

Capturing the Potential of Greenhouse Gas Offsets in Indian Agriculture

Issues and Context

Issues:

- Nexus between agriculture, energy and GHG emissions: economy-wide linkages
- Potential for off-sets and feasibility
- Institutional mechanisms for implementing an offset scheme

Policy context:

- Indian economy at cross roads: policy reforms on the agenda
- Growth slow down and macroeconomic volatility, fiscal deficits and challenges
- Role of agriculture

- ***How would emissions change with policy changes?***
- ***How would policy changes affect other major variables (such as (household incomes (including farm incomes), production and consumption, national income, wages, etc) ?***

Research Strategy

- Focused, detailed, disaggregated analysis of emissions associated with crops/livestock produced with various technologies in different agro-climatic environments
- Evaluations and assessments in an economy-wide setting to take into account major changes in relative prices and associated shifts in production and consumption patterns

Integrating these two components into a coherent analytical framework is necessary but challenging

A major component of the research programme initiated recently involves the construction of a new, state of the art computable general equilibrium (CGE) model of the Indian economy to assess the impact of existing policy settings and the effects of a range of policy changes on emissions and on other major variables of interest

Aims of Workshop

- Introduce the analytical tools – with **illustrative** outputs - to demonstrate potential scope
 - Note: model development, particularly CGE, is at early stages
- Eliciting feedback to ensure that critically important features of the Indian bio-physical, institutional and policy environment are incorporated in the models
- Identify issues of major policy relevance to focus analytical exercises