Strengthening Climate Services to Manage Risks and Impacts from Climate Variability and Change

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1. Introduction

✧ Climate variability and extremes and their impacts

✧ Changes in climatic averages and frequency and intensity of extreme events could exacerbate these impacts

✧ Management of climate-related risks is imperative
  o Protection of lives, livelihoods, and assets
  o Resource management
1. Introduction cont.

✦ UNDP program on managing climate-related risks

- Goal: reduced risks to climate variability and change
- Approach: address short- and long-term impacts of climate variability and change to prevent disasters and promote development
- Expected outcome: mainstream climate risk management into country programming and national development planning

✦ Key requirement in climate risk management: climate information
2. CRM Requirements

a) Climate information
   - Historical climate data
   - Observable trends
   - Climate forecasts: short-, medium-, extended-range, seasonal
   - Long-term scenario: decades into the future

b) Delivery mechanism

c) User capacity for climate information application

d) Iterative analyses of risks and options for risk management and adaptation
3. Issues and gaps: Climate services

a) Climate information

- **Observations:** unrecorded observations, lost data sheets, location of data with various institutions within the country, digitization of observations, sparse observation networks

- **Prediction:** requires long and reliable observed data, appropriate climate model, uncertainty, computational resource, trained personnel

b) Delivery mechanism

- **Institutions:** roles, responsibilities, coordination

- **Integration of users:** important in selection of appropriate emission scenarios, dialogue to level off expectations

- **Communication of uncertainty and limitations for application**

- **Updating of projections as new climate change evidence becomes available**
3. Issues and gaps: Users

a) User capacity for climate information application
   - Translation into impact outlook and management/ adaptation options
   - Managing uncertainty

b) Iterative analyses of risks and options for risk management and adaptation
4. Recommendations

✧ Improve data availability
  o Improvement of observation systems
  o Data digitization; data rescue
  o Data sharing

✧ Capacity building in climate information generation
  o Training in climate modeling/ downscaling
  o Incentives/ disincentives to retain trained personnel
  o Use of more than 1 climate model for more robust ensemble predictions/ projections
  o Investment in computing capacity
  o Assistance from regional climate centers
4. Recommendations cont.

✧ Establishment mechanisms for delivery of climate information
  - Clear mandates, roles and responsibilities, and coordination arrangements
  - Engage with users: user forum, local level dialogues

✧ Mobilize resources
  - Integration into annual budgets
  - Donor support through projects
  - Assistance from regional and international organizations
Thank you for your attention