Capturing the Potential of Greenhouse Gas Offsets in Indian Agriculture

ACIAR Project - ADP/2010/008
India Policy Research

1. Agricultural Trade Liberalisation and Domestic Market Reforms in Indian Agriculture (ADP/2002/089)


3. Capturing the Potential for Greenhouse Gas Offsets in Indian Agriculture (ADP/2010/008)
Capturing the Potential for Greenhouse Gas Offsets in Indian Agriculture

**Objective 1** - Understand how national policy settings in India and Australia may be influencing agricultural emissions

**Objective 2** - Assess (i) international GHG policy settings & (ii) the benefits that offsets could provide to energy and industry sectors.

**Objective 3** - Assess (i) the scope for cost effective abatement within India’s agricultural sector and (ii) the economy-wide impacts of an agricultural offsets policy.

**Objective 4** - Explore potential market-based offset designs and incentives for the adoption of abatement practices in agriculture.
Objective 3 - Assess (i) the scope for cost effective abatement within India’s agricultural sector and (ii) the economy-wide impacts of an agricultural offsets policy.


- Alex DePinto - International Food Policy Research Institute (IFPRI) - IMPACT Model - the GHG abatement potential of Indian agriculture.

- Jyoti Gujral - IDFC - India’s GHG emitters - what would they be willing to pay for agricultural offsets?
Exhibit 2.1

India’s abatement cost curve for 2030 (cost below EUR 100/tonne)

Note:
1. This curve highlights 2.1 billion tonnes CO$_2$e of potential. Additional potential below Euro 100/tonne includes reduction in technical T&D losses (190 million tonnes CO$_2$e (mt), auxiliary consumption (~50 mt), efficiency improvement in other sectors (~200 mt), improved urban planning (~30 mt), and distributed generation using combined heat and power (CHP) (~15 mt).
2. Levers costing above EUR 100/tonne (not included in the cost curve) have a total abatement potential of 80 mt. Important levers are public transport infrastructure (metros) (~7 mt), electric vehicles and full hybrids (~6 mt).
3. 8% discount rate assumed for the cost curve analysis, based on benchmark yield for long-term Indian government bonds.

SOURCE: McKinsey India Cost Curve model
Modelling India’s Agricultural Policy Reforms

Chair: Sisira Jayasuriya

- CGE Modelling: An Assessment Tool for Gauging Reforms in the Indian Economy - Peter Dixon & Maureen Rimmer, Victoria University
- Agricultural Subsidy Reform in India - Preliminary Results: Peter Dixon & Rajesh Chadha

Lunch

Identifying Modelling Priorities for Indian Agriculture

Chair: S Sivakumar, ITC

- Economy-wide policy reform priorities and complimentary agricultural modelling scenarios: Arvind Panagariya, Columbia University
- Energy and Climate Modelling Imperatives in India, Kaushik Deb, BP
- MAC and GHG issues: Jyoti Gujral, IDFC

4:00pm-4:30pm Tea

Morning Tea

Discussion: Summary and Recommendations

Arvind Panagariya
Assessing the Impact of Green House Gas Emission in Indian Agriculture

Chair: Pramod Joshi, IFPRI

- Results from Impact Model: Alex De Pinto, IFPRI
- IMPACT Model: Integration with CGE Model: Peter Dixon & Rajesh Chadha

Morning Tea

Locating Offset Opportunities in Indian Agriculture

Chair: Scott Davenport

- Emerging Issues in Agricultural Policy: GHG Emissions, Ramesh Chand, NCAP

Discussion: Summary and Recommendations

- Summing up: Ejaz Qureshi, ACIAR and Scott Davenport
- Closing Remarks: Shekhar Shah

Lunch

Project Steering Committee Meeting