Integrating Climate Change into National Sustainable Development Strategies – the Role of Indicators

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Outline

1. Role of national sustainable development strategies (NSDS) in addressing climate change
2. Indicators of sustainable development related to climate change
Climate change is a sustainable development issue, not just an environmental concern.

- Climate change threatens to erase progress made in achieving sustainable development goals, including the Millennium Development Goals.
- Greenhouse gas emissions depend on economic and technological pathways.
- Current emissions impact on the living conditions of future generations.
- Poor and vulnerable countries are expected to face the greatest burden of climate change, while having contributed the least to the problem.
NSDS and climate change

- Benefits of addressing climate change in an NSDS
  - An NSDS provides a natural framework for climate change;
  - an NSDS facilitates the identification and valuation of co-benefits of climate change actions on other sustainable development issues;
  - an NSDS facilitates harnessing co-benefits from actions driven by non-climate objectives;
  - an NSDS enables country to identify and solve trade-offs between climate change and other objectives;
Examples of co-benefits:

- Reducing emissions from combustion of (imported) fossil fuels can increase energy security.
- Improved disaster risk management helps to address not only climate related events (droughts, floods, ...), but also non-climate related ones (earthquakes, volcanoes).
- Preserving forests to maintain natural capital and to sustain livelihoods also increases carbon absorption.
NSDS and climate change

- Benefits of addressing climate change in an NSDS
  - Intergenerational equity is at the heart of the concept of sustainable development and of the climate change challenges;
  - As global partnership forms an integral part of the sustainable development agenda, an NSDS facilitates the consideration of other countries’ concerns;
  - As an NSDS is a participatory process, it facilitates the engagement of non-state actors.
Country experiences

- Most countries address climate change in their NSDS
  - Forty-nine out of 60 countries included in a recent study by DSD explicitly reference climate change in their NSDS.
  - Large variations in type of coverage of climate change
  - Generally, mitigation is covered more extensively than adaptation, but exceptions exist.
Country experiences

- Areas in which countries identify linkages to climate change mitigation
  - Renewable energy
  - Energy efficiency and energy saving
  - Forests
  - Transport
  - Eco-efficiency
  - Waste management
  - Housing
  - Agriculture
Country experiences

- Areas in which countries identify linkages to climate change adaptation
  - Disaster management
  - Climate observation and forecasting
  - Agriculture
  - Fishery
  - Water management
  - Forests
  - Economic development
Some countries also explicitly link climate change to
- Foreign policy
- Technology transfer
- Development cooperation
- International carbon market, in particular CDM
Country experiences

- Wide range of policy instruments included in NSDS:
  - Economic (subsidies, tax exemption, ...);
  - Regulations, mandatory and voluntary standards, voluntary arrangements with private sector;
  - Developing new and revising existing strategies and management practices;
  - Providing information;
  - Research;
  - Awareness campaigns.
Many countries express a need for capacity-building in this area

UN DESA has just started a project on Integrating climate change concerns into NSDS in Latin America and the Caribbean

- Special focus on climate change adaptation
- Development of methodologies and indicators
- Testing methodologies and conducting national capacity-building workshops
Indicators of sustainable development and climate change

- Existing sustainable development indicator sets are a useful point of departure for the derivation of indicators related to climate change:
  - This helps to identify the important linkages
  - It also helps to avoid duplication of efforts.
  - It may reduce reporting burden for agencies.
Indicators of sustainable development and climate change

- Linking climate change indicators to sustainable development indicators increases coherence among indicator sets.
  - This avoids risk of sending ‘mixed’ messages.
  - Coherence can further be increased by incorporating existing issue-specific sets of sustainable development indicators, for example:
    - Energy Indicators of Sustainable Development
    - Biodiversity Indicators.
Indicators of sustainable development and climate change
Indicators of sustainable development and climate change

- Countries are using many indicators of sustainable development related to climate change as part of their indicators sets used for monitoring the NSDS.
- Identification of additional specific indicators is useful, e.g. climate indicators (Changes in temperature and precipitation patterns);
- Disaggregating of existing indicators may make them more climate relevant.
Main challenges

• Definitions of climate change adaptation are often vague.
  – People and economies adapt to a multiple factors, climate change being one of them.
  – If “development is the best form of adaptation”, are all development indicators climate change related?
  – Climate change impacts and adaptation measures interact.
Main challenges

- Methodologies for measuring technology transfer are underdeveloped.
- Measuring the impact of carbon markets and related mechanisms is difficult.
- Statistical classifications for indicators in some important domains remain incomplete.
- Data availability remains often a problem.
- Capacity for indicator computation and indicator analysis is important.
Main challenges

- Time lag between climate change policies and climate change impact
  - Policy measures on climate change mitigation and adaptation are in response to future climate changes.
- Models and scenarios necessary to guide policies
  - Climate change impacts are uncertain
- Extreme events can be devastating, but cannot be ignored (‘Fat-tailed’ distribution)
Thank You

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