

# Mainstreaming Co-benefits

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**IGES-TERI Policy Dialogue**

**Sustainable Low-Carbon Development in Asia:**

**Prospects for a Successful Future Climate Regime**

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## Few Questions

### ◆ Co-benefit

- A jargon or an urgent need
- Some illustrations
- Barrier to technology dissemination

### ◆ Response strategies

- Is Government of India ignorant?

### ◆ Approach towards mainstreaming co-benefits

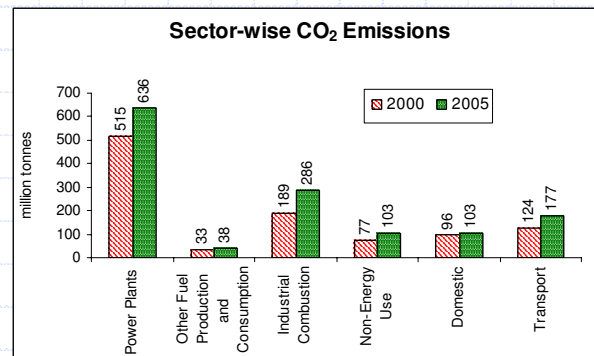
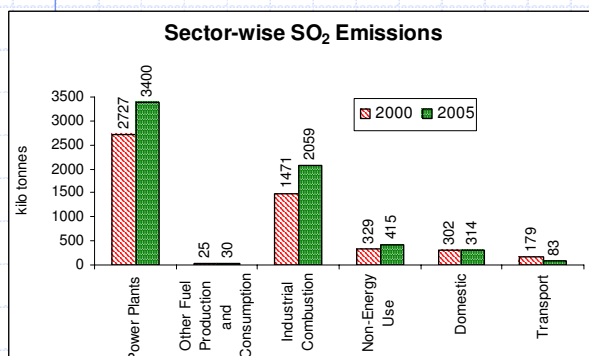
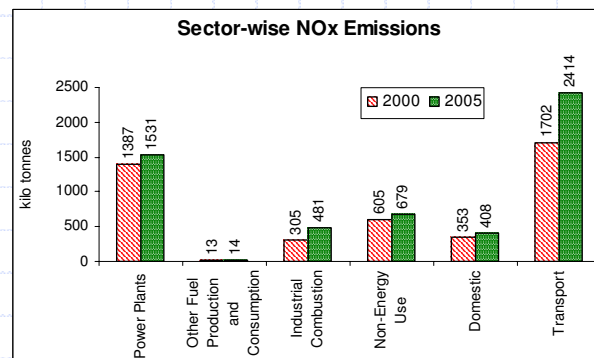
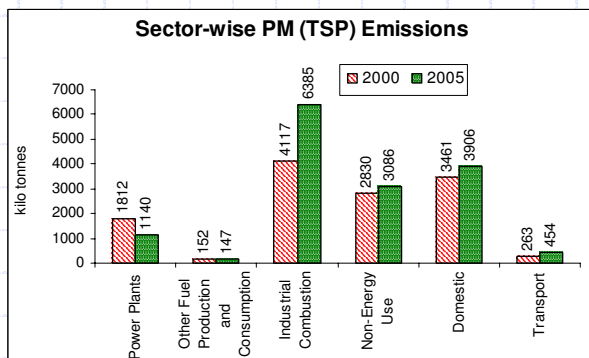


# Air Quality Status in India

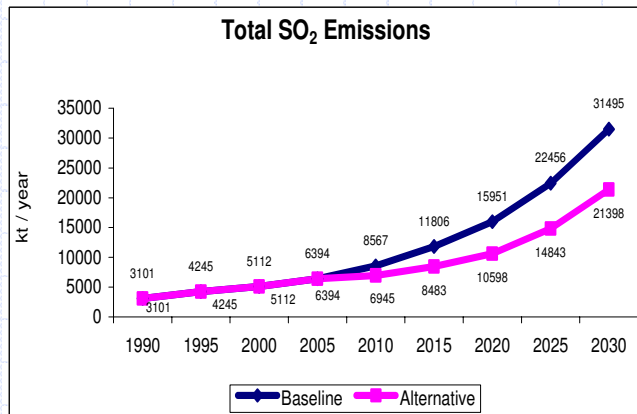
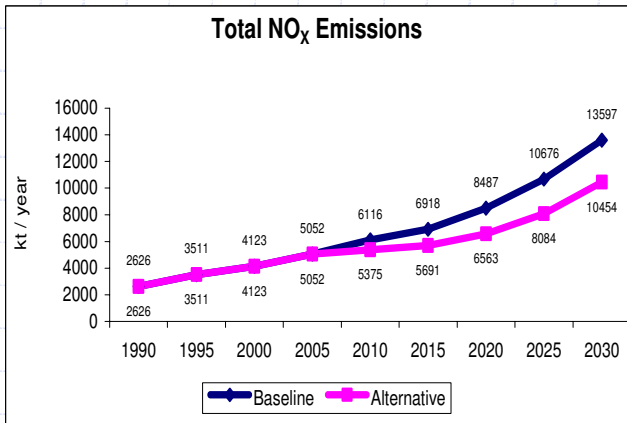
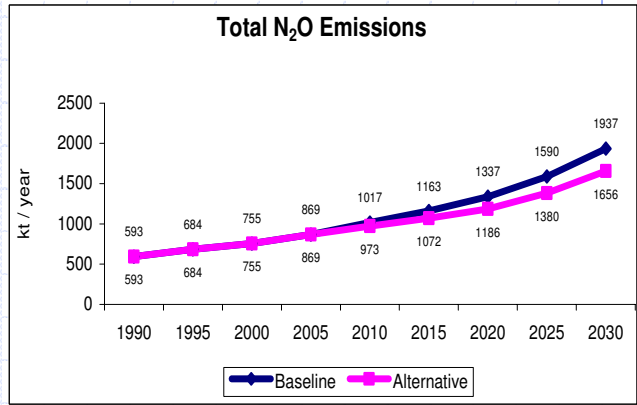
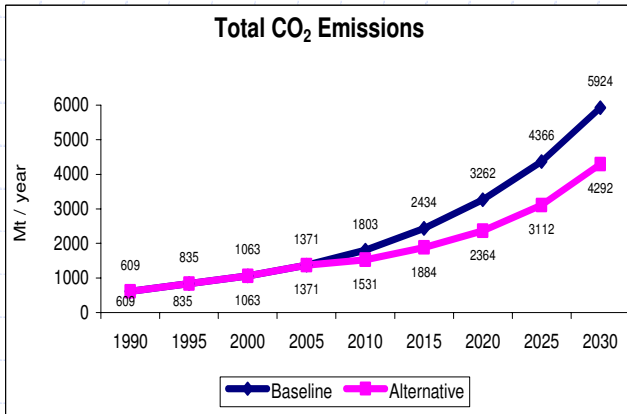
- ◆ Many cities in India are facing serious problem of air pollution
- ◆ Particulate matter is still a major pollutant of concern.
  - Cities falling under critical pollution category for RSPM have increased from 24% in 2000 to 47% in 2007
  - Oxides of nitrogen have shown an increasing trend
  - Sulphur dioxide levels in the ambient air have shown a marked decline
- ◆ Ozone concentration monitoring is limited in India currently
  - At some places for which data has been analysed, it does show violation against the proposed Indian ambient air quality standard for Ozone



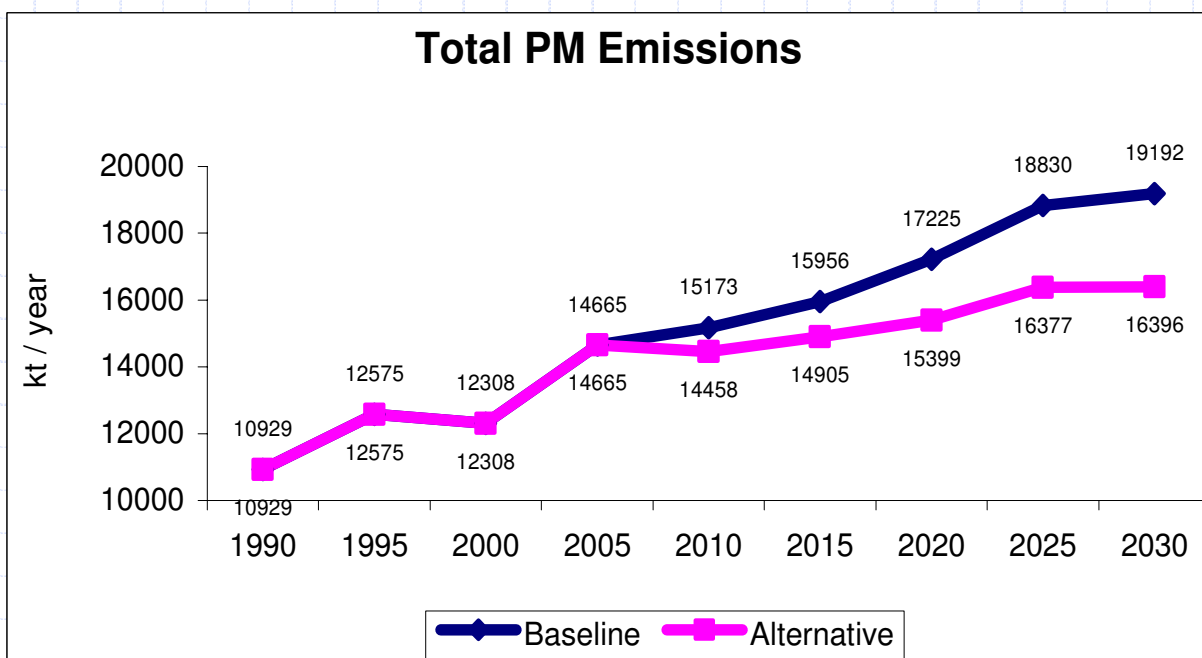
## Emissions Levels



# GAINS-India: Analysis of Alternative Policy Scenarios



## PM Emissions

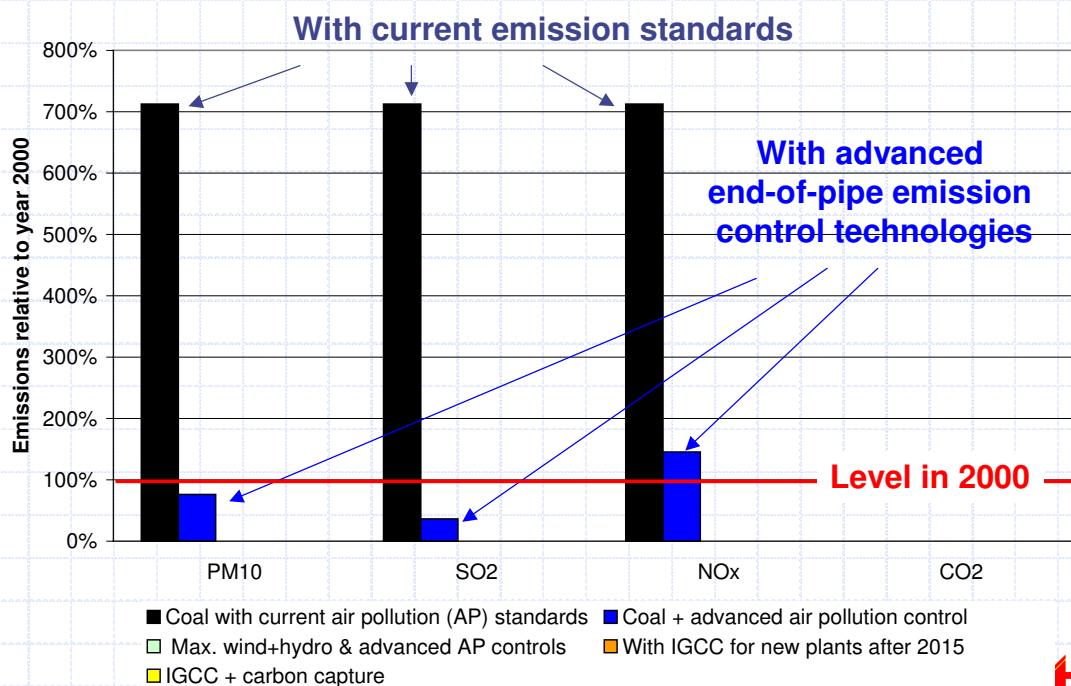


# An Illustrative Example

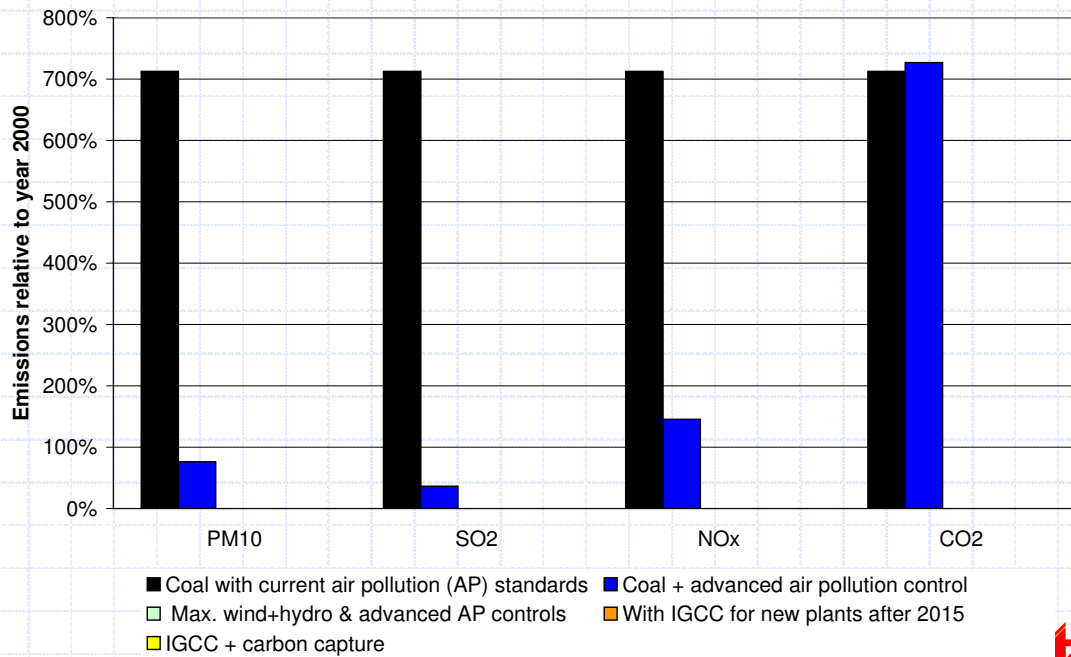
## Power sector interventions



## Emissions from electricity generation

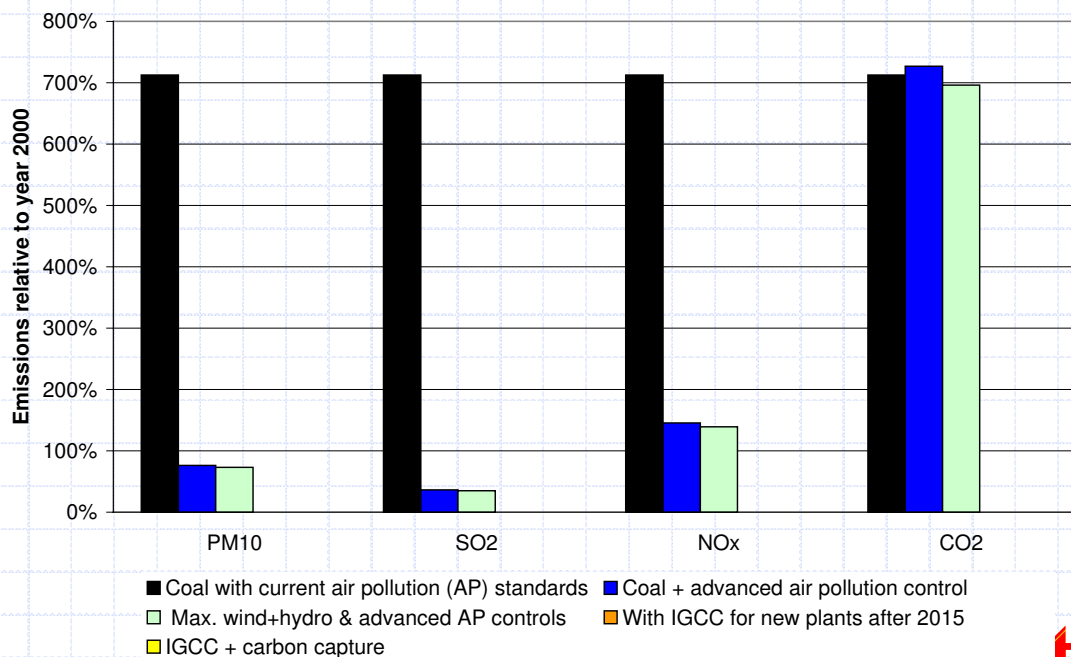


# Emissions from electricity generation



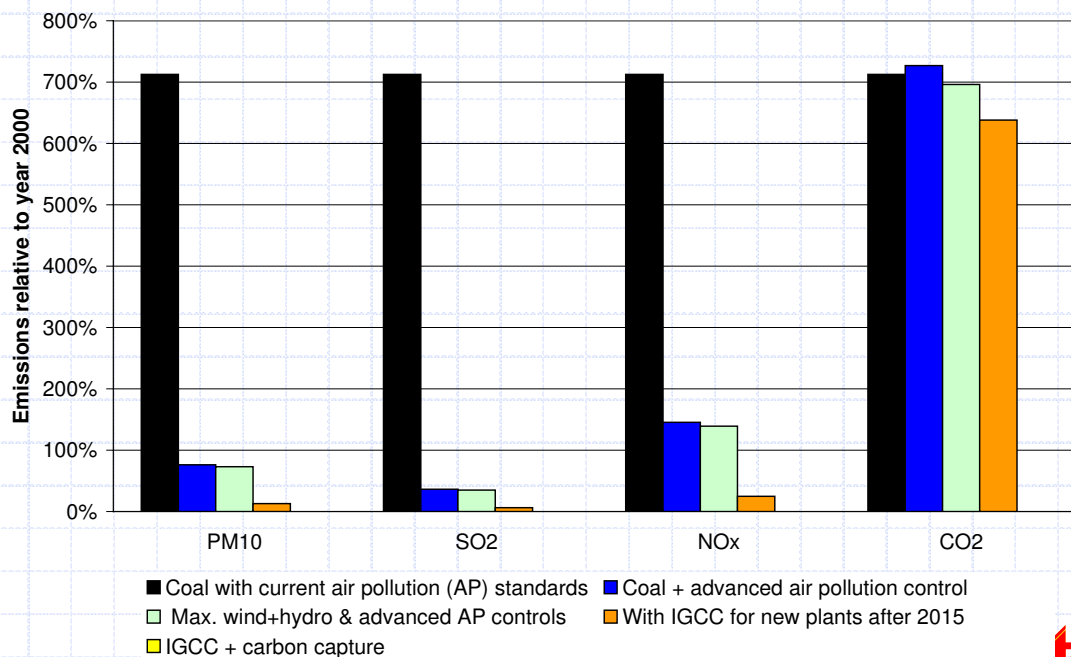
# Emissions from electricity generation

with maximum use of wind and small hydropower

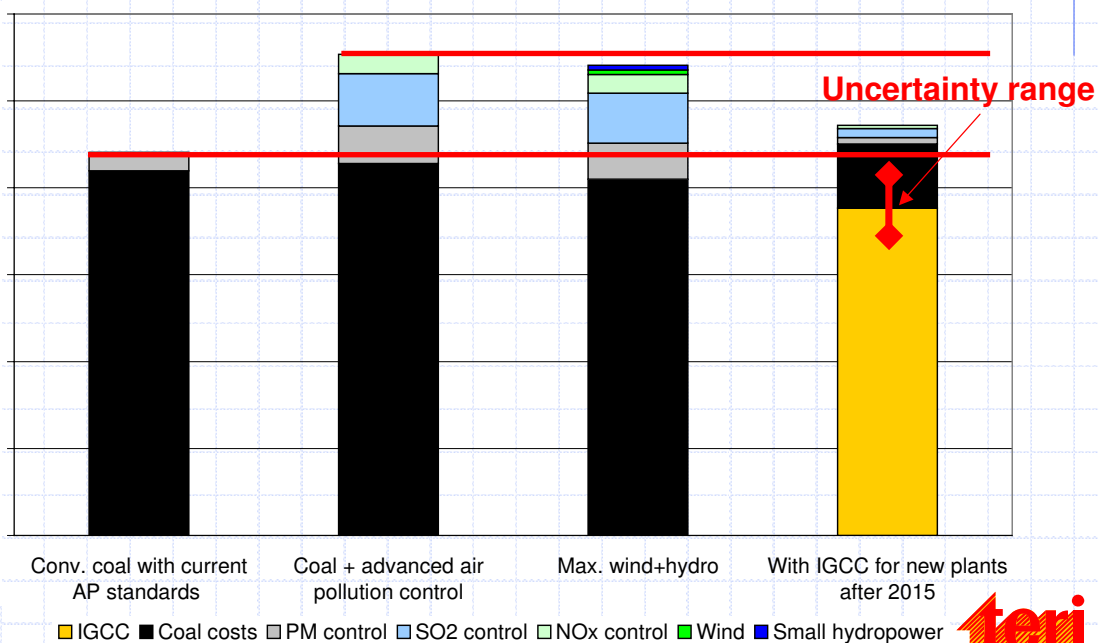


# Emissions from electricity generation

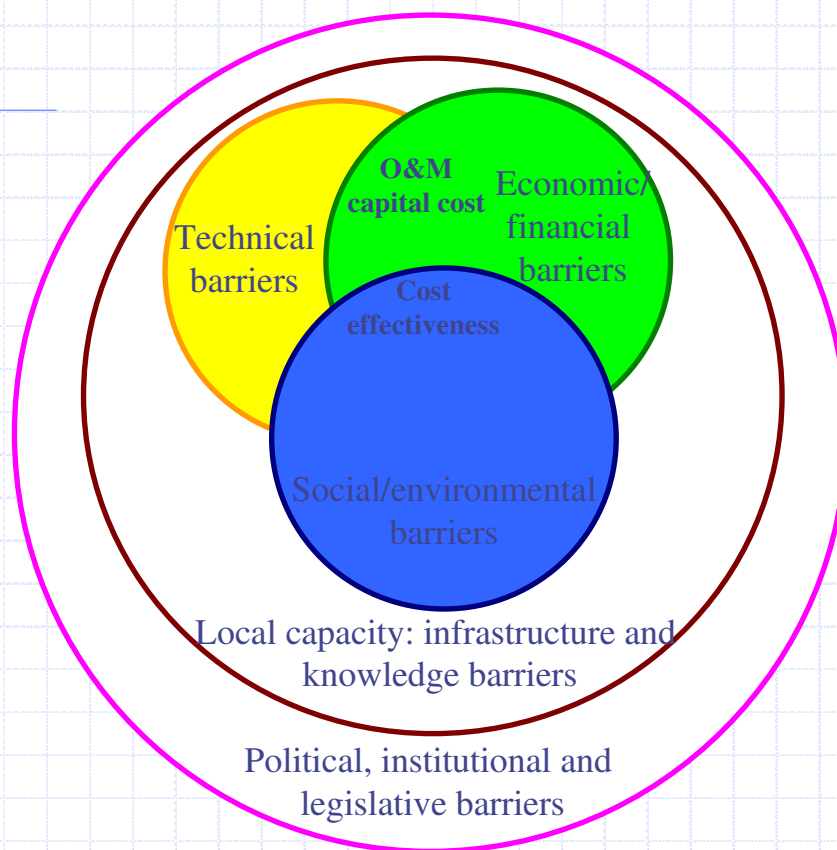
with IGCC at new plants after 2015



# Costs of electricity generation



## Barriers in technology dissemination



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## Is Government of India Ignorant?

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# India's current energy policies (themes)

Improving energy efficiency

Promoting hydro and renewable energy

Power sector reforms

Promotion of clean coal technologies

Energy and infrastructure development

Coal washing

Cleaner and lesser carbon intensive fuel for transport

Environmental quality management



# India's Adaptation Strategies

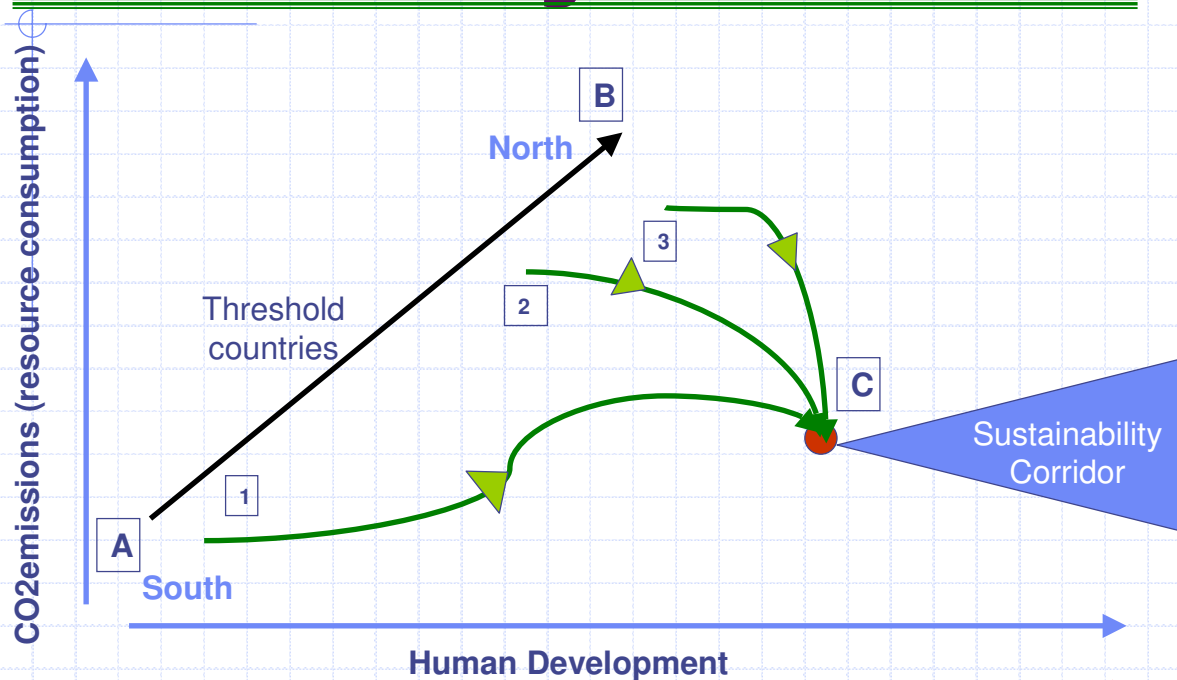
◆ Intensify implementation of programmes that simultaneously address poverty alleviation and development, and climate change, so that national goals are met despite adverse climate impacts



# Approach towards Mainstreaming Co-benefits



# Approach towards Mainstreaming Co-benefits



Adapted from INFRAS 1996



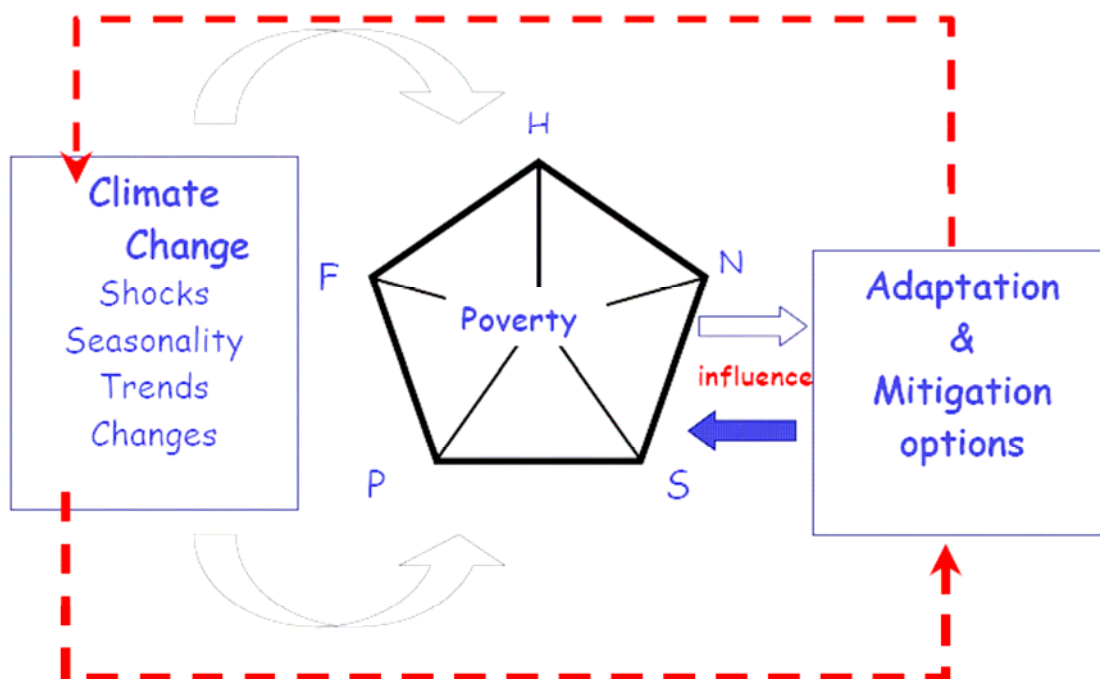
# A TERI-UNDP Initiative

## ◆ Linking Poverty Alleviation and Climate Change

- Objective: to facilitate more informed choice of different interventions on poverty impact making



## Linking Poverty Alleviation and Climate Change



Note: The bold blue arrow shows the scope of the study



# Action - Impact Matrix

- ◆ **Maps strategic interventions (in rows) under the programme to the poverty dimensions (in columns) affected by these actions**

The poverty dimensions considered are

- ◆ Income and Consumption: more real income
- ◆ Productivity: health and education
- ◆ Security
- ◆ Non-alienation and Inclusivity
- Externalities not incorporated in the programme objectives upfront



		Income & Consumption	Productivity		Security	Non-alienation & Inclusivity	Externality
			Health	Education			
Creating opportunities and building capabilities	Creating new / improving assets						
	Providing/ increasing access to assets						
	Creating enabling conditions						
	Providing affordable basic services						
Reducing Vulnerability	Reducing exposure to risks						
	Reducing impact of risks						
Empowerment	Providing Ownership rights						
	Participatory and representative governance						



Efforts to address Climate Change  
should not compromise our  
development objectives

Thank You

