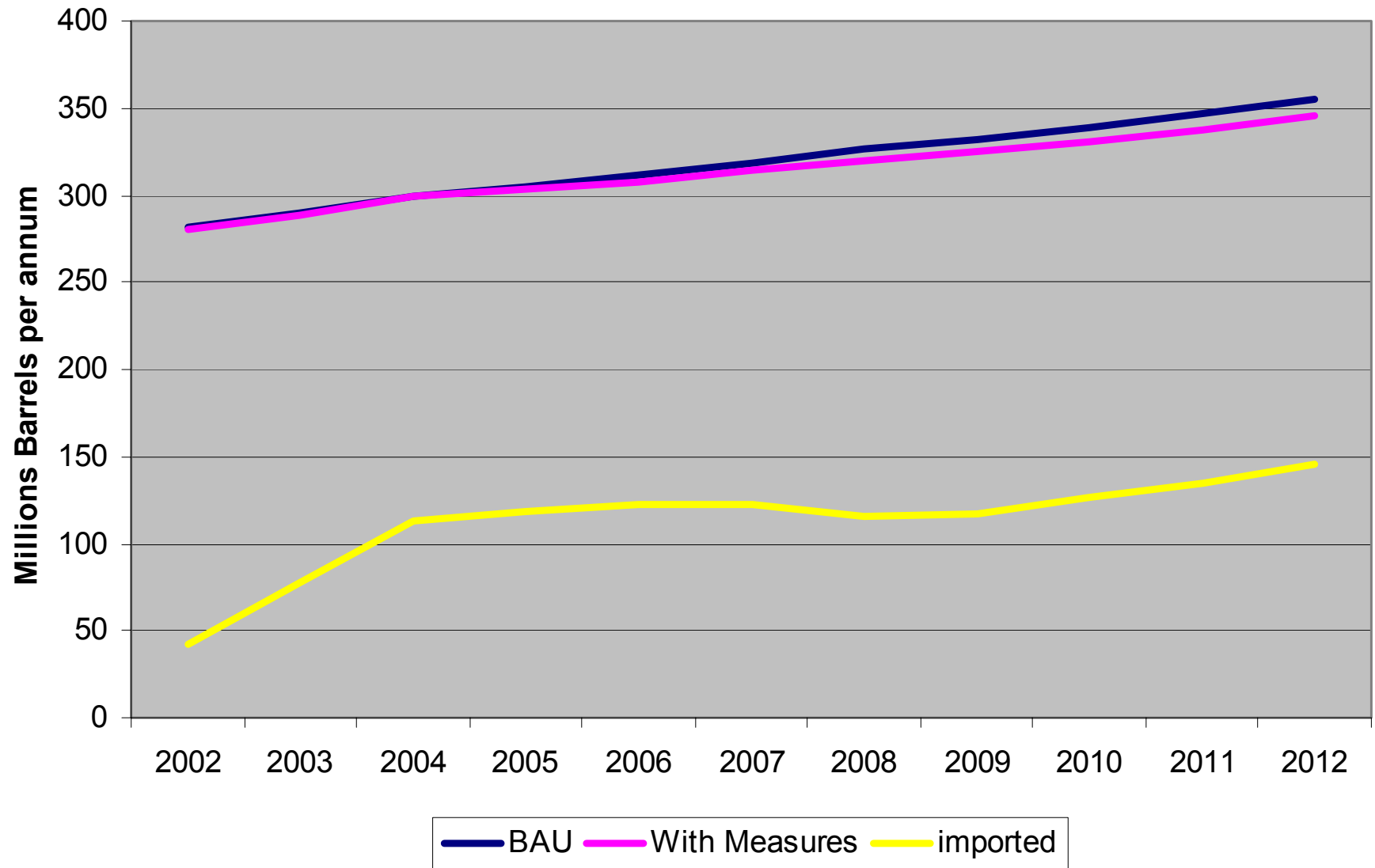
Reflections on tourism

- Can be a focus of economic activity and employment
- Can be significantly exposed to risks by climate change
- These risks can be minimised by effective adaptation activities
- Ultimately there is – at least in some cases – “tipping points” after which risks cannot be managed
- Any strategy for economic diversification and sustainable development needs to be cross-sectoral and conscious of the range of potential impacts of climate change

World's 3 leading exporters of fossil fuels



Greenhouse Measures: impact on Australian demand for oil





Impact of Response Measures on coal

- Impact of Australian measures on domestic coal use is more than 3 times greater than oil – largest area of action other than LULUCF
- ABARE study on impact of high carbon price in Japan alone - estimated cost of AUD \$5 billion between 2005 and 2010 to Australia
- Despite this trend, coal exports are projected to increase along with increased energy demand. This is good for Australia and good for global attempts to alleviate energy poverty.
- However, for climate reasons it is imperative that we develop new technologies to keep utilising this resource while significantly reducing the greenhouse footprint



A few final, but still preliminary, thoughts

Economic diversification is an issue for all countries – not only developing countries

Diversification needs to be cross sectoral in order to enhance resilience

Ad hoc comparative analysis of climate impacts on economic development (looking at agriculture, tourism and fossil fuel exports) suggests that the impact of climate change has the potential to be a more negative to developing country economies than the impact of response measures