Development, Energy and Climate Change

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Exploring the Linkages Between Integrated Policy Options

Bagasse based power generation

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Rationale for a Long Term Development, Energy and Climate Change Perspective

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- Principles and ambitions of the UNFCCC and KP
- Energy is the main driver for development and GHG emissions
- Need to ensure meaningful involvement of all countries
- Climate concerns are mostly overshadowed by more immediate development priorities esp. in DCs
- However – many development initiatives are climate friendly, and…..
- A more integrated approach to D, E & CC would lead to much more cost-effective mitigation and adaptation

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IIMA
India

ERC
South Africa

ENDA-TM
Senegal

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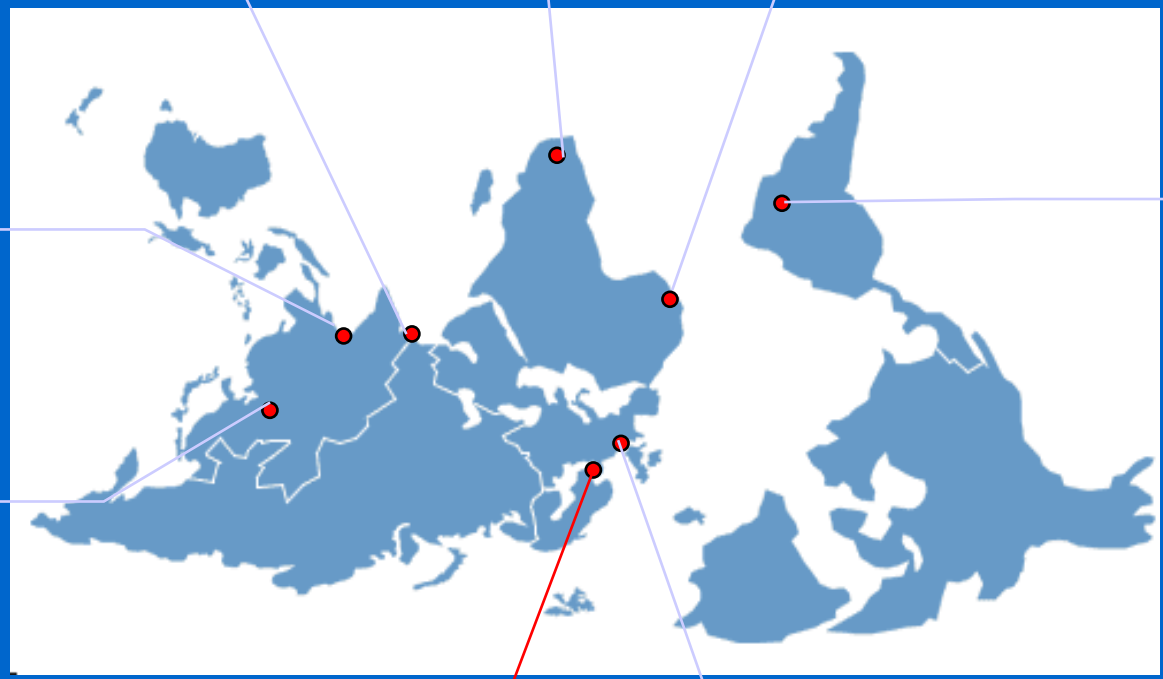

BCAS
Bangladesh

COPPE
Brazil

ERI
China

URC
Denmark

MNP/RIVM
The Netherlands

Project Sponsors: DANIDA (Main) and KEI (for V&A component)

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Development Issues are Closely linked to Climate Change

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- Economic growth, capital accumulation, investments, technological change, production factors.
- Natural resources and environmental impacts.
- Institutional issues.
- Welfare concepts, basic human needs, and equity.
- Alternative development paradigms: ”growth theory”, neoclassical theory, the structuralists, institutional economics, well being and basic needs
- Integrated view on economic growth and development goals

D, E and CC – Phase II

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- Upscale Phase-I and also new **six-country case studies** to assess D and CC impacts of national energy policies.
- **Three thematic papers** on Development pathways, Energy policy instruments, Adaptation and mitigation.
- **Methodological framework** for assessing D, E and CC policies that are tested and applied in country case studies.
- **Sustainable Development Indicators** to capture D, E and CC linkages for 2000-2030 using elaborate country modelling
- **Comparative assessment** of country case study results and discussion of conclusions for international policies.
- **Outreach materials** including a popular brochure that summarises country study results, SD indicators and cross cutting conclusions.

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Sustainable Development Indicators

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- **Economic indicators**
  - National macro indicators
  - Energy use indicators
  - Energy access indicators
  - Energy investment indicators
- **Environmental indicators (**GHG and local pollutant emissions**)**
- **Social indicators**
  - Energy affordability indicators
  - Employment indicators
- **Mitigation cost curves for energy sector**
- **Adaptation indicators**

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Key Lessons Learned

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- Regional energy co-operation provides a major opportunity for linking D&C.
- Various divides require bridging.
- Strong stakeholder involvement is key.
- Quantifying development and climate change impacts of energy policies enhances policy relevance of the research considerably.
- The project helps with positioning in international debates.
- Considering both mitigation and adaptation is key.
- The ‘non-climate’ route for international climate change policy making is important.
- Implementation remains a challenge.

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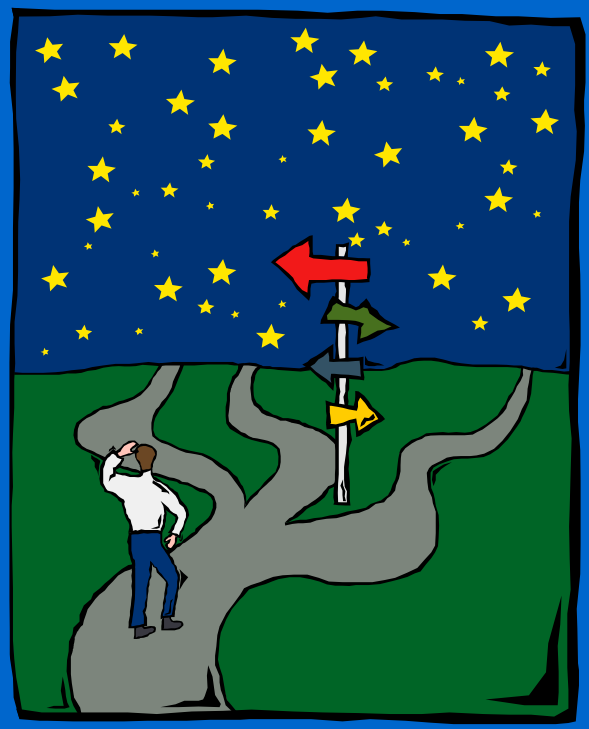
Conclusions

- The project offers an analytical framework for integrated development, energy and climate change studies.
- Potential exists for joint development and climate benefits. Implementation requires technological innovation, institutional development and targeted finance.
- National case studies in a number of countries demonstrate that many dedicated development policies and activities make (”unintended”) positive climate contributions
- These examples can in many cases be replicated and contribute to making development patterns gradually more sustainable.
- Integration of climate and broader SD concerns early in energy policy process (path change) is cost-effective both from development and climate change perspectives.

Time to Choose Path



More information at: *www.developmentfirst.org*