



State Knowledge Management Centre on Climate Change (SKMCCC)

Government of Madhya Pradesh
Urban Development and Environment Department
Environmental Planning & Coordination Organization

Background of SKMCCC

- **State Designated Agency** for Climate Change issues
- State Nodal Agency Managing knowledge in Climate Change
- DST, GoI has acknowledged SKMCCC of EPCO as the “State Unit for NMSKCC”

Objectives

- Create Knowledge Repository and Enhancing Knowledge Environment there by Bridging the Gap
- Improving Knowledge Access & Transfer; Managing Knowledge as an Asset
- Strengthening the R&D Capacity in Climate Change field
- Mainstreaming Climate Change concerns in the policies and programmes

Activities

Climate Science

Understanding
Climate Change

- GHG inventorization

Climate Policy

Studying the
impacts

- Assessing the climate change vulnerability
- RCM

Climate Actions

Developing
response
strategies

- SAPCC Mitigation Adaptation

Assisting in
Integration

- Policy & Program
- Pilot projects
- Knowledge Management
- Capacity Development

SKMCCC Functions

Knowledge Creation –

- Research studies in association with scientific institutions and agencies
- Scholarships for carrying out research on CC issues of MP
- Action research projects to generate primary information

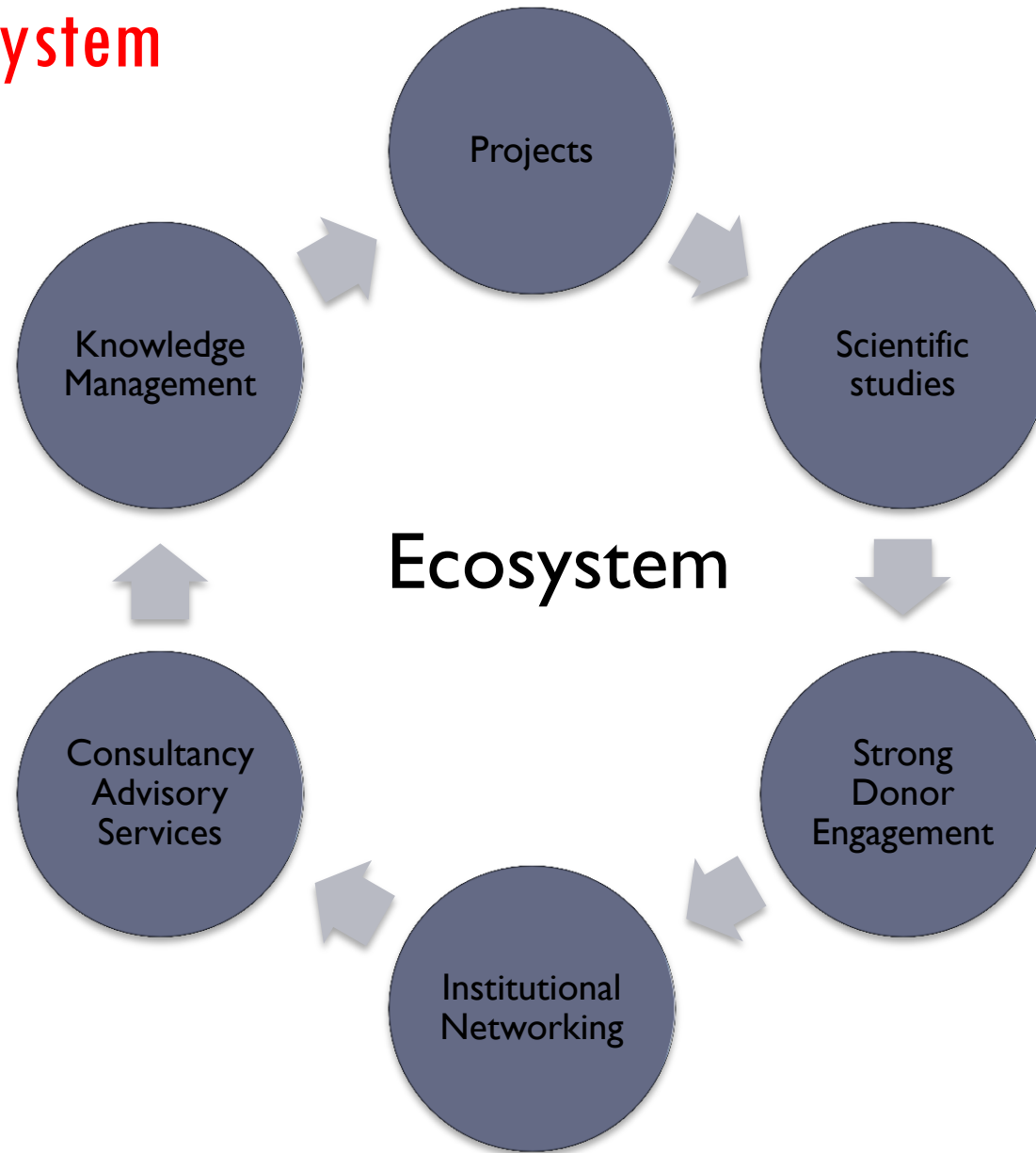
Knowledge Collection and Synthesis –

- Establishing Networks and strategic partnerships with institutions and agencies
- Documentation of traditional knowledge
- Case studies on climate change and developmental issues

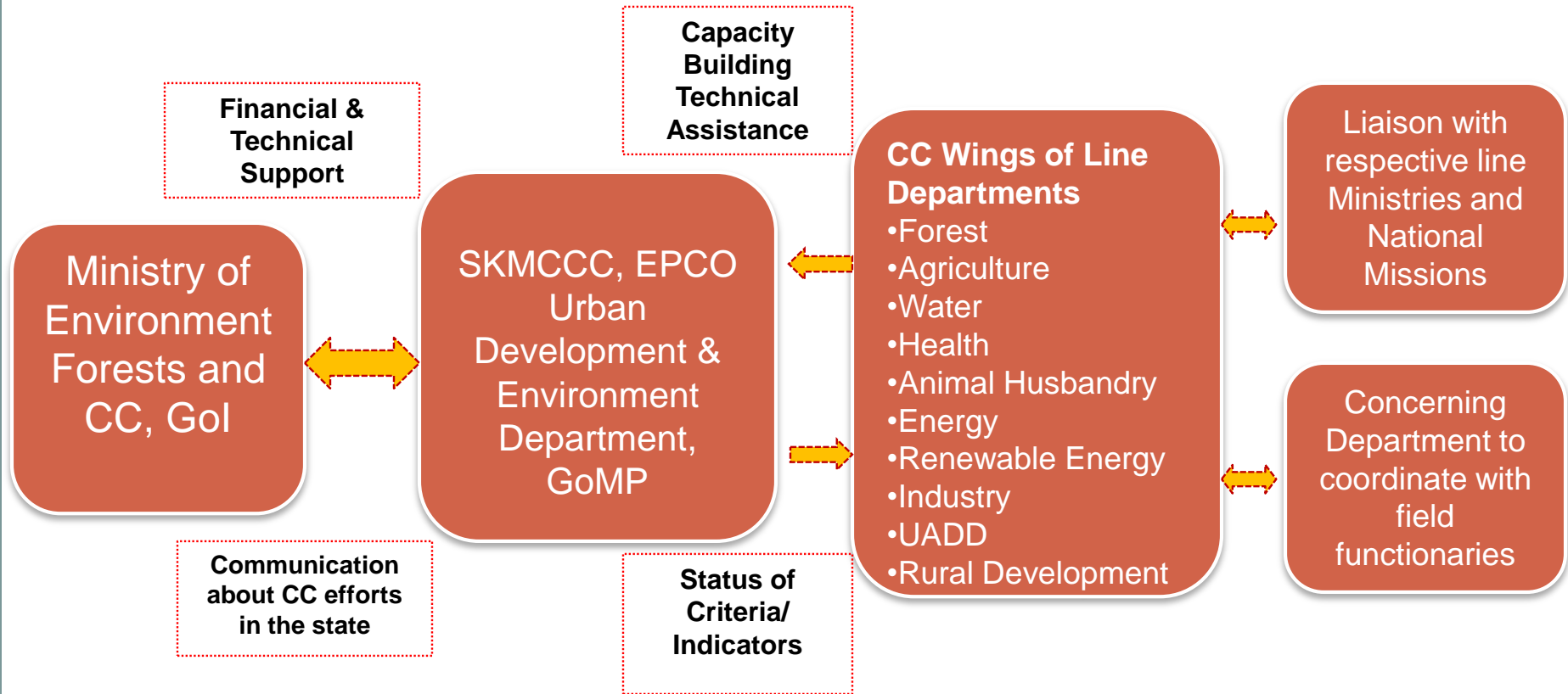
Knowledge Dissemination –

- Knowledge portal for wider distribution of information.
- Capacity building and training activities.
- Engaging communities and piloting adaptation projects.

Knowledge Ecosystem



Framework & Mechanism



- ❖ Climate Change Working Groups formed in departments
- ❖ These working groups to coordinate with their respective line ministries

- ❖ SKMCCC EPCO to act as the coordination agency
- ❖ M&E Criteria and Indicators to be developed with departments

Training & Capacity Building Activities

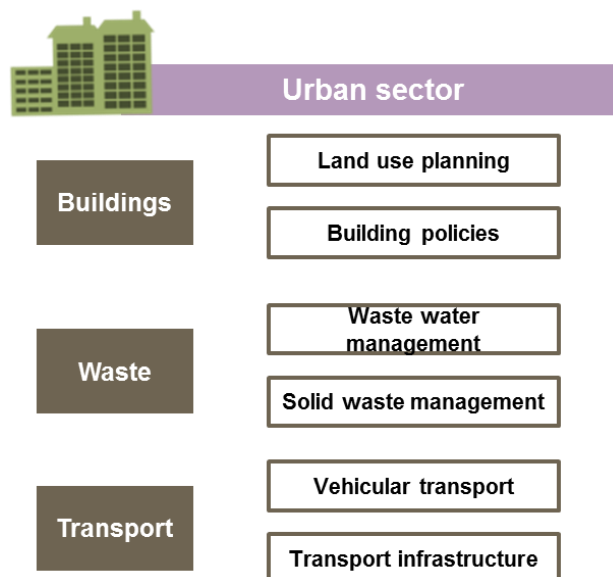
- Building basics with "Climate Change Appreciation Course" with State Academy of Administration
- Workshops with DCCWGs, govt. officials planned at regular intervals
- Workshops and Trainings with specific department; Forest, Water, Agriculture etc.
- More than 500 officials from different departments have been trained.
- Support to ATMA
 - ✓ Support to 5 districts of MP for training & capacity building of field functionaries of ATMA
- Awareness programs in Schools

- Identify needs for Pilot Projects / Action Research Projects regarding Climate Change
- Support to formulate project proposals

- Integrated Solid waste Management ; Create awareness in the community and building capacities of the workers.
- Waste to resource: Processing Organic Waste

- Capacity building and Training needs of department for implementing the MP SAPCC
 - Knowledge partners with different organizations helping build the capacities of the officials in the Urban Development department.
 - Sensitization workshop for the Urban Development and Environment Department.

➤ **Climate Change Mainstreaming Checklist : A Quick Reference for Policy Makers to Evaluate Adequacy of Climate Change Responsiveness**



	Focus aspects	Considerations
Land use	Extreme weather events	Integrating possibility of floods and drought into land use planning
	Proportion of tree and vegetative cover	Provision of “green corridors” and “green breaks” to assist in reduction of urban heat island effects
	Stakeholder consultation	Involvement of state government, local authorities (water, transport, waste etc.), commercial traders, residents and general public, among others
Buildings	Green building elements	Reduction in urban heat island effects by employing green building elements such as green roofs, tree cover and permeable and light-coloured surfaces
	Energy Conservation Building Code	Enforcement of the Code would yield considerable annual energy savings

Other Activities

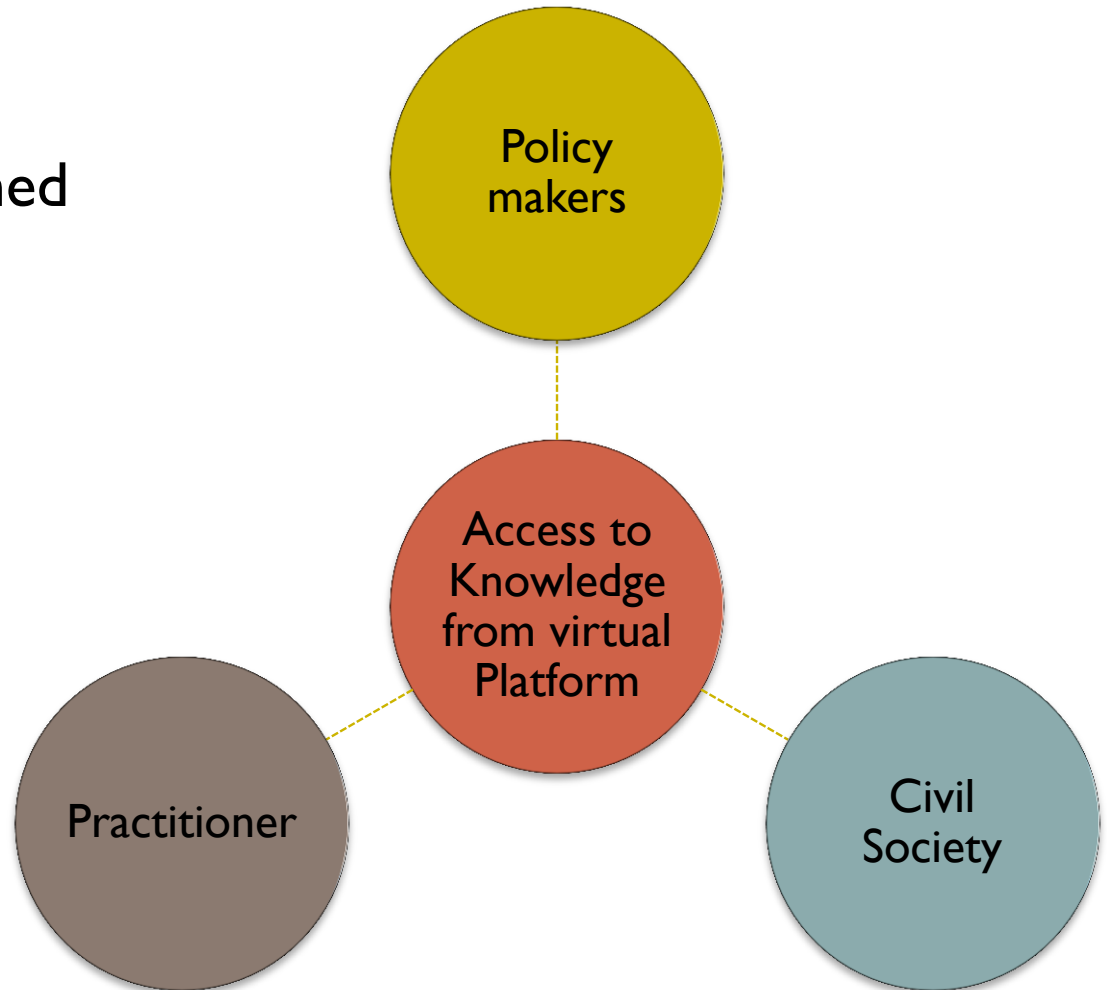
Technical Activities –

- Preparation of the project for Climate Change Adaptation Fund Board
- District climate profiles for MP
- CC Adaptation Project Formulation based on Landscape Approach
- Strategic Knowledge Generation Studies with IIT-GN
- Research study on "Climate Change & its impacts on Human Health"
- Project on "Impact of climate change on crop insects & pest diseases"
- Development of Knowledge products
 - ✓ Monograph
 - ✓ Panchayika special issue on Climate Change –Published by RD Dept.
- Scholarships & internship activities

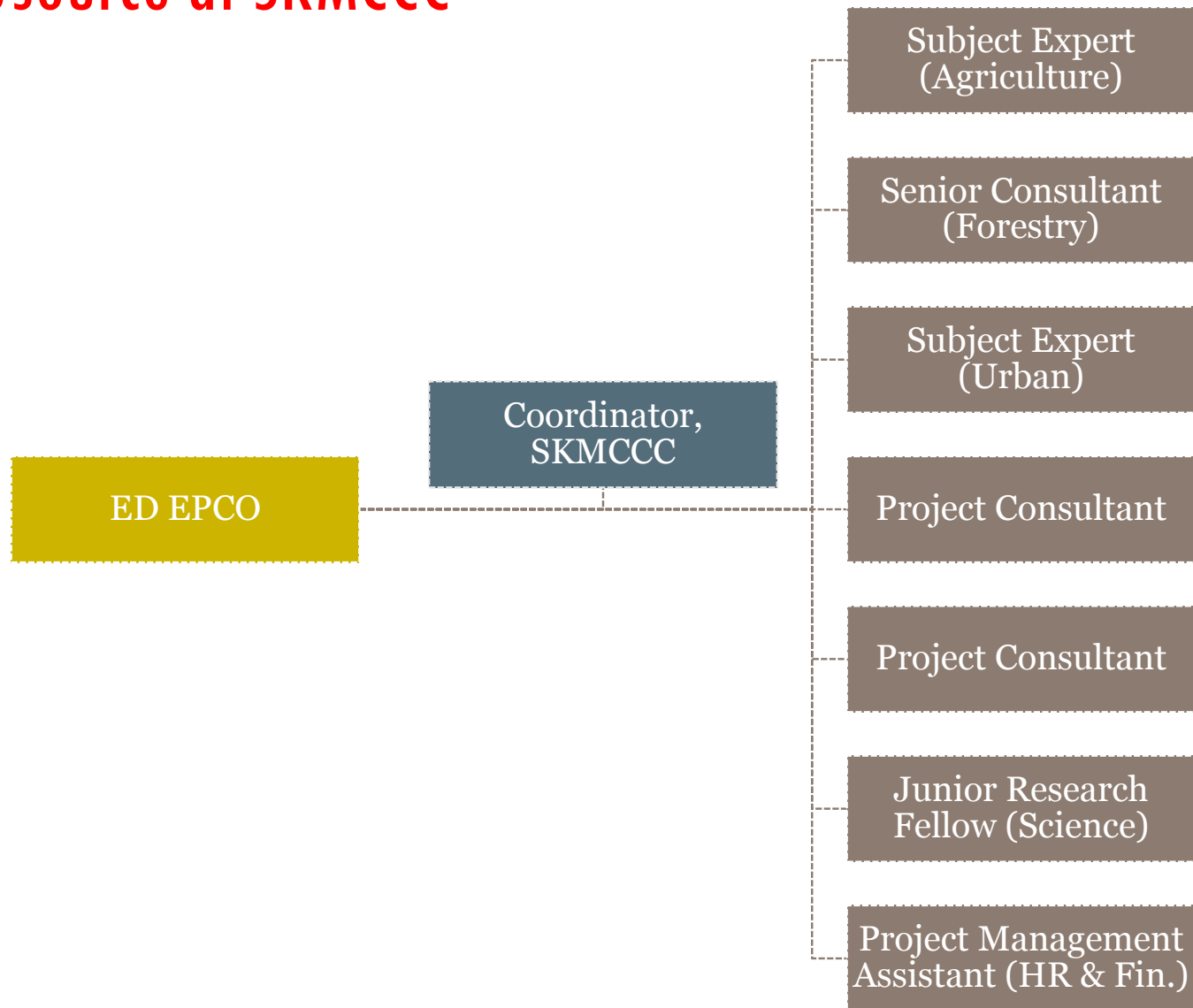
Knowledge Portal

The climate change knowledge portal established to meet the needs of the three major categories of user groups

thus serving as the **first point of entry** for policy and decision makers, practitioners and the civil society



Human Resource at SKMCCC

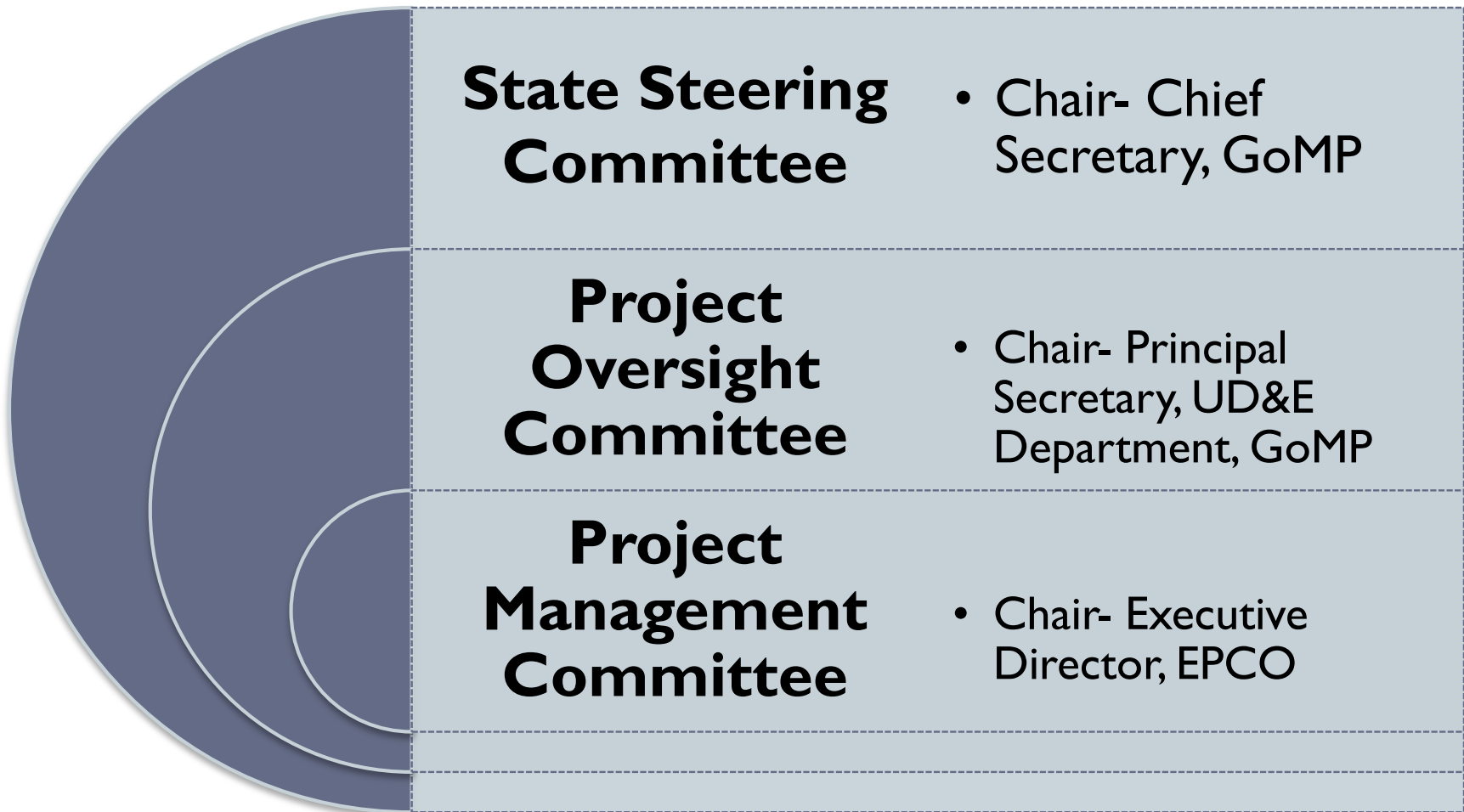


Hub and Spoke model for SKMCCC

- Climate Change Pulse Centre as the extended arm of SKMCCC.
- A committees under Divisional Commissioner with all the Collectors and CEO ZP and district Departmental officers

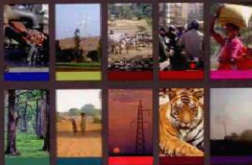


Institutional Mechanism





Environmental Planning and Coordination Organisation
Madhya Pradesh State Climate Change
Knowledge Management Centre



Climate change in Madhya Pradesh: A compendium of expert views



Madhya Pradesh State Action Plan on Climate Change

Integrating Concerns - Converging Possibilities

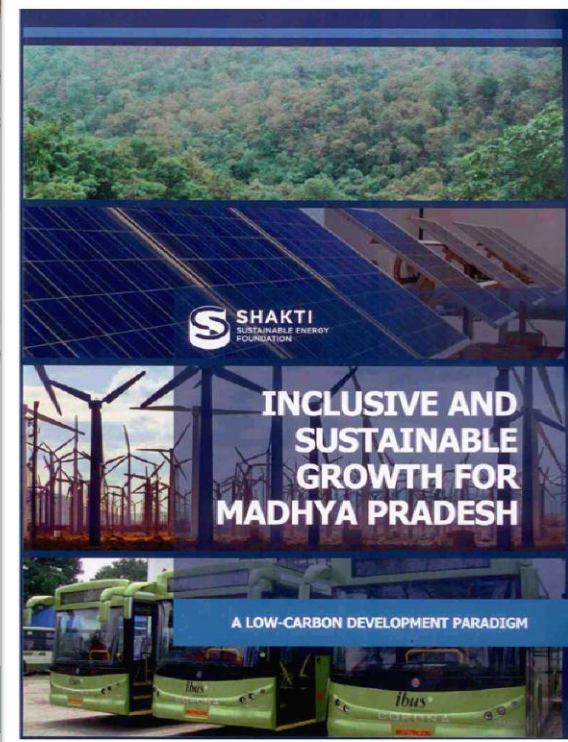
2014

Housing and Environment Department
Government of Madhya Pradesh



Vulnerability Assessment of Madhya Pradesh
Climate Change - a study under
'Climate Change Adaptation in India'

Ministry of Environment & Forests
Government of India
Environmental Planning and
Coordination Organisation
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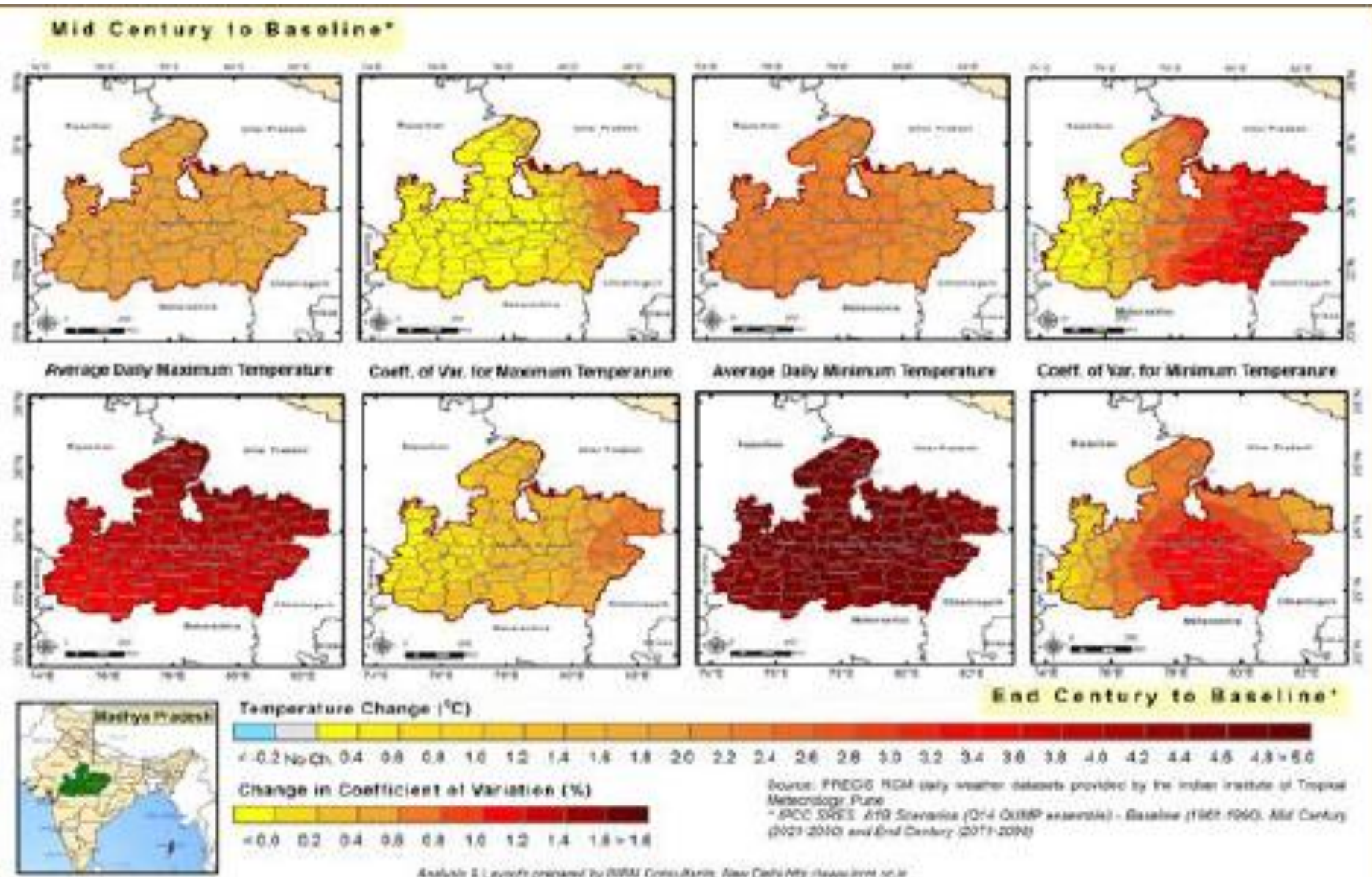
Thank you !!

Climate Scenarios

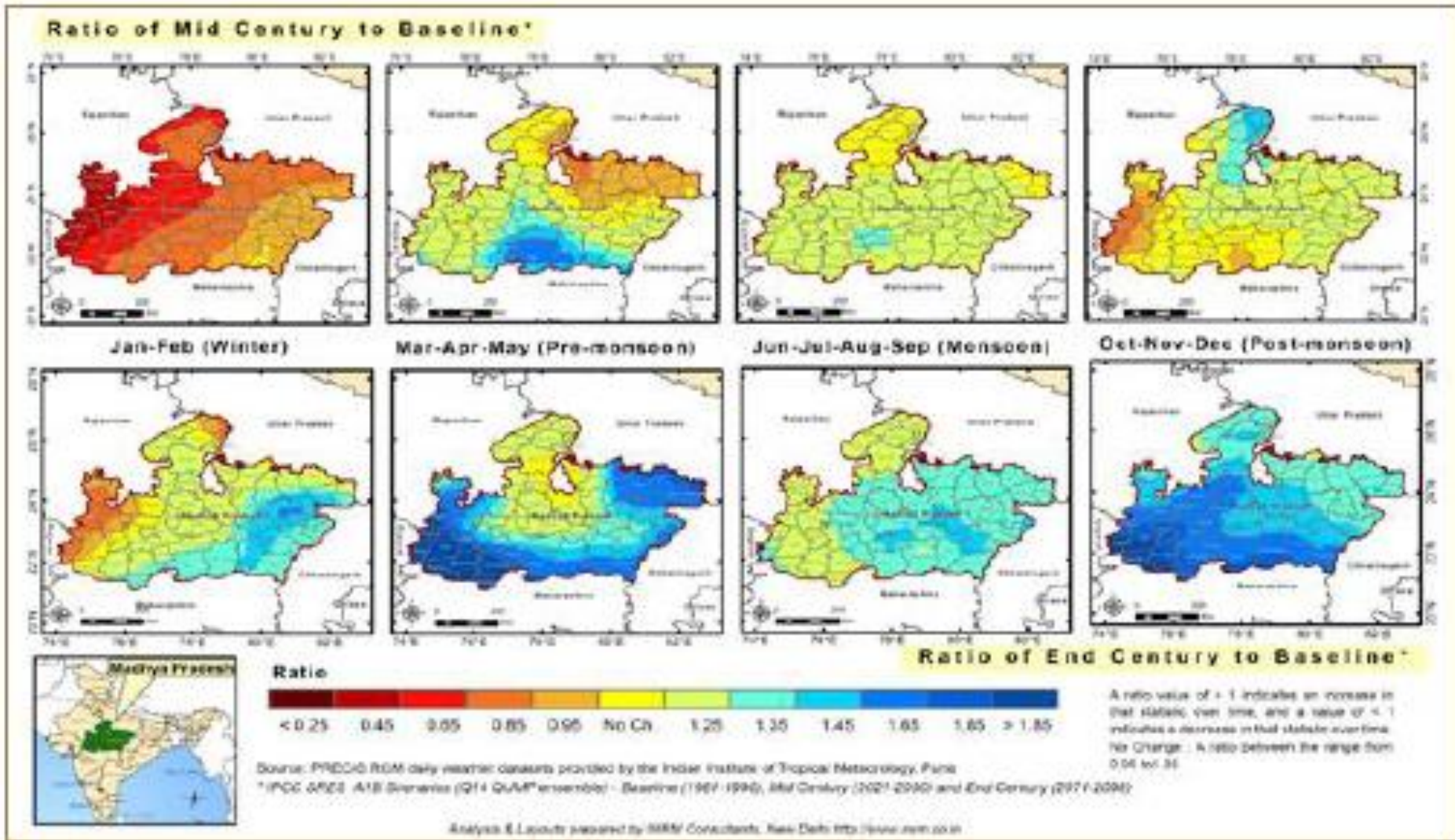
Projected Changes *	2021-2050	2071-2100
Daily Max. Temp	1.8-2°C increase	3.4-4.4°C increase
Daily Min Temp.	2.0-2.4°C increase	>4.4°C increase
Monsoon Precipitation	Increase in precipitation by 1.25 times the current observed rainfall in most parts of MP; No change in Morena, Shivpuri, Gwalior and Bhind; Increase in precipitation in eastern parts of Hoshangabad, northern part of Betul, north eastern parts of Betul and Southern part of Sehore	More than 1.35 times increase in precipitation wrt observed climate in most parts of MP. With major parts of Hoshangabad and Damoh, Mandla and northern parts of Balaghat will experience rain in excess of 1.45 times the observed climate now. The extreme northern and western part of the state will also experience excess rainfall but less than most of the other areas
Winter Precipitation	Decrease in precipitation	Substantial increase in precipitation in Central and South western part of MP increasing from between 1.45 to 1.85 times

* Projections Based on PRECIS considering A1B scenario

Climate Projections: Temperature



Climate Projections: Rain Fall



Vulnerability Assessment –Inferences

Sector	Time Slices			Spatial
	Baseline	2030	2080	
Forest	Tropical Moist Forest, Tropical Deciduous Forest, Tropical Thorn Forest	Reduced area under Tropical Moist Forest	Reduced area under Tropical Moist/ Deciduous Forest	<p>North and South East part in short term (2030)</p> <p>North, South West, South and East part in Long term (2080)</p>
Water (Ganga Basin)	Average Annual Rainfall 1039.2 mm	5% increase in annual precipitation, increase in evapo-transpiration	24% increase in annual precipitation, 22% increase in evapo-transpiration	<p>No significant change in north/ north-east region, increase in central-western part in short term (mid century)</p> <p>increase in north/ north west part, significant increase in north east regions of Ganga Basin (End Century)</p>