



GEOSMART CONFERENCE 2023

A Data-Enabled Approach to Govern India's Common Lands

Foundation for Ecological Security

Commons 101

- Natural resources used and managed directly by communities.
- **15-25%** of the geographical area of India is constituted by community forests, pastures, water bodies, etc.
- **35** crore rural poor in India directly depend on these resources.
- Contribution of **20-40%** of rural household's annual income in arid, semi-arid and sub-humid regions.
- Support climate change mitigation and adaptation, regulating temperature, maintaining water & nutrient flows.



Common lands are dwindling at an alarming rate through land use changes, putting livelihoods, socio-cultural fabrics, and biodiversity at risk.

(Some) reasons:

- (Major) data and knowledge gaps:
Last assessment by NSSO in 1998!
- In most cases, they are still regarded as “wastelands” and are left out of major land-related policies.



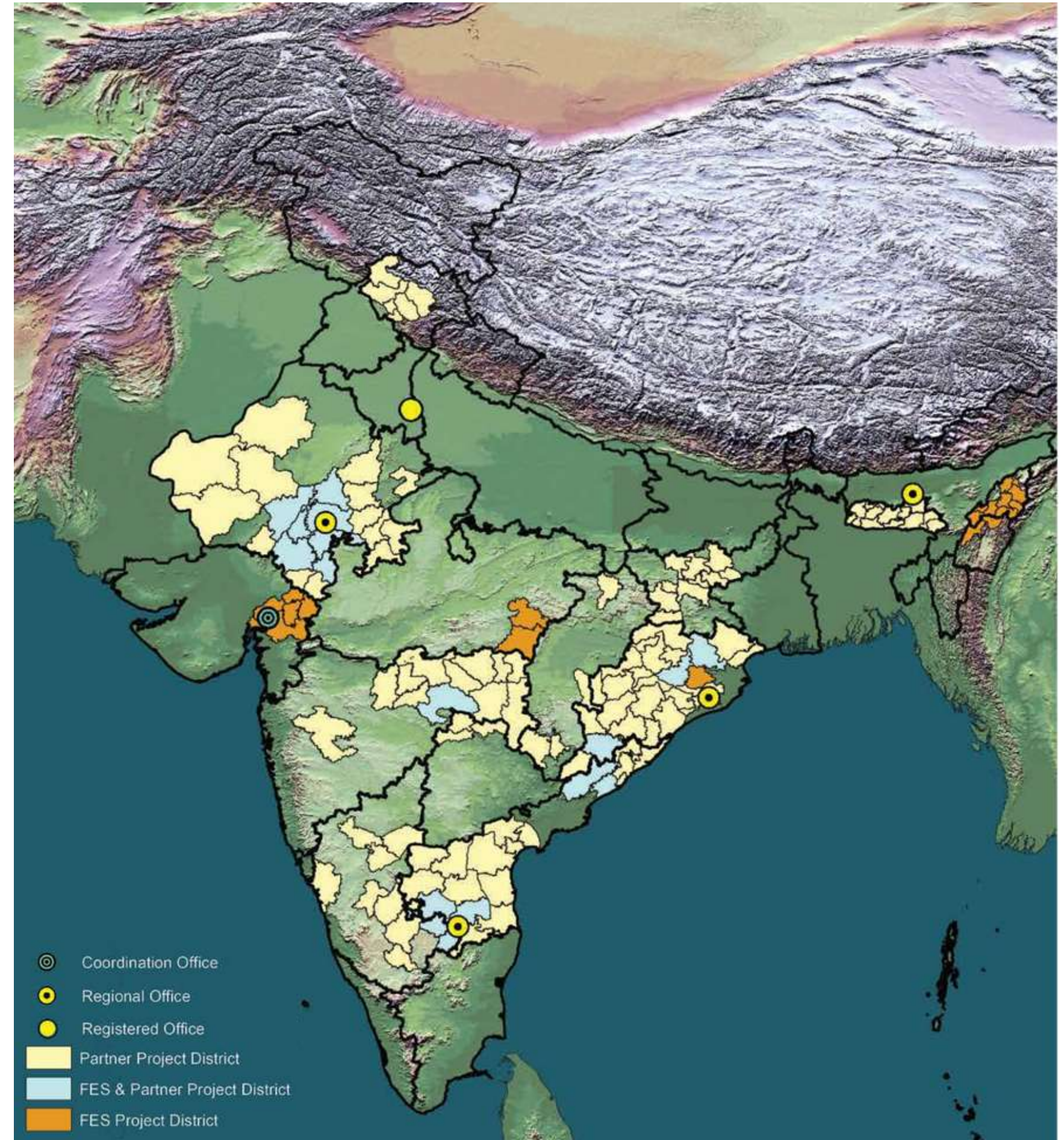


FES

FOUNDATION FOR ECOLOGICAL SECURITY

- Established in 2001
- Currently working in ten eco-regions
- 119 districts of 14 states
- 8,309 villages through direct interventions, and 33,571 villages through partnerships with 92 NGOs and state government departments

Through	Village Institutions Strengthened	Million People Impacted	Million Acres of Commons under Community Governance
FES Teams	8,309	5.38	2.33
Government and NGO Partners	33,571	19.42	10.19
Total	41,880	24.80	12.52

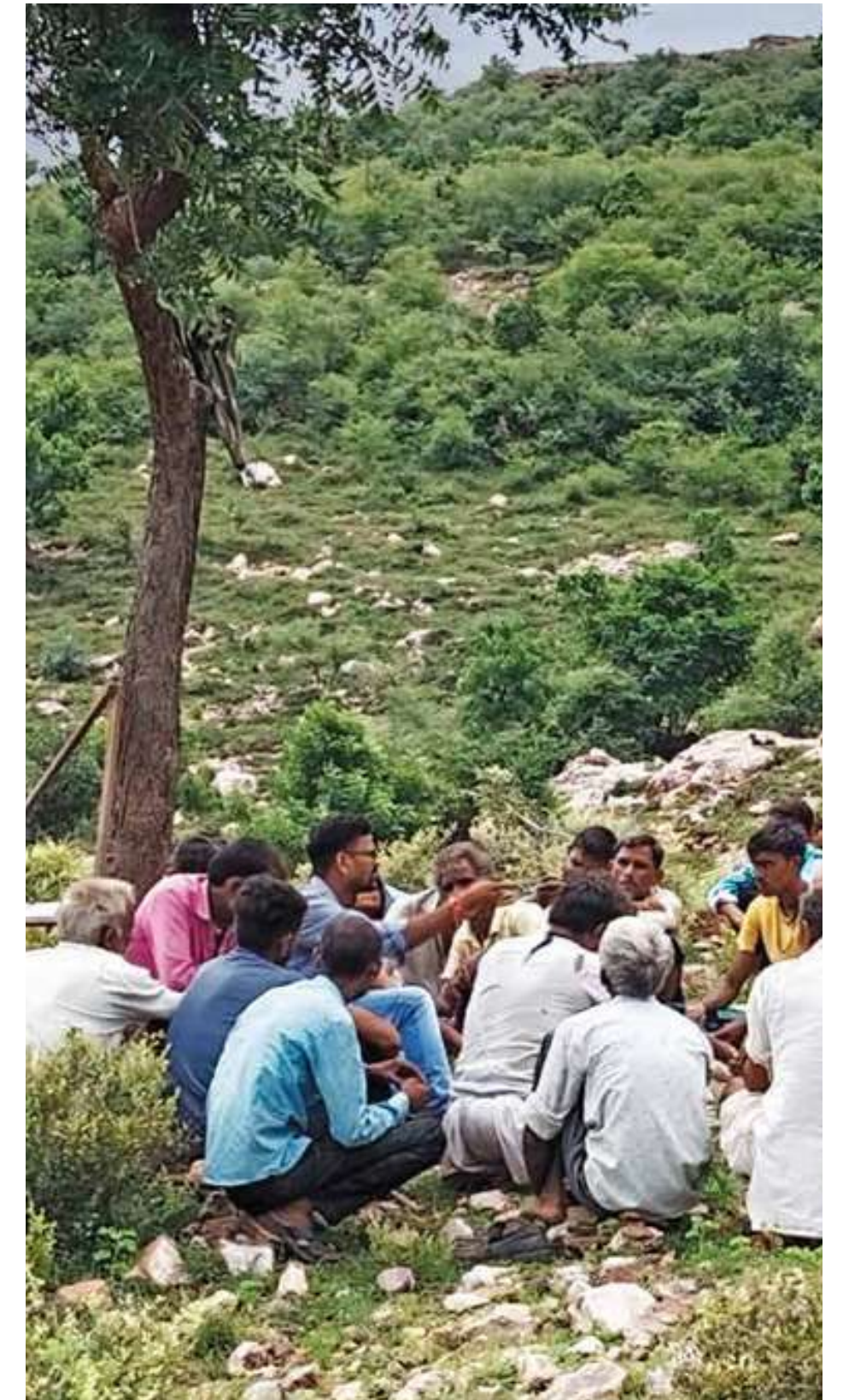


The Core Model



Panchayats as the Custodians

- **11th Schedule** of the Constitution devolves 29 subjects to the Panchayats. This includes soil conservation, water management, fisheries, fuel and fodder, maintenance of community assets, etc.
- Respective panchayati raj legislations regard panchayat as the **custodians of the common resources** under their jurisdiction, responsible for their management.
- Empowered to form **sub-committees** to protect natural resources.



Panchayats as the Custodians

- **Panchayat asset registers** to engage and empower communities by enhancing understanding, facilitating dialogue, supporting resource allocation and planning.
- Others: People's biodiversity registers
- Other tiers, such as **taluk panchayats**, also have support the panchayats such as by consolidating, maintaining, and updating a database.



Governing Commons

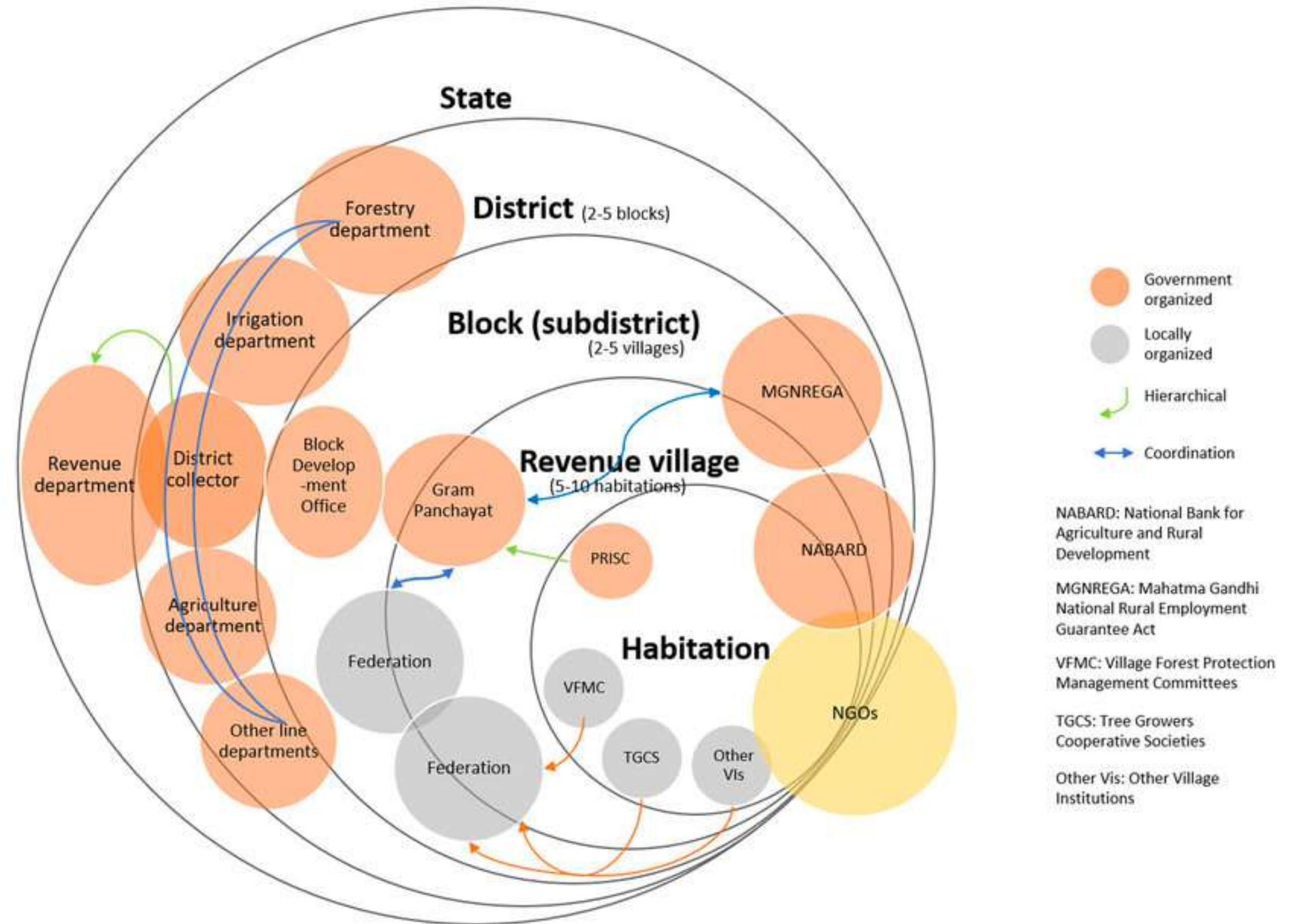
TYPE OF COMMONS	STATE	DISTRICT/ MUNICIPALITY	BLOCK/ VILLAGE
Revenue Common Lands (Grazing lands, Khalihans, Burial grounds, Skinning grounds, Cattle pounds, Threshing grounds)	Revenue Department	District Collector	Tahasildar Block Panchayat Village Panchayat
Water Commons (Ponds, Lakes, Wetlands)	Revenue or Forest Department	Municipalities (Urban areas)	Gram Panchayat (Pani Panchayats, Sinchai Samitis etc.)
Forest Commons (Panchayat Forests, Village Forests)	Principal Chief Conservator of Forests	Chief Conservator of Forests (CCF)	Divisional Forest Officer (DFO) Gram Sabha

Source: CPR-Namati (2018); NSSO (2019)

Polycentric Governance in India

Multiple centers of decision-making with multiple kinds of datasets.

How can Panchayats, *the custodians*, effectively navigate this?



Common Land Registry

- A repository of shared resources with geographical data, political boundaries, and legal cadastre.
- Aims to inform resource management, facilitate decision-making, and safeguard customary rights.
- Past efforts to create inventories for 'land banks' primarily aim to divert them for more "productive" uses, such as urban expansion, infrastructure, etc.



An Established Concept

- **Draft National Land Reforms Policy of 2013** recommended a national portal with a web GIS where each State, District, Block and Village has their own respective portal for storage of land records data.
- **MC Mehta vs Union of India (SC, 2022)** recognised the importance of satellite land mapping, digitization of cadastral maps, and geo-referencing, particularly for water bodies, forests, mining areas etc. that require regular monitoring.
- **Iyarkai Valam Matrum Perumpalla vs Secretary (Madras HC, 2021)** directed that a repository on water bodies in Tamil Nadu be created and geo-referenced.

Welcome to
Land and Development Office

eDharti Geo Portal

An Integrated and detailed GIS Map of Land & Development Office, Delhi for
Citizen and Department Use

Citizen

Dashboard

Department

Property Geotag Inspection Android Mobile
App

[**Download**](#)

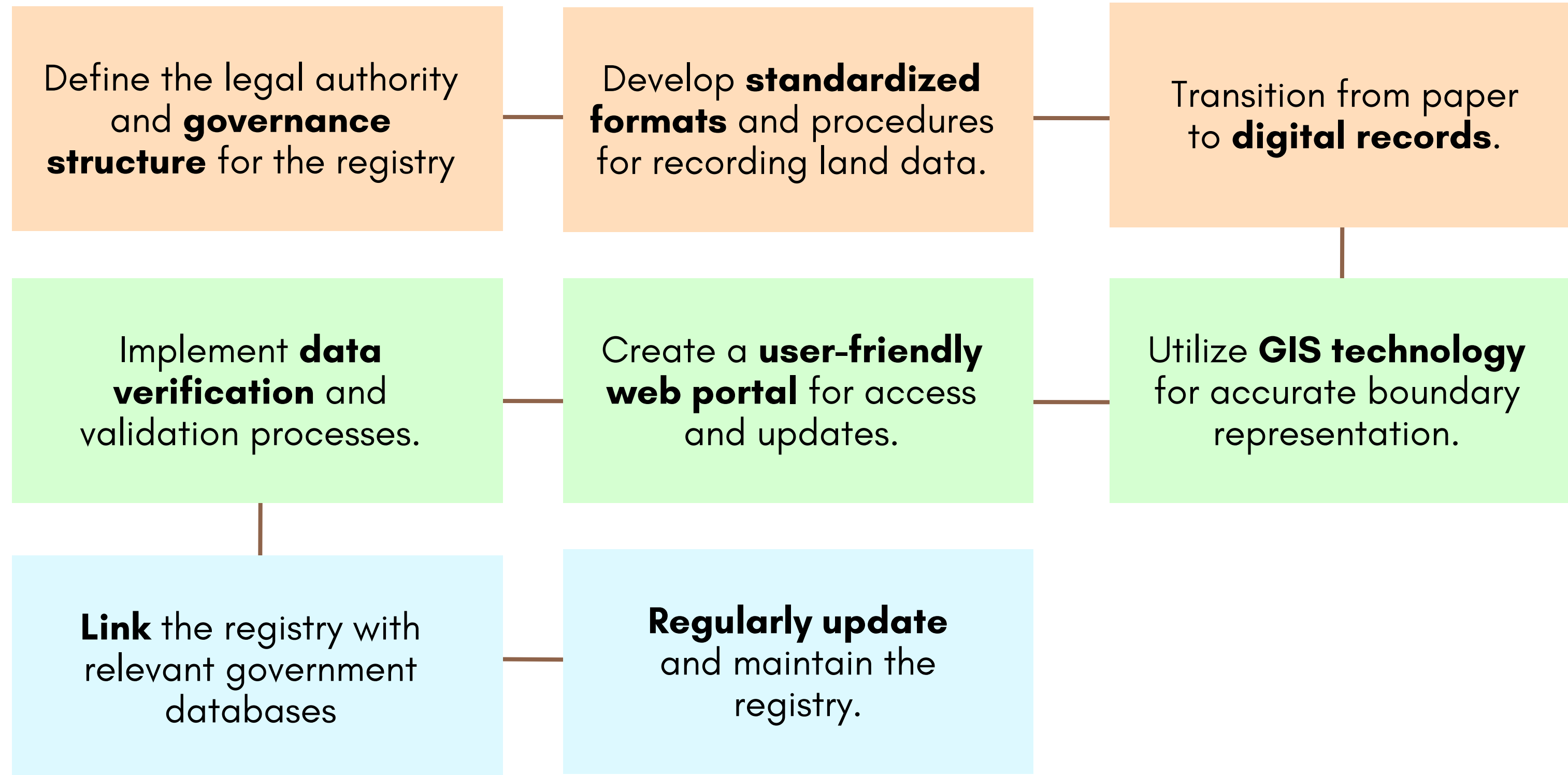
A Collective Effort

to coordinate knowledge, resources, and determination, to unlock the potential for equitable, transparent, and sustainable land management.

Eg. CPCB inventoried of water bodies after NGT directions in *Lt. Col. Sarvadaman Singh Oberoi vs Union of India* (2019) and identified 413,911 water bodies across India for restoration.

S. No.	Activity proposed	Organization Responsible
1	<i>Identification and Geo-Tagging of Ponds or Lakes in the Country</i>	<i>NRSA, State Space Application Centre and Concerned State Departments</i>
2	<i>Assessment of Water Quality of Ponds or lakes.</i>	<i>Through Laboratories approved under E(P) Act, 1986 by the Concerned State Department /ULBs/ State Environment Dept./ SPCB/ PCC.</i>
3	<i>Prioritization of Ponds or Lakes for restoration in consultation with the respective SPCB.</i>	<i>State Environment Dept./ SPCB /PCC.</i>
4	<i>Preparation and submission of action plans for restoration of prioritized Ponds or Lakes to CPCB for random scrutiny of proposed action plans.</i>	<i>State Environment Dept./ SPCB /PCC.</i>
5	<i>Execution of approved action plans.</i>	<i>State Environment Dept./ SPCB /PCC under the overall supervision of Principal Secretary, Environment Department.</i>

Building a *single source of truth*



Thank you.

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