

Managing Risks of Climate Extremes and Disasters in Asia

**Some perspectives on Policy, Posture
and Practices**

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Extreme Weather Events: Reality and Challenge in linking policy to practice by people

- **Climate change is a topic of global concern with long term perspective and uncertainties**
- **Events of Weather extreme are realities of the day**
- **Coping with challenges of extreme weather events is an act of pragmatism and governance challenge**
- **Available Tools for managing weather extremes through governance linked actions include**
 - Assessment of potentials, forewarning, enhancing preparedness, disaster mitigation strategies and actions

Extreme weather events: Some Common features

- **Generally local events with down stream effects**
- **Intensity of events could exceed coping potentials of the local infrastructure and human population**
- **Damage potential of extreme events is variable and exhibit differentiated effects based on vulnerabilities of different social segments**
- **Call for assessment with high spatial resolution of the potential impact of the events and public understanding of consequences for responsible practice and actions**

Managing Risks of Extreme Weather Events: Common Features

- **Scientific quantification of Hazard potentials and developing cost-price relationships**
- **Political understanding and Assessment of Risk potentials with a commitment for policy actions**
- **Public understanding and Acceptance of risks for response actions**
- **Planning actions for averting and mitigation of disasters**
- **Establishing forewarning systems and disaster management authorities with accountability**
- **Good Governance practices with empowerment focus for local actions based on sound advice-response systems**

Weather Extremes in Asian Context: Specialties of Challenges

- **Climate features of most Asian Populations**
 - Tropical monsoons: Tropical physics makes the modeling a challenge; reliability of global models for Asia is a challenge
 - Himalayas: As an influencer of weather patterns
 - Oceans of Asia: In General Circulation; centers of cyclonic storms
 - Geological history and Seismological activities: Plates in motion
 - River systems: With flooding features and changing courses
 - Increasing density of human population: Vulnerability dimensions of each extreme event and scope for humanitarian disasters
 - Asian Complexity: Poverty – vulnerability- disaster impact relationships in the social contexts of the region and challenges of devolution of national policy into local actions

Humanitarian Disasters and their impact in the Asian Social context

- **Water linked**

- Deluge in monsoon times; Drought and Flood related, Tsunami, blizzards, cloud bursts

- **Water and Air, Air-heat combinations**

- Cyclones, heat waves with dryness; Tornadoes, sand storms,

- **Land linked**

- Earthquakes, Landslide, Tsunami

- **On Agriculture**

- Monsoon failure and livelihood farmers
- Crop yield and food security of population
- Crop failure and food inflation

- **On human health**

- Water and sanitation related challenges
- Epidemics and nutritional challenges

- **Property damages and Loss of Human life**

- Buildings and structures, Social infrastructures, Transportation

IPCC Special Report on Managing Risks:

As a learning Tool and input for planning for policy bodies

- **Advisory and advocacy dimensions**
 - Realities of Weather Extremes
 - Types of challenges emanating from extremes
 - Coping with challenges as adaptation strategy
 - Feasibility of event Predictions and fore warning
 - Zoning based on vulnerability assessment
 - Risk Quantification and Disaster estimation
 - Case studies and experience sharing measures

India in the management of Climate Risks

- **National Action Plan on Climate Change**
 - Mounting of Eight National Missions
- **Scientific Inputs into NAPCC**
 - National Mission for Sustaining the Himalayan Ecosystem
 - National Mission on Strategic Knowledge for Climate Change
- **Building National Capacity and Capability**
 - For assessment, modeling, risk appraisal etc
 - Forewarning and system integration on information outreach
- **Technology-Policy- People Interface**

Summary and Closing Remarks

- **Extreme events of weather are becoming a reality. Acceptance of realities and adaptation to extremes are pragmatic approaches to management of social systems through empowerment for local actions**
- **Management and mitigation of disasters on account of extreme events of weather and Nature calls for an effective interface among science-policy and people centric actions based on understanding and societal outlook to adapt**

Thank you

**Policy and Practice in
managing risks calls for
linking governance with
concern for people**