

The background of the slide is an aerial photograph of a road that curves through a dense, green forest. The road is dark asphalt with white lane markings. The trees are a mix of vibrant green and some brownish-green, suggesting a diverse ecosystem. The overall scene is captured from a high angle, looking down at the road and the surrounding forest.

RUN UP TO THE MID-CENTURY

Guiding framework for India's Climate Resilient Development Pathway

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1st July 2020

PURPOSE

Strong LTS

Indicative blueprint for development

Coherence in policy and action

Linkage with NDCs

Efficient resource allocation

Support from international community

Enabling just transition

- Article 4.19 of the Paris Agreement requires all countries to formulate and communicate their Long-Term Strategies.

*“All Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2, **taking into account their common but differentiated responsibilities and respective capabilities**, in the light of different national circumstances.”*

- Paragraph 35 of Decision 1/CP.21 accompanying the Paris Agreement further invites countries to communicate these strategies by 2020.
- Not legally binding, but developing an LTS serves several domestic and global benefits

BOUNDARY & SCOPE

The LTS must in effect fulfil two crucial criteria:

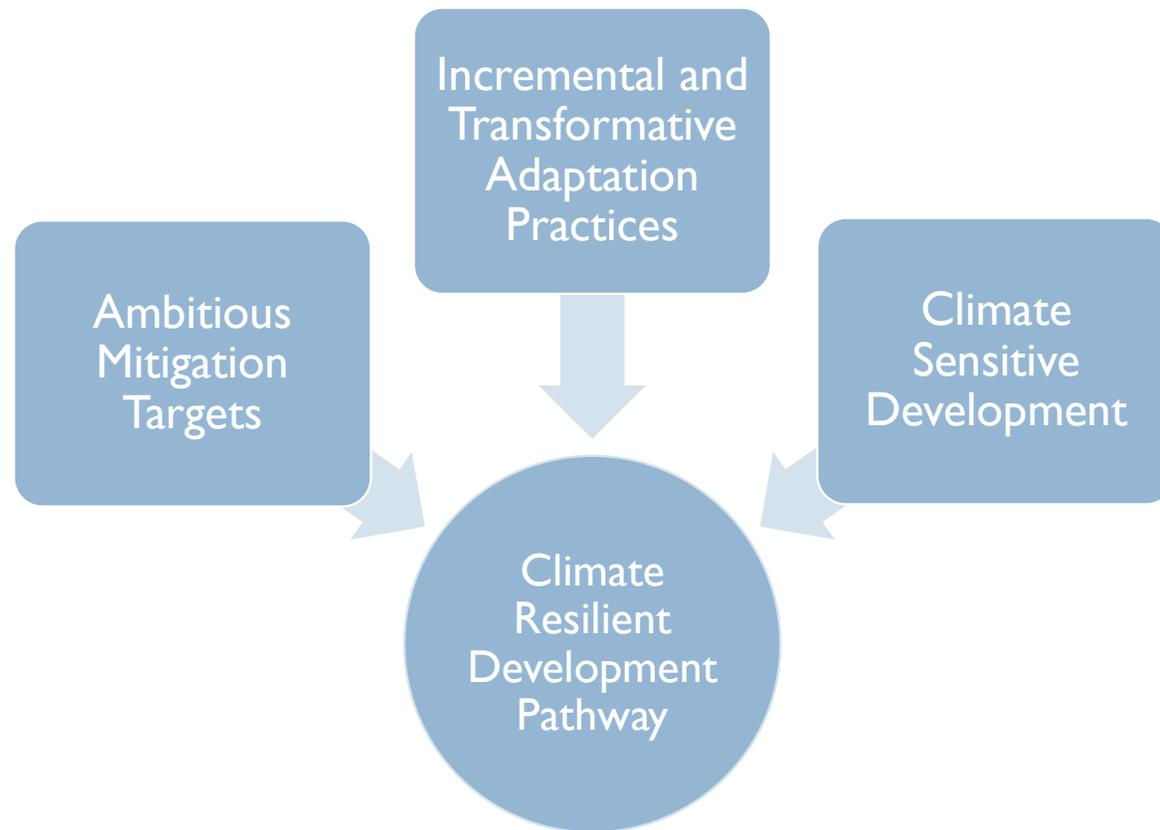
- 1. Domestic developmental priorities**
- 2. Enhancing resilience of local communities**

India's LTS would remain incomplete without equal focus on both adaptation *and* mitigation.

This framing document focuses on adaptation alone

A framing document on mitigation has already been prepared by TERI and can be accessed through the TERI website

CLIMATE RESILIENT DEVELOPMENT PATHWAY



FOUR PILLARS OF THE FRAMEWORK



Climate Resilient Development Pathway



Developmental Context

Understanding the developmental needs based on the current growth trajectory



Analytical Framework

Using realistic assumptions to design smart future-looking scenarios



Resourcing Adaptation

Determining needs and available sources for finance and technology



Governance of adaptation

Engaging with all essential stakeholders

Monitoring, Evaluation & Learning

I. Developmental Context

The Development Policy Context in India

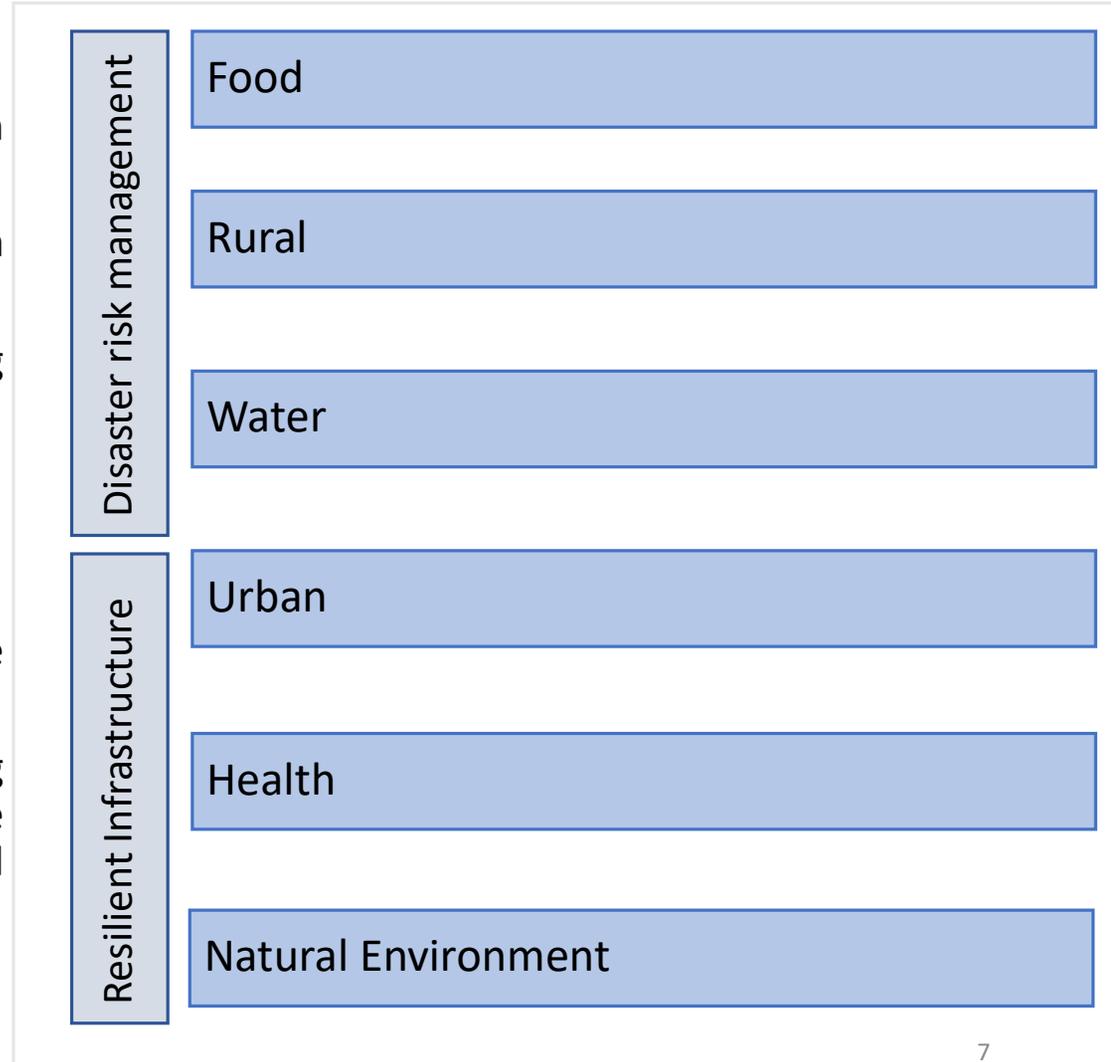
- Dependence on climate sensitive sectors (agriculture, water, health, infrastructure, natural ecosystems and forestry and energy) → High vulnerability to climatic stressors.
- Poverty and increasing inequalities
- Mainstreaming of climate action in the long term-development planning in the country → NAPCC missions and 'inclusive growth' as outlined in the 12th FYP

Adaptation and Development Synergies

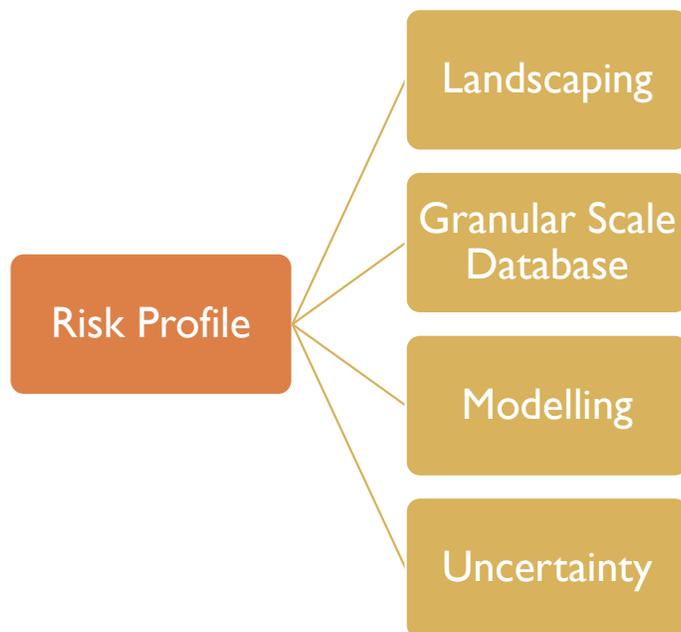
- Sustainability and the efficacy of climate change adaptation and development pathways are strongly linked
- Vulnerability and Adaptive Capacity → Strongly rooted in the development process
- Climatic Risks and Vulnerabilities → Derail developmental goals
- Development Policy context → Define potential tradeoffs and co-benefits of adaptation actions

Key Systems or Sectors

- Adopted from the Global Commission on Adaptation Report.
- Are an intrinsic part of the developmental agenda for the country.
- The systems encompass the following components to name a few:
 - Water & Heat management for agriculture
 - Heat-stress management in urban areas
 - Management of water-borne diseases
- Disaster risk management is a cross-cutting issue that must be addressed across all the systems.
- Resilient infrastructure- climate proofing existing infrastructure and constructing new climate resilient infrastructure are required across all systems for a climate resilient pathway.



II. ANALYTICAL FRAMEWORK: Risk Profile



- **Landscaping**

Taking stock of past work done under risk profiling under the context of climate and disaster at various scales : National, Sub National and Local

- **Granular Scale Database**

- Preference on generating a comprehensive granular scale database on climate change risks and impacts assisting translation of available global information onto regional and local level
- A coarser resolution data for risk may be relied on to first degree of approximation in case of non-existence of local level risk information like: moving from district level to State Level to Zonal level

- **Modelling**

- Integrated Assessment Models Curating the risk information which is integrated with all aspects of a development pathway
- If IAMs are not available, a combination of hybrid coupled models and impact models can be utilized

Uncertainty

- Uncertainty is considered as one major hindrance for a well informed adaptation policy.
- Often, improper consideration for uncertainties leads to increase the likelihood that the action taken will be inadequate, inappropriate or increase vulnerability.
- Recognising the nature of uncertainties is crucial for a robust, well informed and more relevant adaptation decision making process.

II. ANALYTICAL FRAMEWORK: Vulnerability Analysis

Focused Vulnerability Assessments

- Landscape Focus ;Arid and Semi-arid areas, Coastal zones, Himalayan regions
- Encompassing contexts; Urban, Rural or the Rural-Urban (Rurban) continuum in nature.

Inform Adaptation Planning

- Answer Questions;
 - *who and/or what is at risk?*
 - *to what extent?*
 - *from what?*
- Unpacking vulnerabilities through identification of hotspots and understanding of interactions within a system.

Need for Regular Vulnerability Assessments

- Evolving definitions and context of vulnerabilities need to inform adaptation planning accordingly.

RESOURCING ADAPTATION: Financing, Technology and Capacity Needs



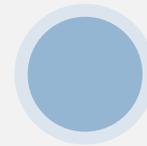
Why Resourcing?

- Adaptation requires critical inputs that go beyond, but are not unresponsive to, financial and technological capital.



Need Assessment of Capitals

- Human Capital:
- Social Capital
- Natural Capital
- Infrastructure & Technology
- Financial Capital

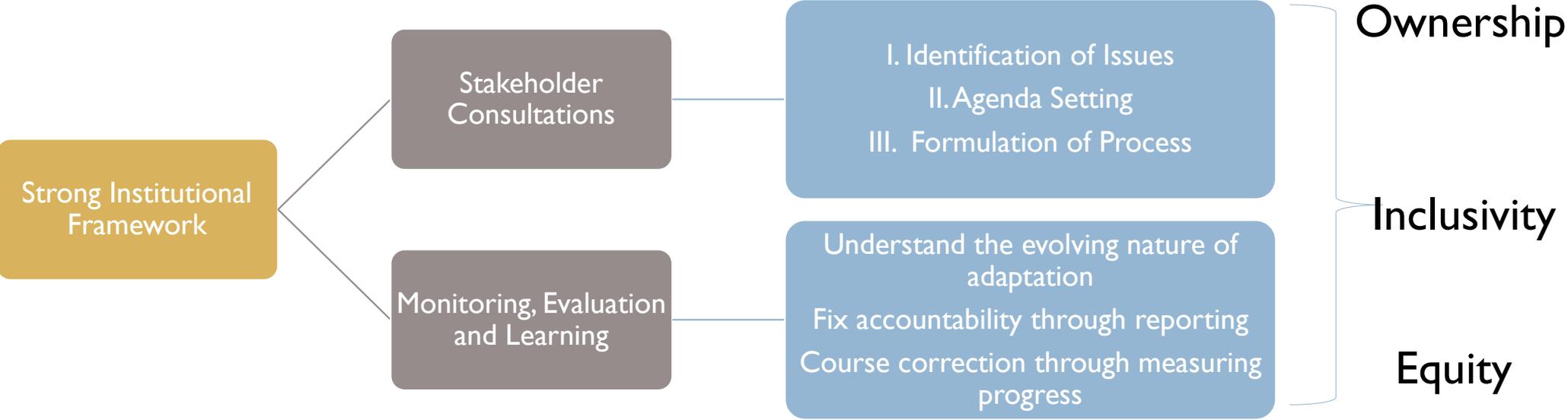


Resource Allocation & Mobilization

- Understanding pre-existing resourcing mechanisms
- Allocation of existing resources and/or mapping of need (i.e. Tech, Financial, Governance/Policy) based on assessment of existing capital.
- Mobilizing additional resources (National, Bilateral and Multilateral Financing or, through R&D)

IV. GOVERNANCE OF ADAPTATION

- Structured engagement and oversight, driven by the central ministries, involving both sectoral line ministries, state governments & communities, is essential for consistently implementing a CRDP
 - Incorporates two necessary features of the CRDP:



Key Questions

- *How do we make adaptation intrinsic to development planning decision?*
- *Considering the time bound political cycle, political view is myopic and may therefore influence decisions away from what is proposed in the LTS. How can one build a political consensus over the issues and trajectory over the LTS?*
- *What are the barriers and constraints to transformational adaptation practices? How can knowledge, planning and finance overcome these barriers?*
- *How to envision a long term adaptation strategy that supports resilient, equitable/inclusive, and sustainable development and are there synergies and tradeoffs?*
- *How can the inclusion of non-state actors like civil society and private actors be ensured so that the planning of LTS also builds considering their perspectives as well?*