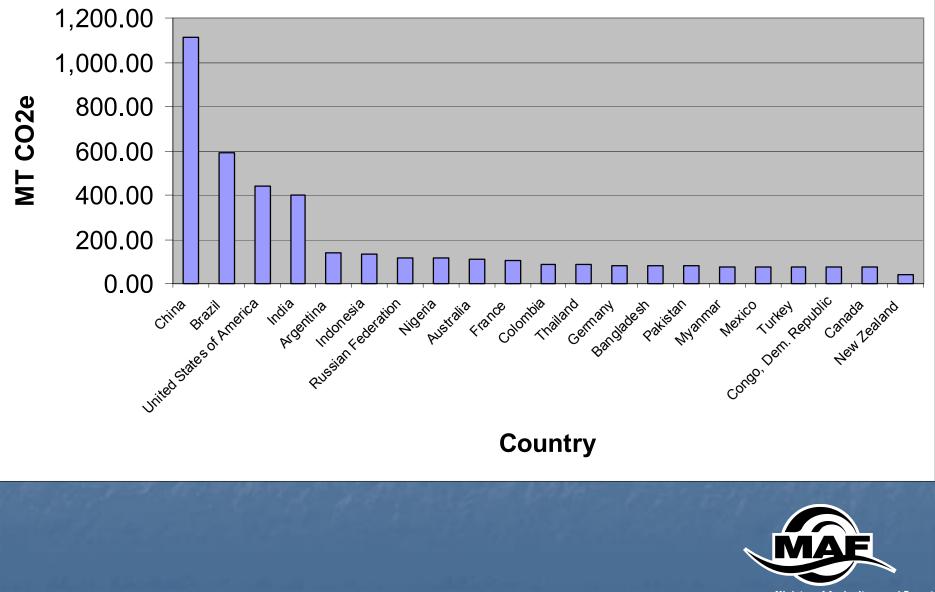


# Agriculture mitigation in the Bali Action Plan

AWG LCA workshop on "Challenges and Opportunities for Mitigation in the Agriculture Sector"

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#### **Total emissions from agriculture sector**



**Ministry of Agriculture and Forestry** Fe Manatu Ahuwhenua. Ngaherehere

### Key messages

Opportunities for reductions in emissions in the agriculture sector exist. We need to explore ways to realise these.

Investment in research and development of mitigation technologies in the agriculture sector must be scaled up.

The agriculture sector must remain an integral and explicit part of our negotiations under the AWG-LCA.



## The global context

- Agriculture is a globally important sector involving all countries as both producers and consumers of agricultural products.
- Meeting the demand for food is the primary role of the agriculture sector - increasing food demand is driving increases in greenhouse gases.
- Climate change will impact agriculture trade will become increasingly important – we should aim for optimal global production pattern for agriculture.
- Agriculture must play a part in the overall mitigation effort but need realistic expectations of what can be delivered in short-term.



### Mitigation potential

 Technical potential in 2030 significant – but number of barriers exist to realising economic and market potential.

#### Barriers can be:

- Technical estimation and verification, lack of technologies
- Social structure, ethical considerations, consumer preference
- Economic cost of technologies, market failure, competitiveness
- Environmental biological systems, climate change

Barriers are real, but opportunities exist.



# **Opportunities for mitigation**

- IPCC assumed no reductions in enteric fermentation and limited reductions in agriculture nitrous oxide.
- Improvement in efficiency and productivity of agricultural systems provides opportunity for emissions reductions below projections.
- Contributing to enhancement of sustainable development, food security, environmental co-benefits, poverty alleviation, and complementary to REDD.
- This will only take us so far, emissions in future will likely be higher than current levels unless mitigation technologies become available.



## Improving understanding

- Enhanced investment in research and development is required.
- Joint development of technology critical.
- Virtual World Research Centre on agriculture mitigation strategies:
  - build on LEARN network;
  - increase the scale of global research investment including direct funding of additional research, leveraging existing research activities;
  - help coordinate research effort;
  - speed up development and diffusion of new technologies.
- New Zealand has proven expertise in livestock greenhouse research, and we want to work with other countries to grow the global research effort in this area.



### Where to from here?

- Agriculture faces a unique set of challenges: feeding a growing world population, different practices across countries, and technology limitations.
- Opportunities exist for reductions in the agriculture sector. We need to explore these.
- We need an enhanced and co-ordinated global response to mitigate emissions from the agriculture sector, possibly through the proposed Virtual World Research Centre.
- The challenges and opportunities in the agriculture sector need to continue to be addressed in our negotiations under the UNFCCC.

