

Centre for **A**chieving **S**ustainable **C**limate **A**ction, **D**evelopment and **E**ngagement (**CASCADE**)

Established in 2023



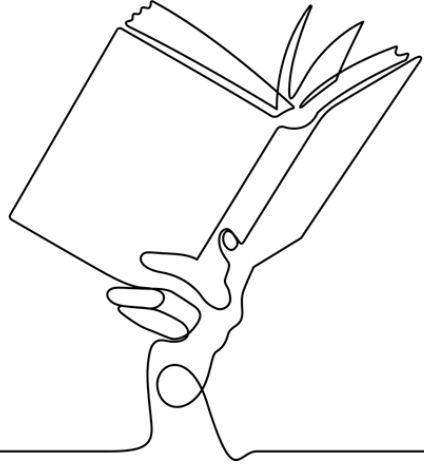
Dr Parvathi JR
Assistant Director-SIRAC
Co-Director, CASCADE
Executive Coordinator – Special Project-Chancellor, SVU



Dr Larry Walker
Professor of Eminence-SVU
Co-Director, CASCADE
President-Somaiya Foundation
Former Professor – Cornell University



Our Guiding Motto



ज्ञानदेवतु कैवल्यम्
(Jnanadevatu Kaivalyam)
Knowledge alone liberates



सर्वे सन्तु निरामयाः
(Sarve Santu Niramaya)
Health for All



न मानुषात् परो धर्मः।
(Na mānuṣāt paro dharmaḥ)
There is no greater dharma than
(service to) humanity

Our Mission



We want to build an institution which is proudly Indian, world-class in teaching and research; global in the reach of its ideas and universal in its service.

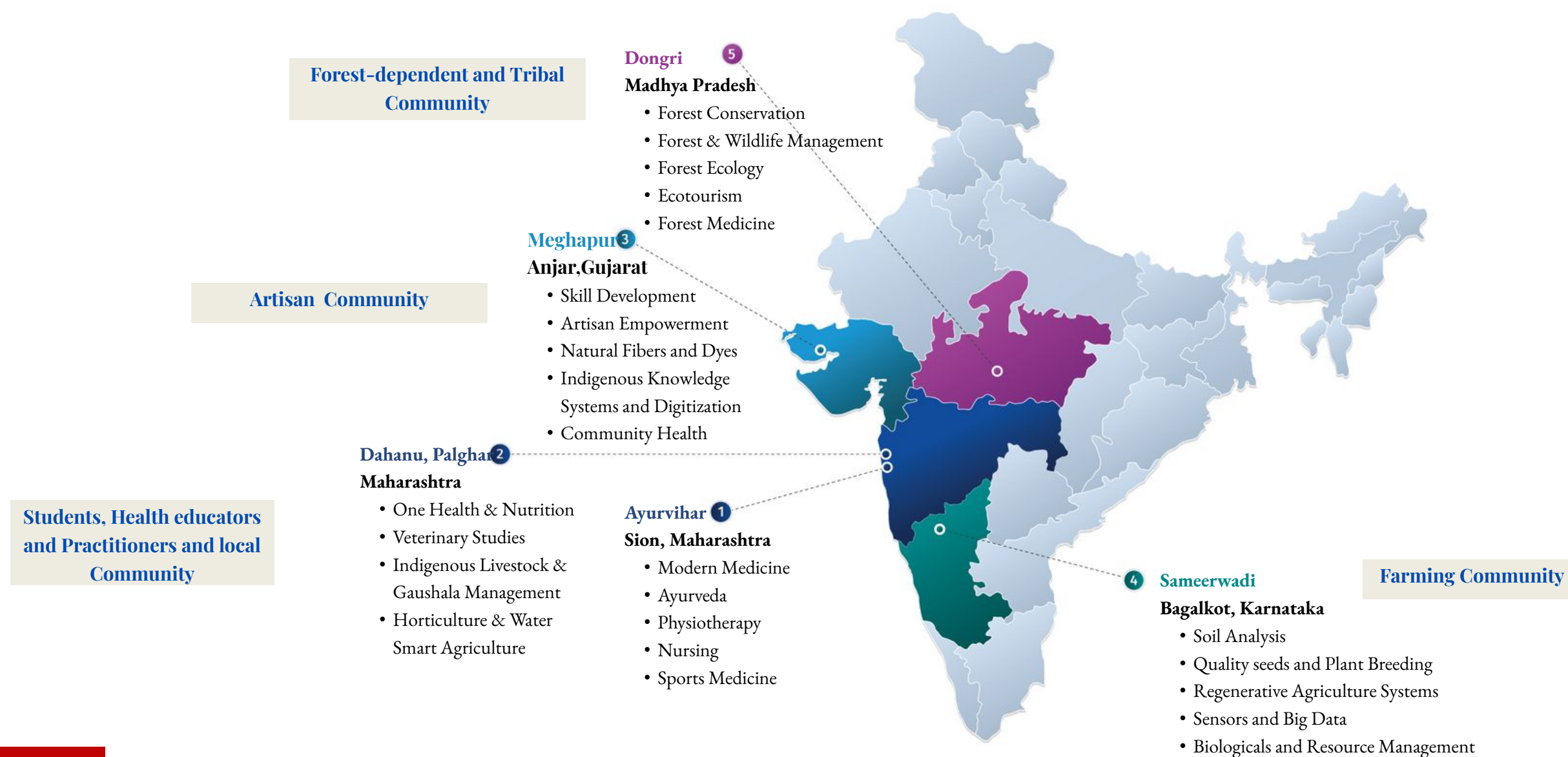
Our Ecosystem

Interconnectedness of People, Places and Purpose



Research & Skill Development Centres

Driving Community-Centric interventions



CASCADE's Approach

We leverage the following 5 “Cs” to successfully address real-world challenges.

Collaborate

Multi-institutional and multi-disciplinary team effort for intervention

Communicate

Knowledge sharing through local language, transparency and sensitivity

Codesign

Create Inclusive, interconnected and human-centric projects

Catalyse

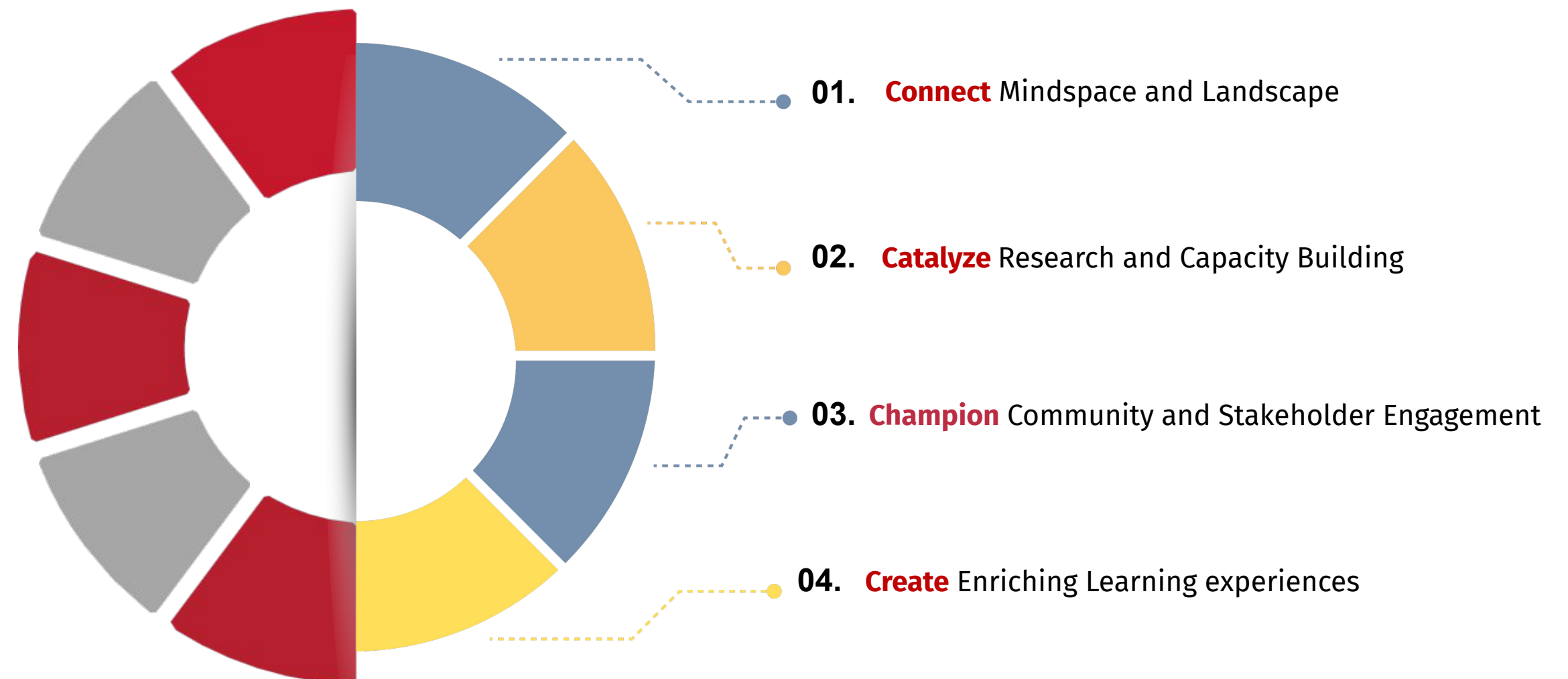
Building leadership and capacity for change

Creative Learning

Innovative experiential and experimental – driven learning to bring impact

CASCADE's Purpose

We nurture talent, knowledge, and collaboration to power community-driven change



Programme Areas



**Regenerative
Agriculture Systems**

**Big Data and AI in
Sustainability**

**Edible
Landscapes**

**REACH
Fellowship**

SEED
Sustainability &
Environmental Educational
Development

**Renewable
Energy and
Biofuels***

**Case Studies
& Policies***

**Sustainable
Designs and
Circularity***

**Somaiya
Sustainability
Dialogue**

**One
Health**

PEOPLE

Farming Communities

Artisan Communities

Student Communities

PLACES

Bagalkot, Karnataka
Palghar, Maharashtra
Bhopal, Madhya Pradesh

Kutch, Gujarat
Bagalkot, Karnataka
Leh Ladakh, Union Territory of Ladakh

Within and Beyond Somaiya ecosystems

PROBLEM

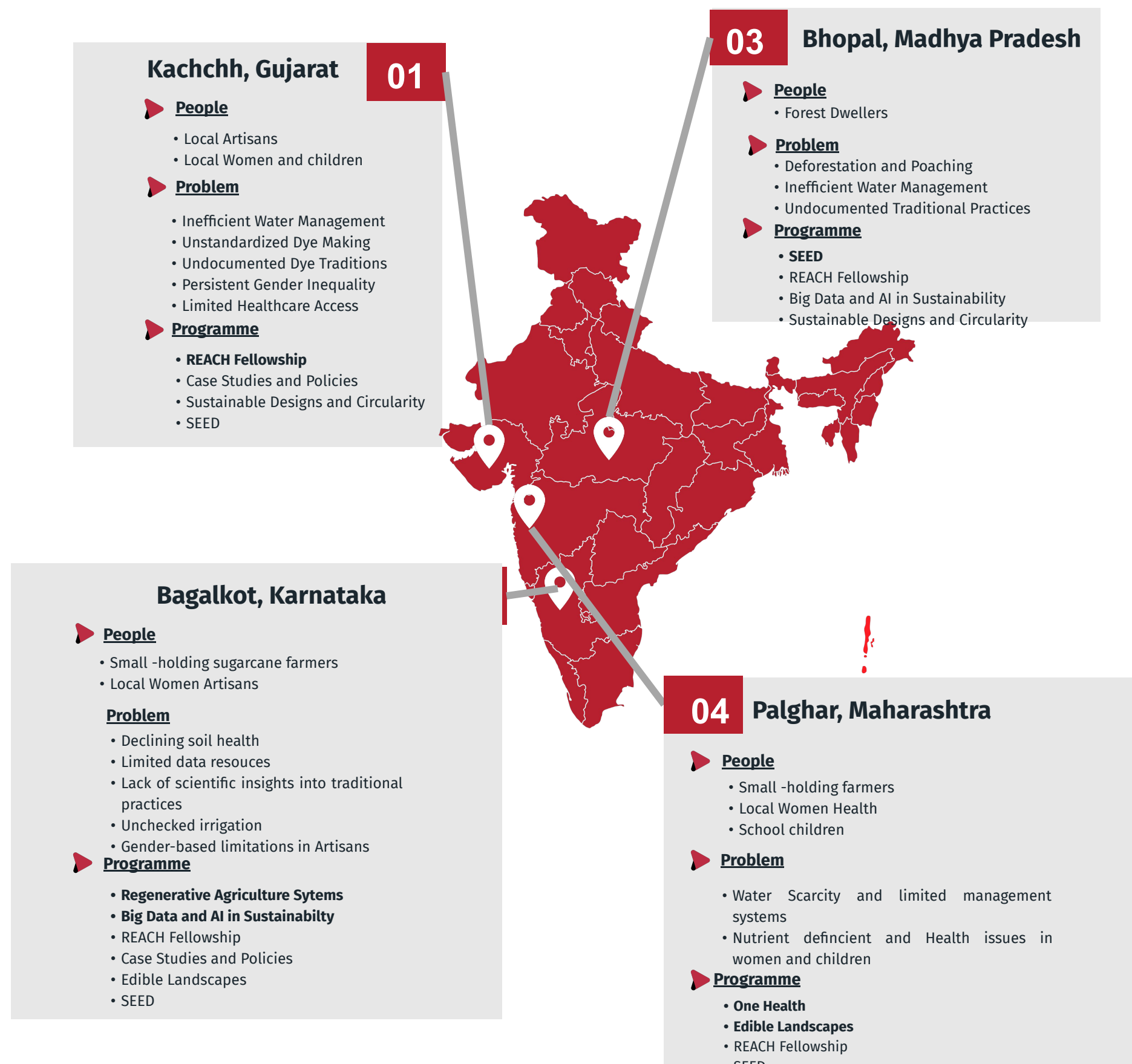
- **Limited studies on soil microbial ecology linking traditional & regenerative practices**
- Water stress issues
- Limited community engagement
- Deforestation and Poaching
- Limited Healthcare Access

- **Undocumented Traditional Wisdom for Natural dyeing and its scientific insights**
- Water stress issues
- Gender Equity Challenges
- Limited Healthcare Access

- **Limited exposure** sustainability-focused field studies
- **Lack of innovative pedagogies** connecting culture, storytelling, and creativity to **simplify complex “wicked problems”**

3P 3I Framework

This **framework—People, Purpose, Process; Intervene, Innovate, Implement—guides every CASCADE initiatives**, ensuring structured, goal-oriented action. It offers a clear roadmap from identifying needs to delivering impactful solutions.



Empowering Farmers & Artisans Sustainably

“Linking Science to Tradition”

Purpose: Bridge modern science with traditional wisdom for improve sustainable livelihoods

Focus Questions:

- How are microbes driving soil health in regenerative farming?
- How are traditional Indigo dyeing vat systems kept ‘alive’ and reusable?
- How does microbial flora in milk differ across indigenous breeds, and what are the One Health and veterinary implications for animal health, nutrition, food safety, and spoilage

Supports: Procurement of High-end molecular biology equipments, sequencing assays, kits and analysis, remuneration for technicians and science illustrators.

Sponsorship for PhD

“Nurturing Catalysts”

Purpose: Mentor and upskill next-gen researchers who drive sustainable innovations.

Focus Areas:

- Soil Health
- Renewable Energy
- One Health in Dairy
- GIS and Water mapping
- Innovative Pedagogies

Supports: Renumeration for 10 PhD fellows (2 per focus areas) for 4 years which includes article publication charges and research dissemination

REACH Fellowship

“Creating Ecovillages”

Purpose: Build catalysts to bring research-driven interventions into villages and cretaing sustainable communities.

Focus Areas:

- Water Storage & Quality
- Rural Education
- Women Health
- Sustainable Livelihood

Supports: Remunerations for 8 fellows and 2 Rural Anchors, community empowerment workshops, vocational training, baseline studies, and capacity-building.

ALIGNING Goals



**Target
2.4**



**Target
3.9**



**Target
4.7**



**Target
13.3**