

# RUN UP TO THE MID-CENTURY

**Guiding framework for India's Climate Resilient Development Pathway**

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# 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:

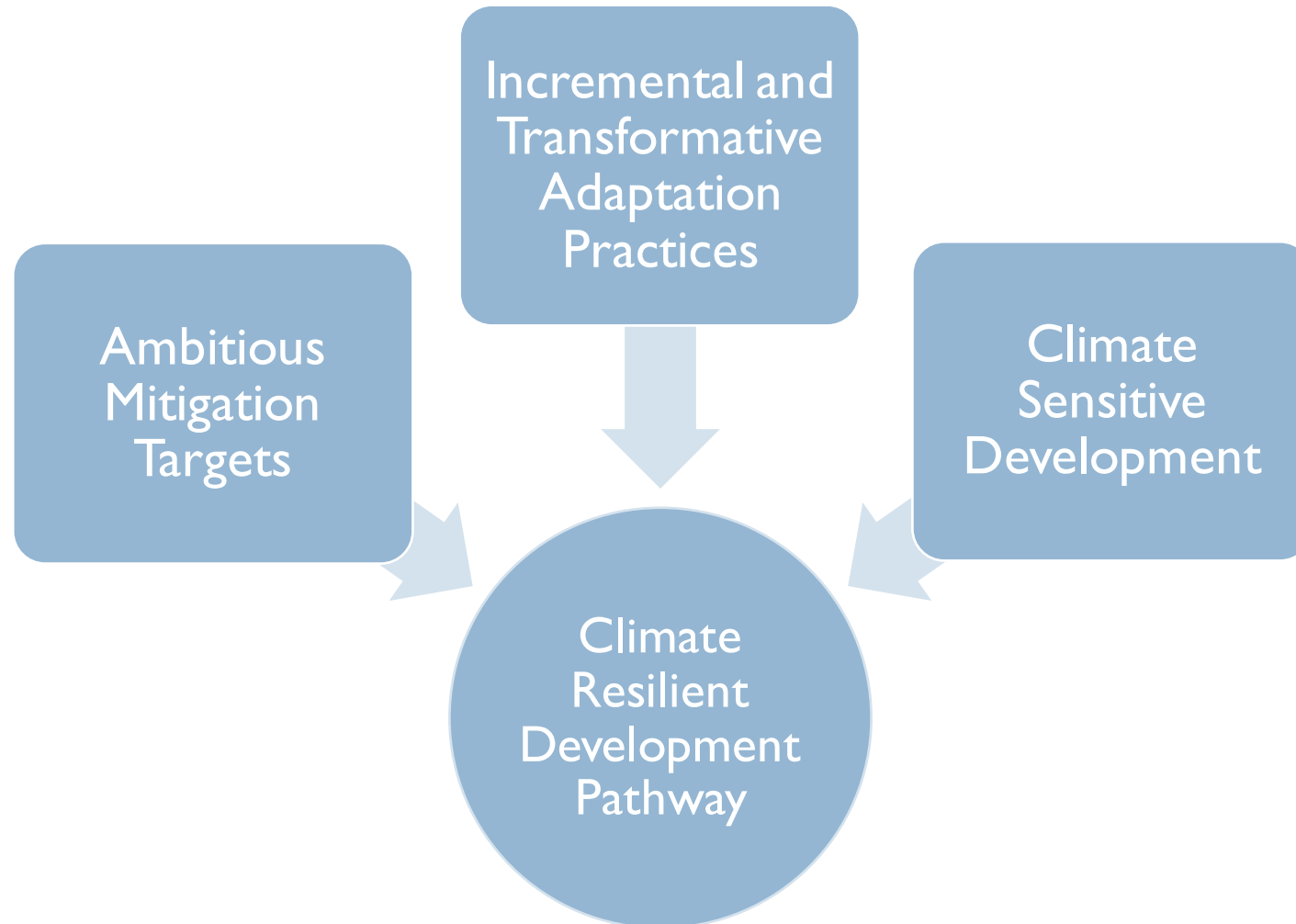
- 1. Domestic developmental priorities**
- 2. Enhancing resilience of local communities**

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

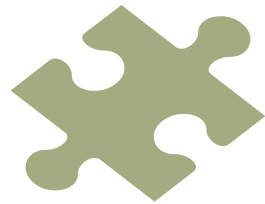
**This framing document focuses on adaptation alone**

*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



## *Pillars of Framework*



### **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

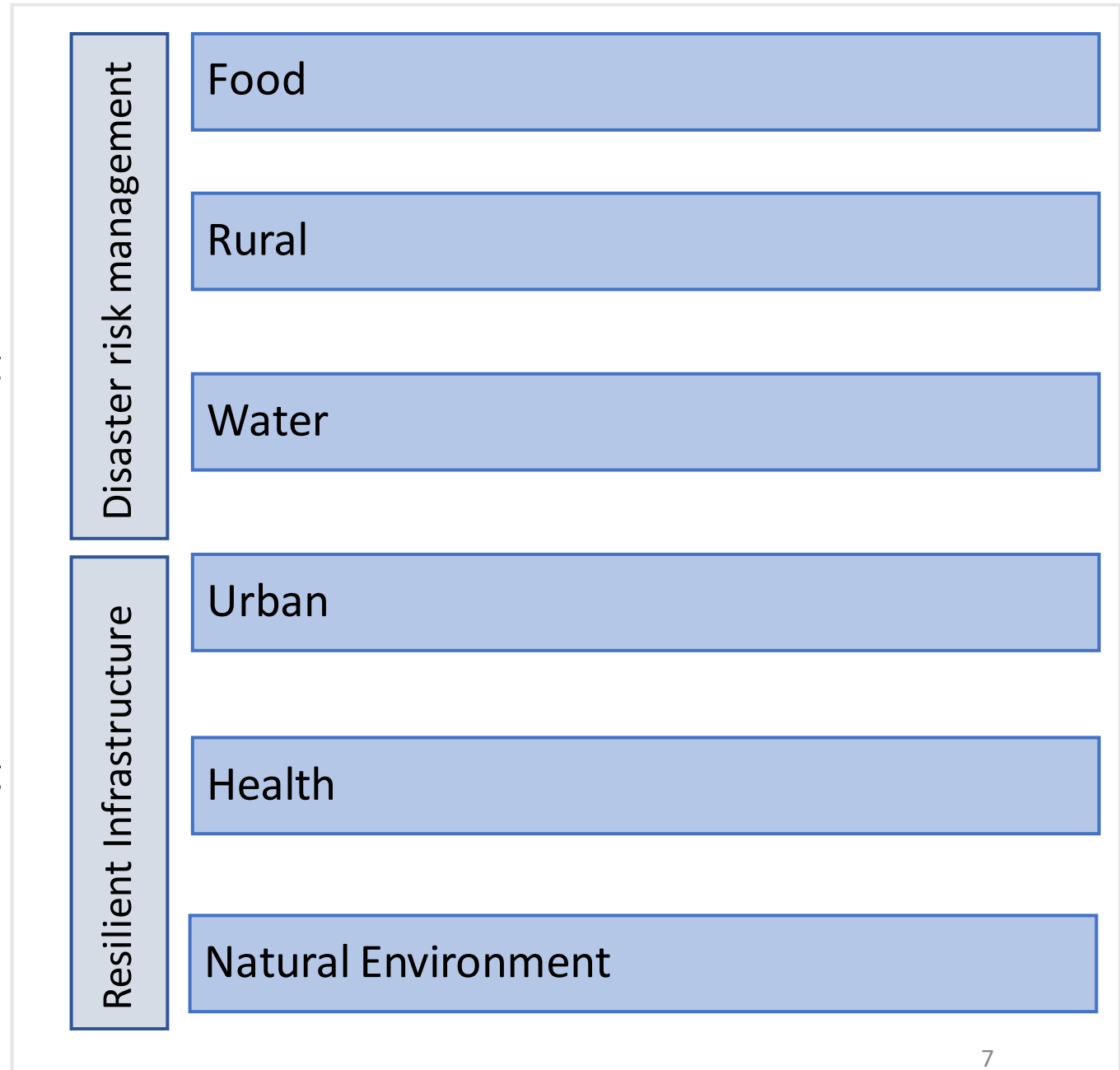
- Dependence on climate sensitive sectors (agriculture, water, health, infrastructure, natural ecosystems and forestry and energy) → High vulnerability to climatic stressors.
- Poverty and increasing inequalities
- Mainstreaming of climate action in the long term-development planning in the country →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

## Adaptation and Development Synergies

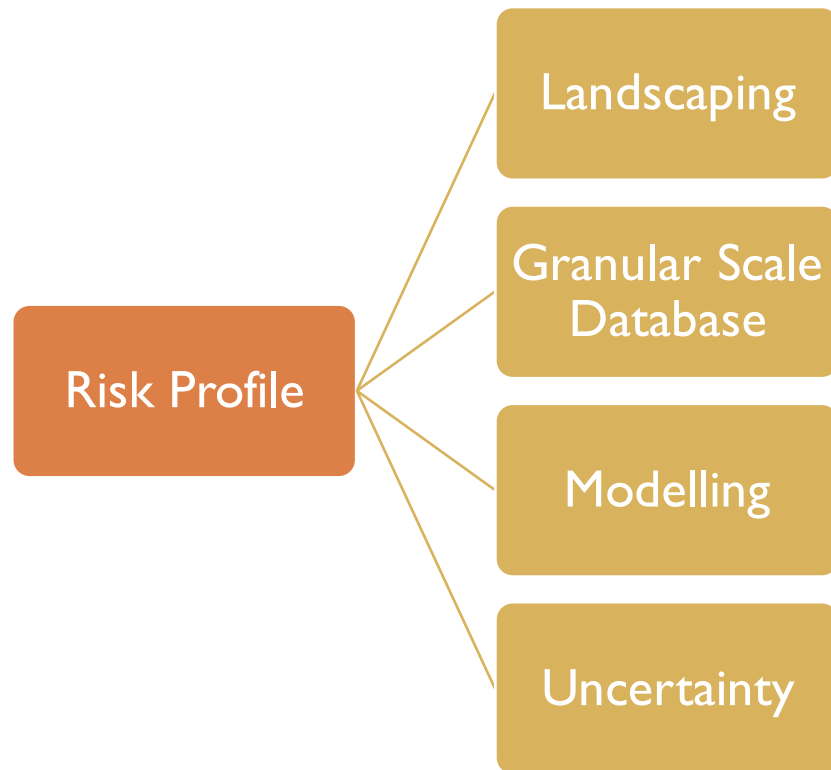
- Sustainability and the efficacy of climate change adaptation and development pathways are strongly linked
- Vulnerability and Adaptive Capacity → Strongly rooted in the development process
- Climatic Risks and Vulnerabilities → Derail developmental goals
- Development Policy context → Define potential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

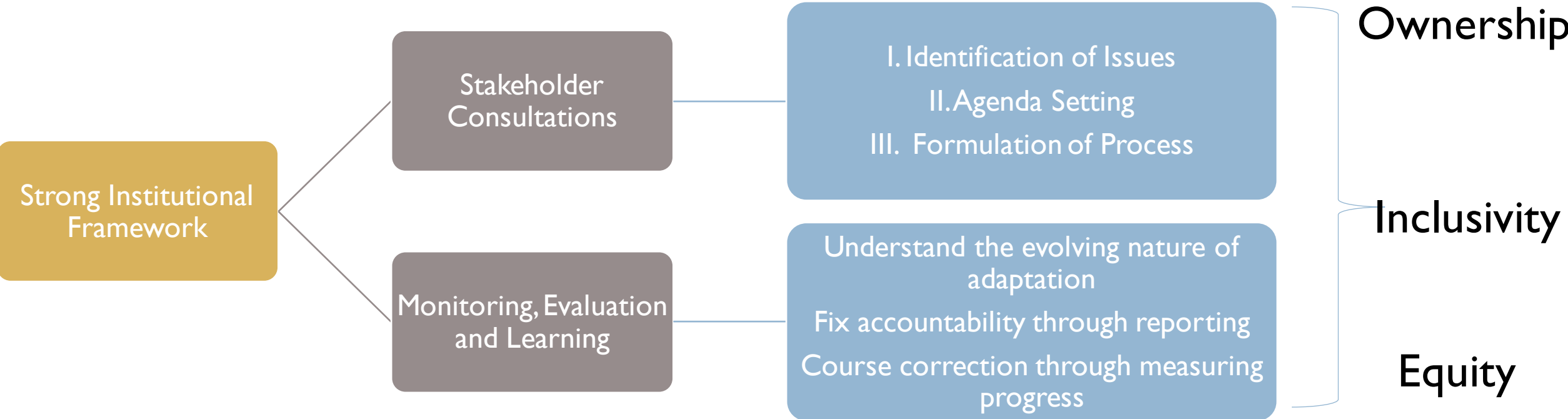


## **Resource Allocation & Mobilization**

- 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, Bi-lateral 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?*