Transform Rural India

Reading the Landscape

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MADHYA PRADESH



Executive Summary

In 2026, thirteen villages across six districts of Madhya Pradesh participated in the Community-Led Landscape Assessment Tool (LCAT) between February and April. The assessments examined changes in local landscapes and livelihoods across eight life-elements, drawing on community experience and observations. Despite differences in geography and agricultural conditions, the findings revealed a consistent pattern: six life-elements showed signs of decline, while infrastructure and economy, and community and governance, showed improvement.

The assessment covered three distinct landscape belts: the Bhil uplands of Jhabua and Alirajpur, the canal-irrigated Nimar plains of Barwani and Dhar, and the black-soil plateau edge of Dewas and Sehore. Across these areas, communities raised concerns about declining water availability, deteriorating soil health, changes in agricultural practices, loss of vegetation and pressure on traditional natural resources.

Key Findings

Six of the eight life-elements showed signs of decline across most of the twenty-five villages: hydrology, land cover and agriculture, wildlife and biodiversity, cultural and historical features, visual and sensory qualities, and landform and topography in many locations. Physical infrastructure and community governance showed improvement.

Water emerged as the foremost concern. Community accounts indicate substantial declines in groundwater levels: in Sukhedi, from approximately 80–90 feet a generation ago to around 800 feet, and in Richi, from 100–150 feet to about 750 feet. Dedla reported a decline in year-round wells from four to one or two, while Sagonia's river, once perennial, reportedly dries by February. Communities also linked declining livestock numbers and reduced manure availability to greater reliance on chemical fertilisers, deteriorating soil conditions and rising cultivation costs. Organic farming was a priority in all thirteen villages; concerns were also raised in Dewas about solar pumping without water budgeting.

Village plans prioritise desilting water bodies through shramdaan, Gram Sabha rules for resource extraction, composting, seed conservation and planting local saplings. More than 200 self-help groups and their federations offer an existing institutional base, but their role in managing water, soil and forests remains limited. The findings underscore the need for integrated village planning that connects water conservation, sustainable agriculture, forest protection and livelihoods, alongside better maintenance of existing infrastructure.

Note: Rainfall, groundwater and pond figures are community-reported approximations, not instrument-based measurements.

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Acknowledgements

This report is, first and foremost, a record of what the assessed villages chose to say about their own landscape. It exists because the women, men, youth and elders of these villages gave their time, their memory and their trust to each assessment. They sat through the discussion circles, walked the transects, debated the direction of every trend and set down their commitments before the Gram Sabha. The knowledge, observations and priorities in these pages are theirs; our task has been to carry them faithfully onto the page, and we are deeply grateful to every community that took part.

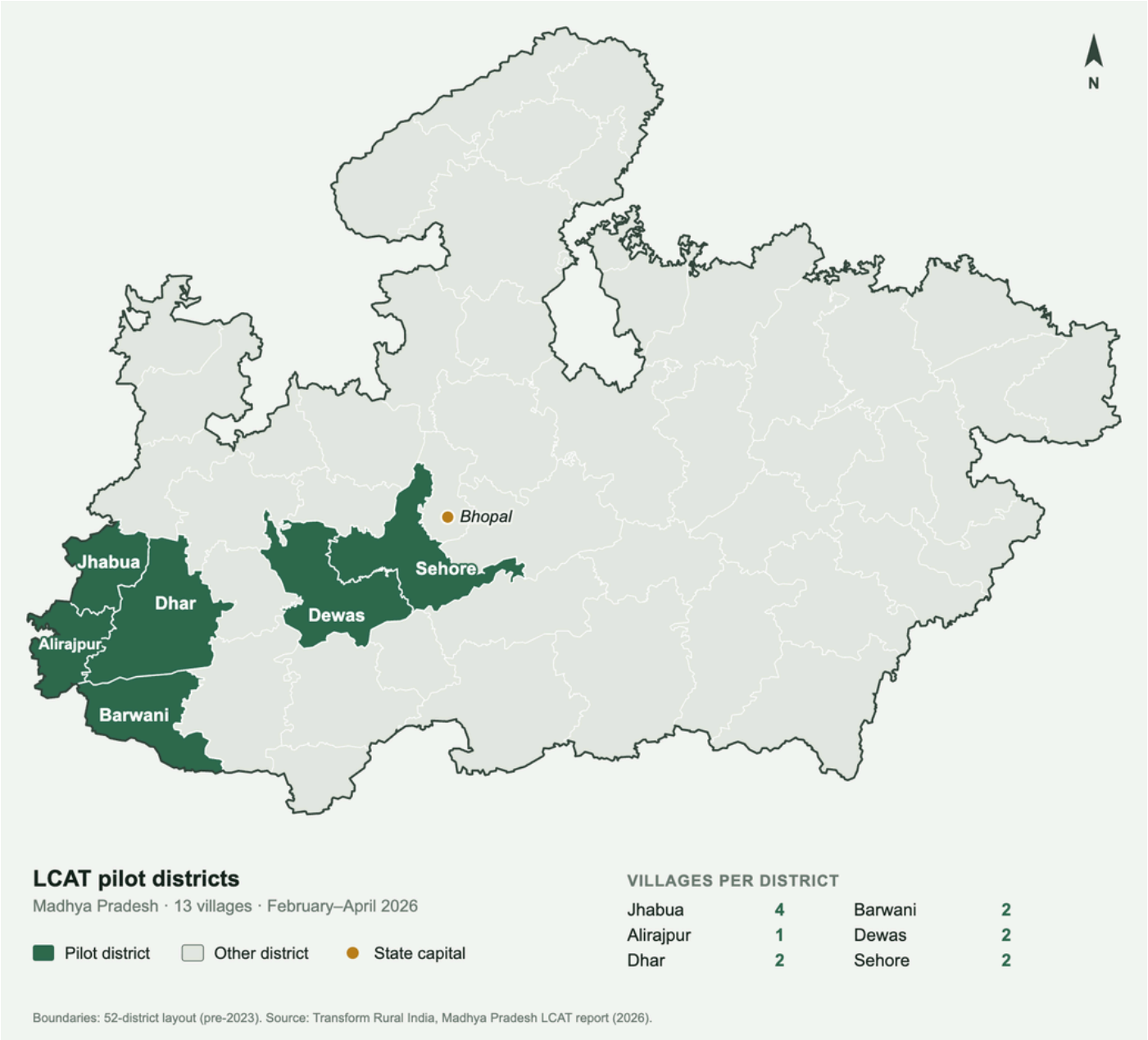
We thank the ground staff and field teams of Transform Rural India who facilitated each two-day assessment. They built the trust on which the exercise depended, guided the groups across the landscape, and translated between local dialects so that every voice could be recorded in its own words. We are also grateful to the Billion Next team for their partnership and support in bringing the assessement to completion.

This report is offered in gratitude to everyone, named and unnamed, who contributed to it, in the hope that it returns something useful to the villages whose testimony fills its pages, in keeping with the spirit of Transform Rural India Foundation's work with rural communities.

Finally, we thank the Rainmatter Foundation for its generous financial support and for the flexible, learning-oriented approach it brought to this work, which has enriched the assessment and this report considerably.

> *"This is the first time we have looked at our village, and all that has changed in it, together — as one community."*
>
> A SELF-HELP-GROUP MEMBER · LCAT FIELD CONVERSATIONS

Assessment Sites



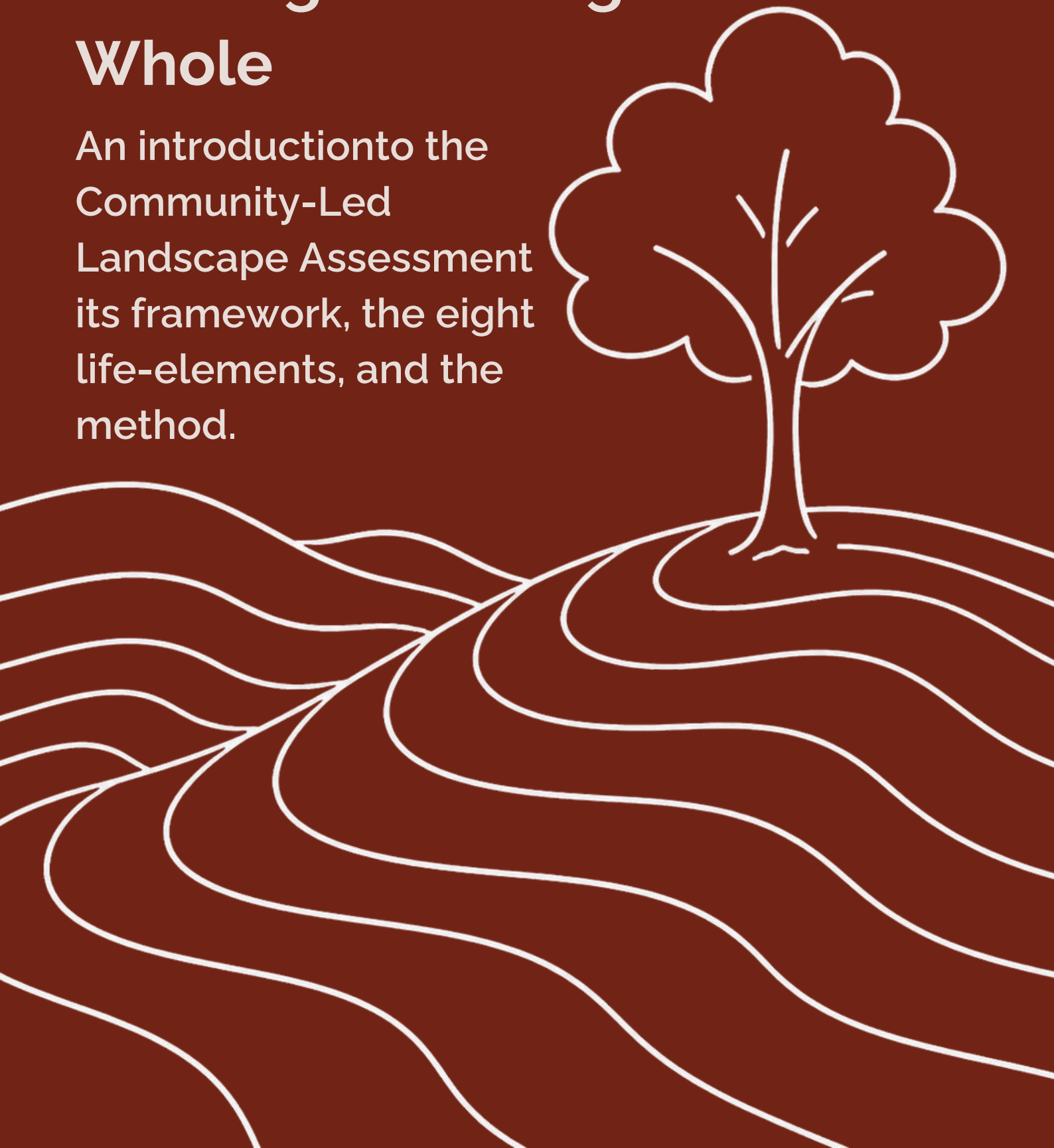
Assessed villages of the Community-led Character Assessment Tool in Madhya Pradesh. The map shows the 13 villages analysed in this report; hollow markers show locations approximated to the block or district headquarters.

Transform Rural India

03

Reading the Village Whole

An introductionto the Community-Led Landscape Assessment its framework, the eight life-elements, and the method.



3.1 Reading the Village Whole

An elderly farmer, asked what had changed in his village over the years, did not begin with temperature of watching your home landscape change around you while you still stand within it — a homesickness felt without ever leaving home. Nostalgia mourns a place you have left behind; solastalgia mourns a place that has left you.

For a long time, climate work in rural India has treated such testimony as soft data — the poetry quoted before the "real" numbers begin. This document takes the opposite view. Carefully documented, solastalgia is among the most rigorous datasets a warming country can build, precisely because it records what satellites cannot: the disappearance of a fragrance, the absence of a once-dependable cool wind, the silence where a bird's call used to be.

> *"Ten years ago, when the rain fell, the soil would give off that earthy fragrance after the first shower. Now even that is gone."*
>
> AN ELDERLY FARMER · LCAT FIELD CONVERSATIONS

To understand why a lost fragrance matters, we take the bond between people and place seriously. The human geographer **Yi-Fu Tuan** called this attachment *topophilia* — and in rural India, it is not sentiment but infrastructure. A farmer's sowing calendar, a pastoralist's grazing route, a household's instinct for when to plant — all are tuned to the rhythms of one particular landscape. Climate change, at its most intimate, is the breaking of that fluency. Three thinkers converge on one lesson.

TUAN · 1974

Topophilia

Why place holds people. The affective tie between human beings and their physical environment.

ALBRECHT · 2005

Solastalgia

What it feels like when place lets go. The grief of a home that changes while you still stand in it.

LEWIN · 1936–51

Field theory · B = f (P, E)

Why no planworks withou the place. Behaviour is a function of the person *and* their environment together.

Figure 1 — Three thinkers, one lesson: the people–place bond is where climate planning must begin.

3.1.1 The changing climate in brief

Where the southwest monsoon weakens, the decline concentrates in June and July — the precise weeks when kharif crops must be sown — even as many places see more days of heavy, compressed downpour. The water is arriving in the wrong shape: too little when the seed needs it, too much all at once when it does not.

≈ 3/4	>80%	>40%	>50%
Indian districts prone to severe floods, droughts & cyclones	of Indians live in districts highly vulnerable to climate extremes	of districts now swap between flood and drought	of India's net sown area is rainfed—the monsoon is destiny

Source: CEEW (2020, 2021, 2023). .

THREE GAPS BETWEEN CLIMATE PLANNING & THE VILLAGE

Between the science of climate change and the lived reality of a village stand three stubborn gaps — which is why the connection has never made itself.

01 · The Normative Gap

No rule asks a village plan to look at climate. The VPRP and GPDP formats contain no requirement for a structured reading of the landscape or its vulnerability.

02 · Distant Science

Robust analysis needs decades of local data that is largely absent below the district. Risk maps stop at the boundary; the process marginalises the very people affected.

03 · Thin Services

Extension advice, warnings, credit and insurance thin toward the last mile — and the infrastructure meant to absorb shocks fails in the same weather.

Figure 2 — The three gaps that leave village planning climate-blind.

> On one side, **people are severed from the places that hold their knowledge** — the farmer who can no longer read his sky. On the other, **planning has disconnected from that lived reality**, organising itself around schemes rather than the living landscape they are meant to serve. The two feed each other — and healing them is the central problem this framework exists to address.

3.2 The Eight Life-Elements

The exercise often begins not with a form but with a circle. The facilitator draws a large circle and says: *this is your village — the whole.* Around it she writes eight words — the village's eight life-elements, the parts that make up the whole — and offers an image that does more work than any definition: the eight elements are like the parts of a body. Each one matters for the health of the whole, and none can be hurt without the others feeling it.



1 **Landform & Topography**
hills, slopes, soils

2 **Hydrology**
rivers, springs, wells, table

3 **Land Cover & Agriculture**
fields, crops, pastures, yield

4 **Wildlife & Biodiversity**
forests, birds, bees, wild kin

5 **Infrastructure & Economy**
roads, markets, power, work

6 **Cultural & Historical**
groves, festivals, shrines

7 **Visual & Sensory**
seen, heard, smelled, felt

8 **Community & Governance**
institutions, panchayat, rules

Figure 3 — The eight life-elements: the village read as one living body. Read together, they describe a single working system — to read any one in isolation is to misread it.

This insistence on the whole is forced by the nature of climate stress itself. An erratic monsoon, intensifying heat and a multi-hazard exposure that swings a district between flood and drought do not respect the tidy boundaries between water, soil, forest, crop and culture. Climate change travels along the connections — so reading the village as one system is simply reading it the way the climate already acts on it.

Consider the sacred grove whose canopy quietly cools the three fields beside it. On a conventional inventory it appears, if at all, as a heritage line item. But trace the cascade — a single quiet failure propagates across five of the eight life-elements at once.

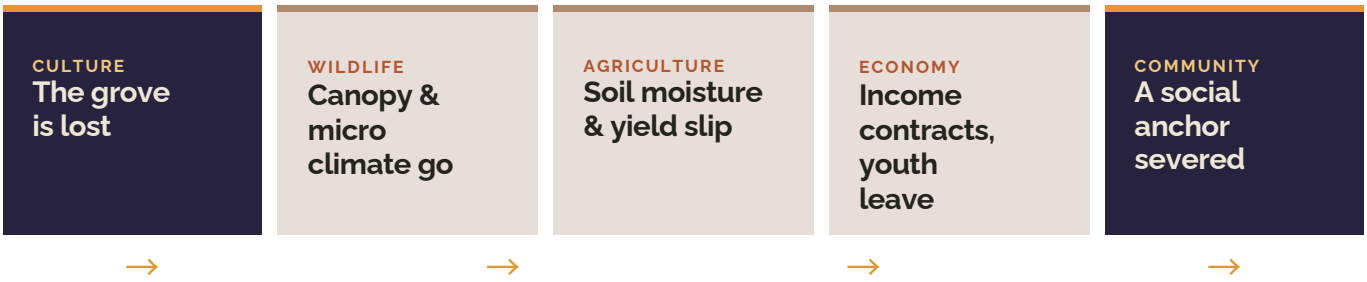


Figure 4 — The grove cascade: how one loss travels across the life-elements. The chain runs the other way too — and faster under climate stress.

Principles of the Community-Led Assessment

Community Knowledge

It begins with memory, not a form — the lived knowledge of people who walk the land daily. *What has changed in the last five, ten, twenty years?*

Documenting Landscape Change

Testimony is treated as evidence. Each element gets a trendline — past, present, future. *We are not writing a summary; we are building evidence.*

Community Participation in Planning

An assessment led by the village, not done to it. A plan handed down is ignored; a reading produced together is owned and defended.

3.3 How the assessment was carried out



Figure 5 — Overview of the LCAT assessment process

In Madhya Pradesh, community members assessed changes in their landscape through discussions, group activities and field observations. They examined the eight Jeevan Tatvas, drawing on their experiences and knowledge of local environmental conditions.

The assessment helped communities identify changes over time, discuss their causes and impacts, and agree on priorities for action. The findings were compiled into village profiles and tiered action plans to support local planning and decision-making.

Something remarkable happens when a village looks at itself through deliberately different eyes. The LCAT's crucial move is to treat the friction between these vantage points as evidence in its own right — not a disagreement to be smoothed away.

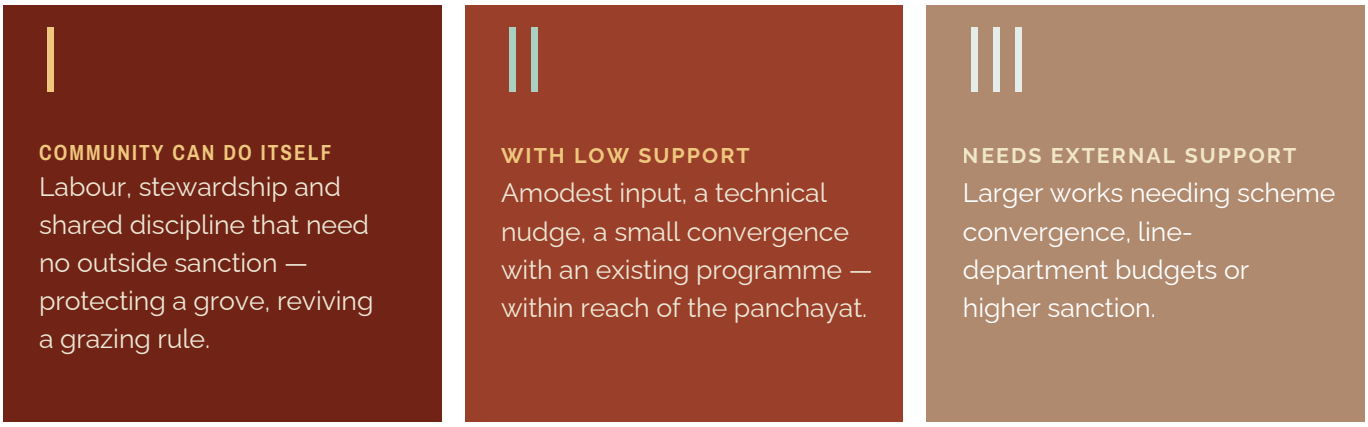


Figure 7 — Three tiers of action: agency first, precise demands after.

[1] Readers interested in learning more about the LCAT process, facilitation approach or assessment methodology may contact the LCAT team at Transform Rural India.

3.4 What each village takes away, and where it goes

How a village's reading of itself becomes the way it is administered.

The LCAT does not run parallel to government planning; it brings a climate lens into it. By the end of the two days the village holds three concrete things — and each feeds directly into the existing planning cycle, reversing the direction of fit so the schemes bend around the village's reading, rather than the village around the schemes.

Landscape Character Profile
the village's own reading, in its own words

Element-wise Scorecard
what is declining, holding or improving

Tiered Action Plan
what the village will do,and what it will demand

→

THE GPDP–VPRP CYCLE

The profile becomes the **situation analysis**; the tiered list feeds the **community & departmental action plans**; the climate & biodiversity priorities enter the **Gram Sabha's vision**.

Convergent, climate-resilient works negotiated with line departments — MGNREGA, watershed, forestry, agriculture.

Figure 8 — From assessment to administration: LCAT outputs entering the GPDP–VPRP cycle.

> *"This is the first time we have looked at our village, and all that has changed in it, together — as one community."*
>
> A SELF-HELP-GROUP MEMBER · LCAT FIELD CONVERSATIONS

What the tool ultimately does is heal the double disconnection: by treating memory and grief as legitimate data, it reconnects people to the places that hold their knowledge; by reading the village as one living system and carrying that into the administrative machinery, it reconnects planning to lived reality. The grief becomes a map; the map becomes a plan.

Transform Rural India

Madhya Pradesh

What Villages Read in Their Own Landscape



Findings from thirteen villages in the Jhabua Hills, the Nimar Plains, the Malwa Plateau and the Vindhya Plateau.

4.1 The Agro-Ecological Tapestry

Stand anywhere in Madhya Pradesh and you are standing at the centre of India — geographically, and in a deeper sense too. This is the country's second-largest state by area, and one of its most land-dependent: agriculture and allied work sustain roughly two-thirds of its people (EPCO, n.d.). But to call Madhya Pradesh “an agricultural state” is to miss what makes it remarkable. It is not one landscape; it is a tapestry of many, stitched together across plateaus, river valleys, forest belts and hill tracts.

The state's own planners recognise eleven distinct agro-climatic zones — from the black-soil expanses of the Malwa Plateau and the Vindhyan uplands, through the long green corridor of the Narmada Valley, to the semi-arid Bundelkhand tract in the north, the Nimar plains in the south-west, and the Bhil-dominated hills of Jhabua on the western edge. Each zone grew its own grammar of survival: which crop to sow, which month to trust, which tank to deepen before the rains. A farmer in the wheat-and-soybean country of Malwa and a Bhil household coaxing maize from the stony slopes of Jhabua live in the same state, but they inhabit different climates, different soils, and different inheritances of risk.

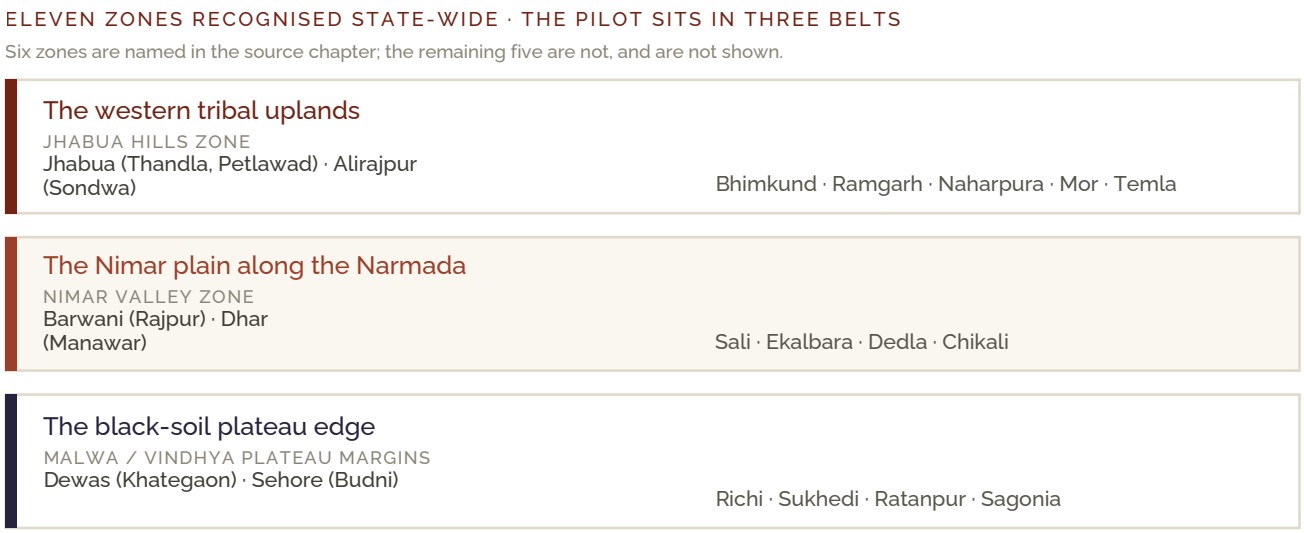


Figure 7 · The three landscape belts the pilot covers. The state recognises eleven agro-climatic zones; six are named in the source chapter and the remaining five are not shown. Zone names are indicative and should be verified against official zonation.

For generations this diversity was the state's quiet strength. The climate itself was legible: a sub-tropical rhythm of three sharp seasons, summer maxima approaching 48°C, and an annual average rainfall of about 1,160 mm delivered almost entirely by the south-west monsoon between June and September (EPCO, n.d.). People planned their lives around that rhythm because the rhythm held.



Figure, Agro-climatic zones of Madhya Pradesh, with temperature range, rainfall, irrigated share, soils and horticulture potential for each zone. The assessed villages lie in Bastar, Dantewada and Kondagaon (Bastar Plateau) and in Kanker and Rajnandgaon (Chhattisgarh Plains). Map from the TRI compilation of state agro-climatic data, drawn on the earlier district configuration (TRI, 2026c).

4.2 Climate variability and the outlook

The state's own trend analysis records a rising count of hot days and more frequent heat waves in recent decades, alongside droughts that have been both severe and widespread. Projections deepen the concern: under a high-emissions pathway, end-century warming across parts of the state has been projected at up to roughly 4.6°C, with both severe droughts and intense rainfall events expected to become more frequent.

An independent reading points the same way, and it comes from one of the most significant new instruments in Indian climate intelligence. In April 2026 CEEW launched CRAVIS — the Climate Resilience Analytics and Visualisation Intelligence System — an AI-powered platform combining more than forty years of historical climate data from institutions including the India Meteorological Department and IITM Pune with district-level projections to 2070, across 279 indicators and multiple emissions scenarios (CEEW, 2026). Its reading of Madhya Pradesh under the high-emissions RCP 8.5 pathway is sobering in a quiet way. The state's average annual temperature, 25.6°C across the 1981–2010 baseline, has already edged up to 25.7°C in the observed 2011–2024 window, and is projected to climb to 27.4°C in the near future (2031–2050) and 28.3°C in the far future (2051–2070). More telling than the destination is the acceleration: the pace of warming rises from roughly a quarter of a degree per decade historically to a projected 0.59°C per decade by mid-century. This is consistent with the platform's national picture, in which India could see an additional 15 to 40 unusually hot days each year within the next two decades against the same baseline, and many districts could see 10 to 30 additional heavy rainfall days annually (CEEW, 2026).

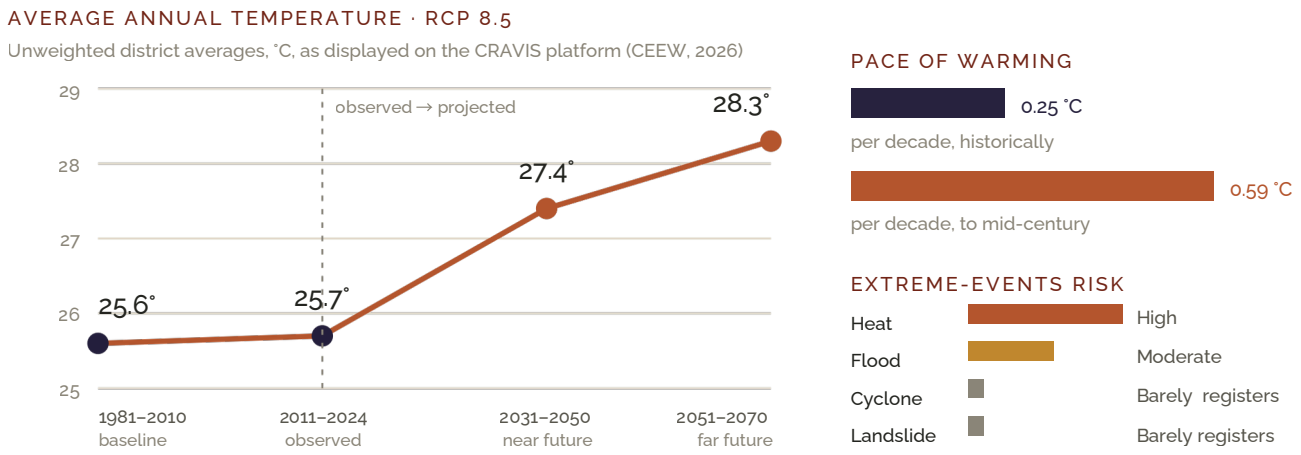


Figure 8 · Temperature trajectory, pace of warming and extreme-events risk profile under RCP 8.5. Values are unweighted district averages as displayed on the CRAVIS platform (CEEW, 2026).

The platform's extreme-events risk profile names the state's defining hazard plainly: heat, rated high, with flood at moderate — while the disasters that dominate national headlines, cyclones and landslides, barely register here. Madhya Pradesh's crisis is not the dramatic kind that arrives in a single night; it is the cumulative kind that arrives every afternoon.

And crucially, the change does not fall evenly across the tapestry. The central plateaus and the Nimar and Bundelkhand tracts carry systemic heat exposure, while the Vindhya and Satpura forest belts face a slower reordering of forest ecology under heat and erratic rain. Water now arrives in the wrong shape: the state's health-sector planning notes that some 32 districts have experienced flooding over the past three decades even as others endure severe drought (Government of Madhya Pradesh, 2024). Nowhere is the whiplash sharper than in northern Bundelkhand — Datia, Tikamgarh, Chhatarpur, Panna, Damoh, Sagar — a semi-arid belt where monsoon rainfall is reported to have roughly halved over two decades, producing droughts lasting four to five years (IndiaSpend, 2023), only for an extraordinary 2025 monsoon to flood the same fields and ruin the kharif sowing (Down To Earth, 2025).

> THE GOVERNING FACT OF THIS CHAPTER
>
> Drought and deluge are no longer opposites here; they are two faces of the same instability. A state stitched from eleven climates is now being unpicked in eleven different ways — and that is precisely why any single, uniform response is doomed to miss most of it.

4.3 Assessing Hidden Vulnerabilities

If the climate is changing in eleven different ways, one would expect the state's planning machinery to be reading the land in eleven different ways too. It is not. What we find instead — in village after village where our teams have sat with communities — is a lens that has gone missing at exactly the level where the change is felt first: the village itself. Two ruptures, working quietly together, explain why so much well-intentioned effort misses its mark. We have come to call them the double disconnection.

The first is the disconnection of people from place. Elders across our field geographies describe a landscape that has slipped out of alignment with memory — the fragrance of the first rain on soil that no longer rises, the night rooftop that no longer cools, the sky that can no longer be read for the sowing date. There is a word for this grief of watching your home change while you still stand in it: solastalgia (Albrecht, 2005). It is more than sorrow. When the sky becomes unreadable and the weather app is unreliable, a farmer is stranded between two failing instruments, and a community's inherited ability to read its own landscape begins to erode.

The second is the disconnection of planning from place. Every village in Madhya Pradesh prepares an annual development plan through its panchayat, and women's collectives prepare their own poverty-reduction plans alongside it. Yet these plans are typically assembled without any structured reading of the village's landform, water, biodiversity or climate exposure. The village enters the plan as a list of habitations, works and beneficiaries — not as a living landscape whose systems are already under stress. Water works get scheduled scheme by scheme rather than against any picture of the village's actual water balance; livelihood plans rarely ask whether the crop or trade being promoted can survive the climate that is coming.

TWO RUPTURES, ONE MISSING LENS



The people who know the landscape best are grieving it without a forum, while the forums that decide the village's future are planning without the landscape.

Figure 9 · The double disconnection: people estranged from a changing place, and plans prepared without the place.

Put the two disconnections together and the result is quietly devastating: the people who know the landscape best are grieving it without a forum, while the forums that decide the village's future are planning without the landscape.

4.4 Integrating People, Institutions, Ecology and Culture

The repair, we argue, is not another scheme but a re-integration — of four strands that in a healthy village were never separate to begin with. People hold the longest, finest-grained climate record available anywhere: they know when the well began to fall, which field floods first, which bird went silent twenty years before anyone thought to count. Institutions — the gram panchayat, the self-help groups and their federations, the village organisation — hold the legitimacy and the planning mandate to act. Ecology is the stage on which everything else stands: the landform, the water, the forest, the soil, the wildlife. And culture is the connective tissue — the sacred grove that quietly cools three neighbouring fields, the seasonal festival keyed to a harvest that no longer arrives on time, the stories through which a place remembers who it is. A sacred grove finds no column in a scheme; a grandmother's story fits in no form; yet these are load-bearing structures of resilience.

FOUR STRANDS, NEVER SEPARATE IN A HEALTHY VILLAGE

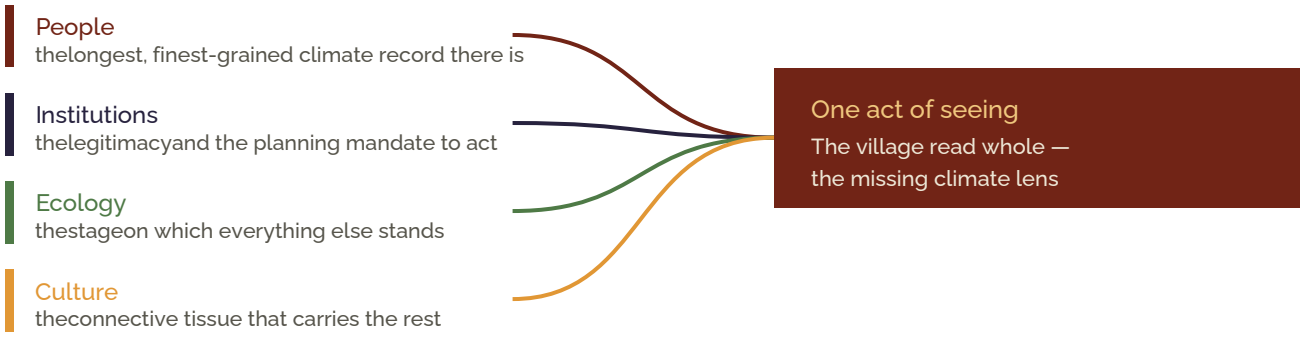


Figure 10 · Re-integration: four strands drawn back into a single act of seeing.

Most climate interventions pick one strand and pull. A watershed programme touches ecology but not institutions; a training programme touches institutions but not culture; a survey touches people but extracts rather than integrates. What Madhya Pradesh needs — what any landscape this diverse needs — is a way of seeing that braids all four back together, village by village. That is the missing climate lens.



4.5 Systemic Hurdles

A normative gap in how adaptation is imagined. National climate policy has historically foregrounded emissions mitigation, while a state like Madhya Pradesh bears the immediate burden of keeping people alive and productive through the next heat season and the next failed monsoon. Where adaptation planning does exist, reviews of India's State Action Plans on Climate Change have found it short on granular vulnerability assessment and poorly converged across the line departments that must act on it (Rattani et al., 2018). Heat in particular is still largely treated as an episodic disaster to be ridden out rather than a structural, year-round condition to be designed against, and many Heat Action Plans remain guiding documents on paper, weakly funded and weakly enforced (Down To Earth, 2026; Mongabay India, 2026).

The difficulty of applying rigid scientific practice to dynamic local contexts. Climate work has become deeply scientific — models, indices, satellite layers, carbon accounts — and these are powerful, necessary tools. But a model calibrated at the district scale cannot see that one village's spring dries in February while its neighbour's holds until May; a standardised crop advisory cannot know that a particular slope has been quietly saline for a decade. When science arrives without the people, it can measure the land with great precision and still read it wrong. The problem is not science; it is science that has forgotten to ask.

Thin infrastructural cushion where exposure is greatest. In Bundelkhand's drought villages, women and girls walk many kilometres in punishing heat to fetch a fraction of the water a household needs (IndiaSpend, 2023). Outdoor workers — farm labourers, construction workers, brick-kiln hands — absorb heat that others escape, yet fall outside core occupational-safety protection (The Leaflet, 2025). And a national assessment places a substantial share of Madhya Pradesh's districts in the high category for climate-induced risk to healthcare systems (CEEW, 2025). Each hurdle compounds the others: coarse plans miss local variation, rigid science cannot capture it, thin infrastructure cannot buffer it — and the result is adaptation that is always slightly out of focus and slightly too late.

4.6 · Triangulating Vulnerability

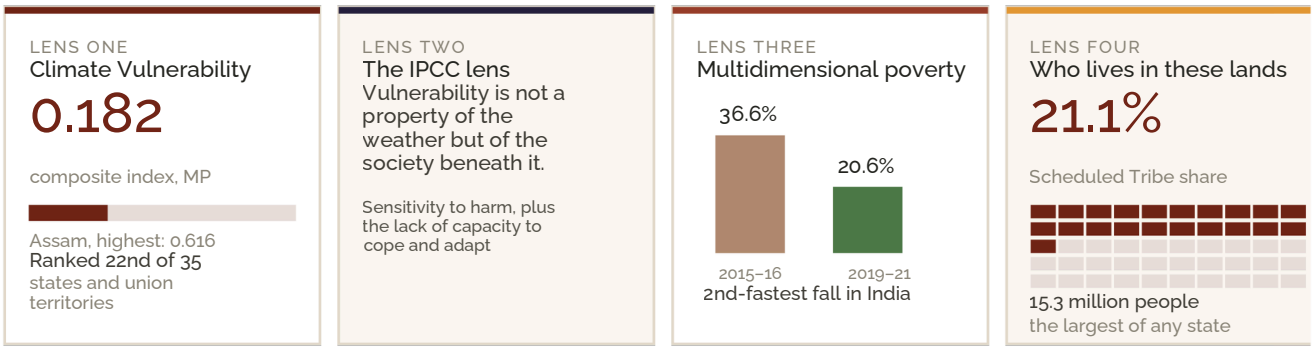
Start with the Climate Vulnerability Index. CEEW's district-level assessment of exposure to extreme hydro-meteorological events places Madhya Pradesh 22nd among 35 states and union territories, with a state score of 0.182 against Assam's 0.616 at the top. Read alone, that mid-table rank could lull a planner into complacency. It should not: the index measures vulnerability to acute disaster events, while much of Madhya Pradesh's burden arrives as chronic stress — heat, groundwater decline, monsoon instability — which a disaster-centred index is not designed to capture; and the state average conceals a wide district-level spread in which drought is the dominant hazard flag for many. An average is where local truth goes to hide.

Now bring in the IPCC lens, which defines vulnerability not as a property of the weather but of the society beneath it: the propensity to be adversely affected, arising from sensitivity to harm and the lack of capacity to cope and adapt (IPCC, 2014). Hazard tells you where the flood will strike; vulnerability tells you who will still be recovering from it five years later. Who lacks that cushion? The Multidimensional Poverty Index answers with unusual clarity. The share of Madhya Pradesh's people counted as multidimensionally poor fell from roughly 36.6 per cent in 2015–16 to about 20.6 per cent in 2019–21 — the second-fastest improvement in the country (NITI Aayog, 2023). That is genuine, hard-won progress. But it also means roughly one in five residents still lives with overlapping deprivations in health, education and living standards — precisely the deprivations that convert a bad monsoon into a lost decade. And among the districts recording the largest improvements were Alirajpur and Barwani — another way of saying these were among the places with the furthest to climb.

The fourth lens is who actually lives in these landscapes. Madhya Pradesh is home to the largest Scheduled Tribe population of any Indian state — about 15.3 million people, or 21.1 per cent of the state's population (Census of India, 2011) — with Bhil communities concentrated in the western hill districts of Jhabua, Alirajpur, Dhar and Barwani, and the Gond across the Vindhya–Satpura forest tracts. These are communities whose livelihoods, food systems and cultural life are woven most tightly into forest, rainfall and commons, and who therefore feel every fraying of those systems first and hardest. Gender runs through all of it as a second axis: as male out-migration deepens the feminisation of agriculture, women increasingly run the farms and carry the unpaid burden of water and fuel, while holding only a small fraction of agricultural land titles (Satapathy, 2025; Oxfam India, 2018).

Lay the four lenses over one another and the picture sharpens into something no single index shows. The places where climate hazard is chronic rather than acute, where sensitivity is high and adaptive capacity thin, where multidimensional poverty persists despite real progress, and where tribal and women-led households depend most directly on land and forest — these are substantially the same places. The tangible impacts are already legible there: fields sown twice and lost twice in a single Bundelkhand season; wells in the Bhil west that fall a little further each summer; forests in the Satpura belt thinning in ways the elders can date; and, beneath all of it, the quieter loss of confidence that the land can still be read at all.

FOUR INDEPENDENT LENSES, ONE CONVERGENCE



Sources: CEEW state-level Climate Vulnerability Index · IPCC (2014) · NITI Aayog (2023) · Census of India (2011). The IPCC panel is definitional — the source

Figure 11 · Four independent lenses converging on the same people and places. The IPCC panel is definitional — the source gives no figure for it.

> THE FINDING OF THIS CHAPTER
>
> Vulnerability in Madhya Pradesh is not a score. It is an address.

4.7 · Conclusion

Follow the argument to its end and a conclusion assembles itself. Madhya Pradesh is a tapestry of eleven agro-ecologies being destabilised in eleven different ways. The lens that should catch this — a structured reading of each village's land, water, life and culture — is missing from the very plans that decide what gets built and grown there. The hurdles are systemic: adaptation norms that are still coarse, science that measures without asking, and infrastructure too thin to buffer the shock. And the evidence, triangulated across four independent frameworks, keeps pointing to the same convergence of chronic hazard, deep sensitivity and constrained capacity — concentrated among the state's tribal, rain-fed and women-led households.

Every strand of that diagnosis calls for the same missing instrument: a way for a village to read its own landscape as one interdependent, living system, and to turn that reading into a shared, locally owned baseline that feeds directly into the formal plans the village already makes every year. This is precisely what the Community-led Landscape Assessment offers. It does not arrive with answers; it arrives with questions, and it begins where the double disconnection began — with memory. What follows is the story of what happened when this tool was carried into thirteen villages across six districts — from the Bhil hills of Jhabua and Alirajpur to the plateau farms of Sehore and Dewas — and what those villages, reading themselves whole for the first time, discovered about their own vital signs.



Transform Rural India

05

Madhya Pradesh

State Summary

5.1 The Villages Speak First

> "When I came here as a bride, water would come after just a little digging; but today it is hard to find water even at 800 feet. People are in a race over who will drill the deeper borewell."
>
> VILLAGE ELDER (DADI) · SUKHEDI,DEWAS

In Ekalbara (Barwani), the elders remember mornings that began with birdsong and nights when the sounds of wild animals reached the village from the forest. Today, they say, the sounds of the forest have fallen silent. In Richi (Dewas), the firefly — the jugnu that once lit the night — has vanished over fifteen or twenty years, and the wells where you could once see fish swimming now hold contaminated water. In Mor (Jhabua), the youth put it as a roll call of the missing: "The parrot, the peacock, the bluebird, the jackal — none of them show themselves now." And in Sagonia (Sehore), an elder measured the loss in the bodies of children: the river where every generation learned to swim now dries to its bed by February — "today's children do not even know how to swim."

These are not the words of scientists. They are the words of farmers, grandmothers, SHG members and teenagers in thirteen villages across six districts — Jhabua, Alirajpur, Dhar, Barwani, Dewas and Sehore — who sat down in early 2026, in groups of women, men, youth and elders, and read their own landscape the way a physician reads a body.

What the villages said is remarkable for two reasons. First, for its sensory precision. In Sali (Barwani), elders described how breaking the land once produced large, firm soil clods — a farmer's sign of living, structured soil — and how those clods are rarely seen now. They noted the disappearing flame- orange bloom of the Palash trees that once announced the season, and the haze of new brick kilns where that colour used to be. In Ramgarh (Jhabua), the village's own indicator of ecological loss was the gauraiya — the house sparrow — whose absence everyone had noticed and no one had been asked about. In Temla (Alirajpur), people remembered a Narmada that flowed all twelve months, a Bhagoria festival where the whole village sang and danced together "as siblings," and food cooked on firewood that simply tasted better.

Second, for its honesty about paradox. These villages are, by most official measures, developing well. The tap has reached the courtyard; the pucca road has reached the school; the SHG has reached the woman who was once told to stay behind the ghoonghat. The villages named those gains with genuine relief. But they also named, unprompted and in near-identical words from Jhabua to Sehore, the price ledger running underneath.

> “The tap has come into the home, but the forest has gone — and the expenses have risen.”
>
> WOMEN'SGROUP · CHIKALI,DHAR

> “When we were little we depended on the forest, and whatever we ate was full of taste. Now, for more earnings, we put urea, DAP and pesticide in the fields — now we are eating poison itself.”
>
> ELDERLYWOMAN · RATANPUR,SEHORE

> “The tank stands built — but no water comes.”
>
> COMMUNITYRESPONSE · NAHARPURA,JHABUA

THE DEEPEST FINDING OF THE PILOT

It is not any single number. It is that rural climate stress is systemic and cascading — when one landscape system fails, the others follow — and the people who see the whole cascade first, and most clearly, are the people who live inside it.

5.2 Landscape and Climate Context

LANDSCAPE BELT	DISTRICTS (BLOCKS)	VILLAGES	WHAT THE LAND IS LIKE
Thewestern tribaluplands Jhabua Hills zone	Jhabua (Thandla, Petlawad); Alirajpur (Sondwa)	Bhimkund, Ramgarh, Naharpura, Mor; Temla	Hilly to undulating terrain on red, black and rocky soils; predominantly Bhil/Bhilala Adivasi villages (Naharpura is ~99.6% ST); rainfed and partially irrigated farming; Mor in the Mahi catchment, Temla on the Narmada's riverine edge; once semi-forested throughout
The Nimar plain along the Narmada Nimar Valley zone	Barwani (Rajpur); Dhar (Manawar)	Sali, Ekalbara; Dedla, Chikali	Flatter agrarian country where canal and lift irrigation arrived a decade ago; strongly tribal (Ekalbara 2,252 of 2,409 residents ST); three-season cropping in places; brick kilns and quarries appearing at village edges
The black-soil plateau edge Malwa / Vindhya Plateau margins	Dewas (Khategaon); Sehore (Budni)	Richi, Sukhedi; Ratanpur, Sagonia	Prized black cotton soil (Kali Mitti / Shyam Mitti), naturally fertile but unforgiving; deep-borewell, triple-cropping agriculture in Dewas; forest-and-pond Gond Adivasi heritage in Budni

Different soils, different rivers, different gods and festivals — and yet, as the next section shows, essentially one trajectory.

5.2.1 · Climate changes report

The LCAT deliberately begins with memory: what was this landscape twenty years ago, ten years ago, today? Across all thirteen villages, community recollection converges on the same climatic shifts.

SIGNAL	WHAT COMMUNITIES REPORT	WHERE
Rainfall declining and destabilising	Annual rainfall down from a remembered ~1,200 mm to roughly ~850 mm (approximate, community-reported)	Richi (Dewas)
Rain in the wrong months	Rain now falls "erratically across all twelve months," damaging standing crops; urad has shifted from the monsoon to the summer season	Temla (Alirajpur)
Rain at the wrong moment	Rainfall "sometimes too late or too sudden during harvest," causing crop damage	Sali (Barwani)
Groundwater in freefall	Water table from ~80–90 ft a generation ago to ~800 ft; from ~100–150 ft to ~750 ft; roughly 50% availability at depths of ~400 ft; deep drilling yields nothing "even at great depth" and the built tank stands dry	Sukhedi, Richi (Dewas); Bhimkund, Naharpura (Jhabua)
Rivers and ponds retreating	A once-perennial river dry by February–March; four year-round wells reduced to one or two; six village ponds lost entirely to encroachment	Sagonia (Sehore); Dedla (Dhar); Sukhedi (Dewas)
Heat rising, cool retreating	Hotter summers, harsher winters, the "cool season" shrinking; concrete houses trapping heat that mud houses once shed	Reported in nearly every village

5.2.2 · What the wider evidence shows

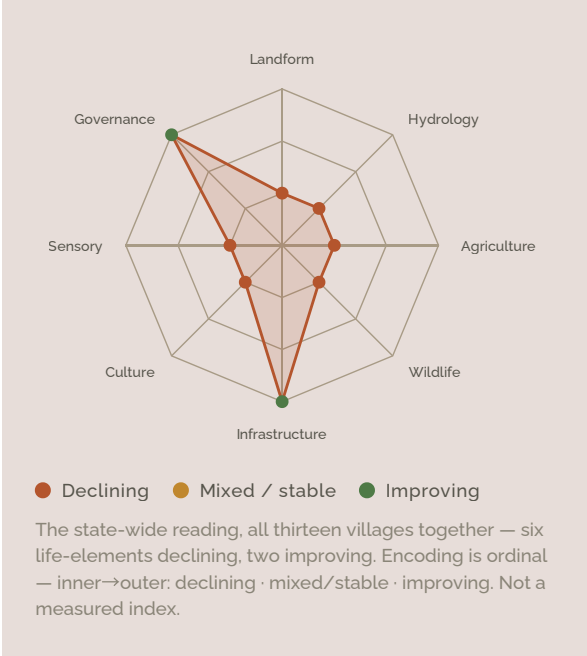
CEEW's tehsil-level monsoon assessment finds that a majority of Indian tehsils have seen significant change in monsoon behaviour, with over half experiencing a rise of more than 10% in southwest monsoon rainfall in the last decade — much of it arriving as short-duration, heavy bursts rather than steady seasonal rain, and with north- western Madhya Pradesh among the regions showing declining post-monsoon (Oct–Dec) rainfall. This is precisely the pattern Temla and Sali describe from the ground: not simply "less rain," but rain that no longer keeps its appointments.

CEEW's district-level Climate Vulnerability Index places Madhya Pradesh in the lower-middle of the state rankings on its composite index — a reminder that state-level averages can mask the acute, localised stress these villages document.

CEEW's extreme-events mapping documents that more than 40% of Indian districts show swapping hazard patterns — flood-prone areas turning drought-prone and vice versa — and cites evidence that each 2°C rise in annual mean temperature can cut agricultural productivity by 15–20%.

5.3 Six Down, Two Up

Trends across the eight life-elements—the most consistent pattern in the entire pilot.



The state-wide reading, all thirteen villages together — six life-elements declining, two improving. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

The LCAT reads a village the way a physician reads a body — through eight vital signs. Across all thirteen villages the readings form one pattern: six life- elements are declining, and two are improving.

The declining six are the natural and cultural systems; the improving two are the built and institutional systems. The village body is growing a stronger skeleton while its circulation weakens.

LIFE-ELEMENT	STATE-WIDE DIRECTION	WHY IT IS MOVING THIS WAY
Landform & Topography	▼ Declining (stable terrain, degrading surface)	The hills and plains themselves are largely intact; what is failing is the living skin on top of them. Soil that elders remember as soft — soft enough to form clods, soft enough to drink the rain — has hardened under tractors, continuous cropping and chemical inputs. Commons and buffer lands have been quietly converted to fields and plots; concrete now seals soil that once absorbed the monsoon.
Hydrology	▼ Declining — with a cruel paradox	Access improved, sustainability collapsed. Taps, canals and borewells brought water to the home even as the water under the home retreated — 80 ft to 800 ft in Sukhedi, four wells to one in Dedla, a perennial river to a February riverbed in Sagonia. Recharge broke first: forests thinned, ponds silted or were encroached, traditional water-holding pits vanished, and pucca surfaces sealed the ground. Then extraction accelerated into the gap.
Land Cover & Agriculture	▼ Declining — the "high-input, low-output" trap	Every village tells the same arc: traditional mixed farming (jowar, bajra, kodo-kutki, paddy in wetter Ramgarh) → hybrid seeds, urea and DAP → two or three crops a year → hardened soil, rising costs, falling profit. Dedla's farmers put it bluntly: even when the crop is good, "the farmer is going bankrupt" on his own inputs. The deeper break is cultural-ecological: when the livestock left, the gobar manure cycle snapped, and chemicals filled the vacuum.
Wildlife & Biodiversity	▼ Declining — the sharpest fall	The most emotionally charged theme everywhere, and the lowest-scored theme in Mor and Naharpura. The losses are named like family: the sparrow and honeybee (Ramgarh), the leopard now "only a memory" (Naharpura), vultures and eagles poisoned out of the sky by chemical residues (Richi, Sukhedi, Ekalbara), the firefly gone from the night (Richi, Sukhedi). Meanwhile conflict rises: nilgai multiply into the fields, and in Sukhedi tigers and deer walk into the village in summer because the forest itself has run out of water.
Infrastructure & Economy	▲ Improving — genuinely, and at a price	Roads, electricity, taps (Jal Jeevan Mission), schools where none stood fifteen years ago (Temla), markets and small enterprises. The communities claim these gains with pride. But the same theme carries the costs: pumping bills from 750–800 ft, chemical input debt, brick-kiln smoke, and youth migration to Indore, Bhopal and Gujarat as farming loses both viability and prestige.
Cultural & Historical Features	▼ Declining — the quiet grief	The DJ has replaced the dhol and mandal; the motorised barat has replaced the walked wedding; the chaupal where elders' counsel once settled disputes sits unheeded (Temla); Ramleela, Phalgun Geet and collective Dussehra are thinning. Ramgarh's elders offered the pilot's most piercing line: "People do not stay happy any more." Yet culture is also where resilience hides — Bhagoria still anchors Chikali, the Bhimkund origin legend still binds identity to water, and a renovated stepwell in Naharpura is still lovingly cleaned.
Visual & Sensory Qualities	▼ Declining — climate change you can feel	This is where the data becomes skin: less green, more heat; birdsong replaced by engine noise (Mor); fruit that has "lost its sweetness"; the Palash bloom gone from the Sali horizon and kiln-haze in its place; food whose taste changed when the chemicals came (Temla, Ratanpur). Communities repeatedly linked these sensory losses to health — new illnesses, "BP, sugar" and worse (Chikali), which they attribute to pesticide-laden food and lost clean air.
Community & Governance	▲ Improving — the engine of hope	The pilot's most consistent bright spot. Over 200 SHGs across the thirteen villages (from 5 in Sukhedi to 38 in tiny Naharpura and 32 in Ekalbara), active Village Organisations, women moving from ghoonghat to Gram Sabha, land increasingly registered in women's names (Naharpura), caste barriers softening. The one caveat, named in village after village: these strong institutions have a weak mandate over natural resources — powerful on credit and welfare, nearly silent on water, soil and forest.

5.3.1 Forest Loss and Its Effects Across the Landscape

What makes the LCAT different from a sectoral survey is that communities do not report these eight readings as separate problems. They narrate them as one chain. Bhimkund traces everything — water, soil, wildlife, even new illnesses — to a single root: the loss of the dense forest that once surrounded it.

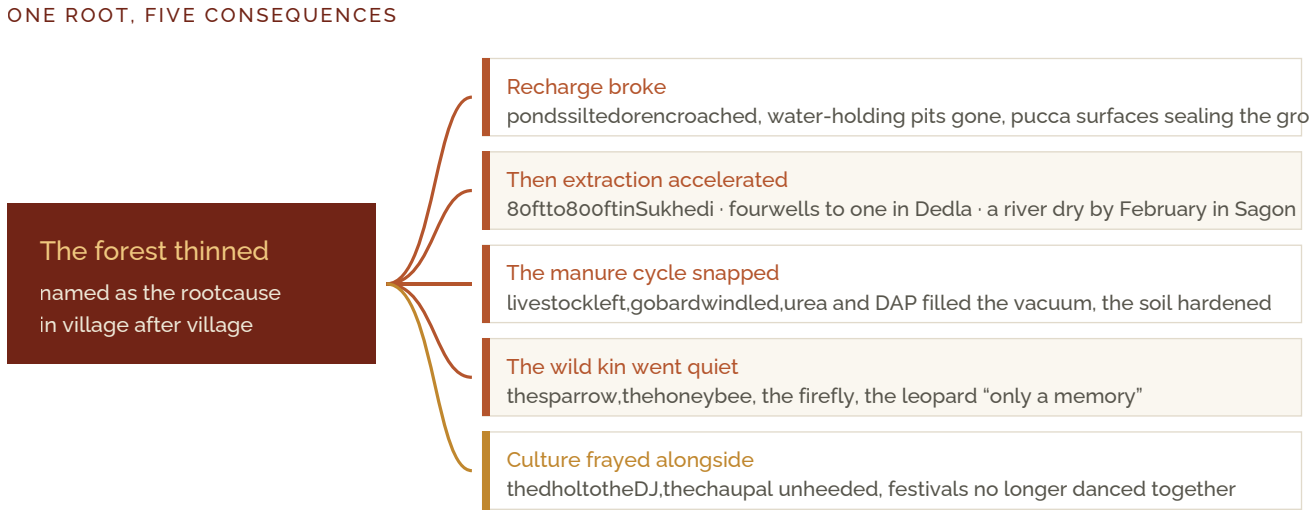


Figure 12 · The cascade as the thirteen communities themselves narrate it — one root cause, five consequences.

Culture does not sit outside this cascade — it frays alongside it, and it can also interrupt it. That is the intersection of climate and culture the LCAT makes visible: the same market logic that swapped gobar for urea also swapped the dhol for the DJ, and the communities know it, because they said both things in the same breath.

5.4 The Core Demands

The LCAT's final step turns diagnosis into demand: each theme's problems are converted into concrete asks, ranked by the community, framed to feed directly into the village's official planning instruments — the GPDP and the VPRP.

> THE Priority DEMAND
>
> Water restoration was the single most common first-ranked demand — the number-one community priority in 9 of the 13 villages.

5.4.1 · The ten most common demands

#	DEMAND	THE PATTERN, WITH VILLAGE EXAMPLES
1	Restore and recharge water bodies — desilt ponds, revive wells and step-wells, build recharge pits, check dams and stop-dams	Universal. Sagonia wants its river back through stop-dams and deepening; Sukhedi wants its six encroached ponds returned; Richi's Panchayat wants soak pits made mandatory for every pucca house; Naharpura simply wants “the water-holding pits” its grandparents dug rebuilt.
2	Transition to organic / natural farming (jaivik kheti)	Named in all 13 villages, often as the highest agriculture priority — gobar manure, vermicompost, bio-pesticides, reduced chemical overdose. Bhimkund's four groups repeated it “clearly and repeatedly”; Ekalbara already has 125 farmers transitioning.
3	Plant trees — on bunds, commons, roadsides, degraded land	The flagship or first-ranked action in several villages (Bhimkund, Temla, Mor). Species are named with intent: Palash in Sali, teak-palash-mango-banyan in Mor, Peepal and Mahua for shade in Richi.
4	Revive livestock to restore the manure cycle	The communities' own systems insight: no animals, no gobar, no soil. Ratanpur, Sagonia, Richi, Sukhedi, Dedla, Chikali and Bhimkund all demand animal husbandry as soil policy, not just income.
5	Bring back millets and traditional crops	Jowar and bajra (Sali, Naharpura, Bhimkund), kodo-kutki (Mor), indigenous seed banks (Temla, Ekalbara), even paddy where memory says the land was once wet enough (Ramgarh) — for water thrift, nutrition and identity together.
6	Community water governance — water budgeting, borewell discipline, regulated irrigation	Sali, Richi, Sukhedi, Dedla, Chikali, Naharpura, Mor and Ekalbara all ask for collective rules over extraction — an extraordinary demand, because it is a demand for self-restraint.
7	SHG-led green livelihoods and youth skilling to slow migration	Everywhere. Vermicompost units, nurseries, dairy, value addition, green enterprise — using the 200+ SHG base as the delivery engine so the young have a reason to stay.
8	Restore grazing commons and fodder	Demarcate, protect and replant common grazing land (Bhimkund, Sali, Ekalbara, Chikali, Dedla) — the land-base precondition for demand #4.
9	Embed ecology in official plans — Gram Sabha NRM charters; LCAT findings into GPDP & VPRP	Nearly every village demands that its landscape findings enter the formal planning cycle, with Gram Sabha rules for forest, water, grazing (and in Temla's PESA area, sand- mining).
10	Manage waste and pollution	SHG-led plastic and waste systems (Mor's wet–dry segregation, Ekalbara's plastic-reduction drives), residue-burning bans, kiln and factory regulation, even DJ-noise norms (Bhimkund, Ratanpur).

5.4.2 · The ten most unique demands — signals worth probing

These are the asks that appear in only one or two villages, yet open doors the common list cannot.

#	UNIQUE DEMAND	VILLAGE(S)	WHY IT DESERVES PROBING
1	Regulate river sand mining	Mor (Mahi), Temla (Narmada)	Communities have connected sand extraction to lost river recharge — "without sand the river no longer holds water." A governance demand aimed at an extractive economy far bigger than the village.
2	Mandatory soak pits for every pucca house and government building	Richi	A village-invented building code: development must pay its own recharge debt. Immediately replicable state-wide.
3	Reverse pond encroachment	Sukhedi	All six historic ponds became private farmland. Restoring them is as much a land-records and courage question as an engineering one.
4	Pricesecurityforfruit trees (the MSP problem)	Sukhedi, Richi	Ancestral mango-mahua-guava orchards (Baags) were felled because wheat has MSP and trees don't. The demand exposes how national price policy silently redesigns village ecology.
5	Forest ponds to keep wildlife out of the village	Sukhedi	Residents already dig temporary ponds so thirsty tigers and deer stop at the forest edge — community-invented climate-conflict mitigation.
6	Fix the infrastructure that already exists	Naharpura	The tank stands built but dry; handpumps fail. A demand for maintenance as a first-class investment, not an afterthought.
7	Deep-pit idol immersion and riverbank protection	Mor, Naharpura	A community re-engineering its own ritual to protect its water — proof that cultural practice can adapt without being abandoned.
8	Curb hunting through Gram Sabha norms	Bhimkund	Rare, uncomfortable self-regulation: the village names its own role in wildlife loss and asks for collective rules.
9	Regulate brick kilns and quarries; rehabilitate quarry pits as recharge sites	Sali, Richi	The village edge is industrialising informally; communities want emissions controlled and scars turned into water assets.
10	Cultural revival as climate infrastructure	Temla, Ratanpur, Dedla, Chikali	Revive the chaupal and elders' authority (Temla), curb DJs and chemical colours (Ratanpur), close the female literacy gap (Dedla 52% vs 83%; Chikali 49% vs 72%), build with alternatives so PM-Awas stops costing trees (Temla). The insight: governance of nature runs through the health of culture.

5.4.3 · Barriers to Change

The broken manure cycle makes organic farming a chicken-and-egg problem. Going organic needs gobar; gobar needs livestock; livestock need fodder; fodder needs the commons that were ploughed under. Mor's adult group said it with disarming honesty: "We are not yet ready for organic farming — and the land is turning barren." Ekalbara shows the unlock: with Krishi Sakhi support and bio-input help, 125 farmers are already crossing the bridge.

Transition risk lands on the poorest. A farmer moving off chemicals typically faces a yield dip for a few seasons with no bridging finance, no certification pathway, and no premium market in Thandla or Bodali mandi. Rational households defer.

Price policy points the other way. MSP-backed wheat and paddy outcompete orchards, millets and mixed systems in every household calculation — even where the community culturally prefers the trees and the jowar roti it lost.

Water is a commons trapped in private logic. Each borewell is individually rational and collectively ruinous — the "depth race" no household can win. Panchayats have no established mandate, and SHGs no NRM charter, to referee the aquifer; meanwhile subsidised power and solar pumps (PM-KUSUM in Sukhedi) quietly finance deeper extraction.

Institutions are strong in the wrong currency. The SHG network can move credit, meetings and trust at scale — but it has never been formally tasked with water, soil or forest. The villages are, in effect, asking for their strongest institution to be given their hardest problem.

5.5 · The financial narrative

> THE PATTERN
>
> Public finance has been superb at building things and nearly absent at sustaining the living systems underneath them.

5.5.1 · Where it falls short — the four gaps

Gap 1 · The maintenance gap. Naharpura's dry tank is the emblem: capital expenditure without an operations budget produces monuments, not water. Ponds are funded to be dug, not to be desilted every few years; saplings are funded to be planted, not to be watered through two summers.

Gap 2 · The transition gap. No mainstream channel bridges a farming household across the risky first seasons of the organic shift, and no channel compensates a family for choosing a mango orchard (income in year 6) over MSP wheat (income in month 6). Communities want the ecological choice and finance pushes them to the extractive one.

Gap 3 · The household squeeze. Climate stress is already a line item in family budgets: electricity bills for pumping from 750–800 feet (Richi, Sukhedi), chemical input costs the Dedla community says are driving farmers to "bankruptcy," festival and consumption expenses rising even as farm profit falls (Sagonia, Chikali). Distress finance flows to moneylenders and migration — the two channels SHGs were built to replace.

Gap 4 · The planning gap. The GPDP–VPRP cycle, where village demands legally meet government money, has historically been a wish-list of construction. Nothing in the standard format asks what is happening to the village's water, soil, forest and culture as one system — which is precisely the question the LCAT answers.

5.5.2 · Existing Funding Channels

CHANNEL	WHAT IT FUNDS IN THESE VILLAGES	THE CATCH
MGNREGA	The workhorse: check dams, ponds, wells, plantation, bunding — Temla's three-crop water sources were "multiplied through MGNREGA works"	Works are built; maintenance and survival (desilting cycles, sapling care) are chronically under-planned
Jal Jeevan Mission / Har Ghar Nal Jal	The tap in every courtyard — a genuine, celebrated gain (Mor, Chikali, Ekalbara)	Delivers water access while the source beneath it keeps falling; supply built faster than recharge
PM-Awas (housing)	Pucca homes and dignity	In Temla, communities directly link Awas construction to accelerated tree-cutting; concrete also seals recharge and traps heat
PM-KUSUM (solar pumps)	Cheaper irrigation energy	In Sukhedi, solar pumps intensify extraction — clean energy financing a deeper depth race unless paired with recharge and water budgeting
15th Finance Commission untied funds + GP own funds	Small local works, the natural home of Tier-B actions	Small, fragmented, and historically consumed by visible infrastructure lists
NRLM / SHG credit and seed funds	The 200+ SHG network's enterprises — vermicompost, dairy, tailoring, vegetables (50 members in Sali, 57 in Ekalbara already engaged)	Finances livelihoods readily; finances ecological restoration as livelihood only where someone connects the dots
Scheme convergence for larger works	Amrit Sarovar, PMKSY-Watershed, PKVY/NMNF (natural farming), Millet Mission/ODOP, MIDH (horticulture), Rashtriya Gokul Mission, CAMPA & Green India Mission, SBM-G, DDU-GKY, DMF, and state schemes like Maa ki Bagiya / Ek Bagiya Maa Ke Naam	Exists on paper for nearly every community demand —but requires a Gram Panchayat to navigate a maze

5.6 Green value chains & rural bioeconomy

“Cut One, Plant Ten” — Mor, Jhabua. A village that watched its teak, palash and banyan vanish has adopted its own replanting ethic: fell one tree, plant ten. The ethic is real, local and free.

“125 Farmers Walk Back from the Chemical Edge” — Ekalbara, Barwani. Through BRC Krishi Sakhis, 125 farmers are mid-transition to natural farming, while the Ek Bagiya Maa Ke Naam scheme plants fruit trees household by household. The largest live demonstration in the pilot that the organic demand is bankable.

“Ponds for Tigers” — Sukhedi, Dewas. When the forest runs dry in May–June, tigers and deer walk into the village for water. Residents dig temporary forest ponds to meet the animals halfway — climate adaptation for wildlife, invented without a scheme or a circular.

“The Stepwell That Never Stopped Being Loved” — Naharpura, Jhabua. Amid failed modern infrastructure, one old bawdi is still tended, cleaned and used — living proof that maintenance is a cultural practice before it is a budget line.

“A River Rises, and a Fishery Is Born” — Temla, Alirajpur. The Narmada's changed backwater has created a new riverine fishery and market income. The community's ask: help us manage it sustainably before it, too, is mined out.

“Sunlight on the Canal's Gift” — Ramgarh, Jhabua. The community's own request: solar-powered drip and micro-irrigation to stretch the canal water it already has — efficiency before extraction.Dedla, Chikali, Mor and Sukhedi ask for solar pumps and street lights; Sukhedi supplies the caution the whole stateneeds—solar pumping without water budgeting simply drills the depth race deeper, for free.

“From Smoke to Soil” — Sali, Richi, Sukhedi. Crop residue currently burned is the raw material for the compost the organic transition needs. One behaviour change closes two loops.“Leaf Plates Against Plastic” — Ekalbara and “A Village Sorts Itself Out” — Mor turn waste into women's enterprise.Andeverywhere, the gobar economy: livestock → dung → soil → fodder → livestock, with biogas(Dedla,Chikali)asitsmodernextension.

6.2 · MOST COMMON VALUE CHAINS — THE STATE-SCALE PORTFOLIO

- Vermicompost & organic inputs via SHGs — all 13
- Livestock & dairy — nearly all
- Plantation, agroforestry & nurseries — nearly all
- Millets: jowar, bajra, kodo, kutki — 8+ villages
- Water-harvesting works as local employment
- SHG micro-enterprise & collective marketing — all 13

MOST UNIQUE — SINGLE-VILLAGE CHAINS WORTH WATCHING

- NTFP value addition: mahua, tendupatta, gum, tamarind
- Palash-plantation products (Sali)
- Narmada backwater fisheries (Temla)
- Beekeeping (Ramgarh, Naharpura)
- Orchard & kitchen-garden chains (Sukhedi)
- Cloth bags & leaf plates (Ekalbara)
- Forest produce: gum, herbs, medicinal plants (Bhimkund)
- Solar enterprise bundle (Mor)
- Riverine-pond fisheries (Sagonia, Ratanpur)

NTFP value addition (mahua, tendupatta, gum, tamarind) is named in Bhimkund, Ratanpur, Sagonia, Mor, Naharpura and Temla — the tribal west and the Budni Gond belt — and is therefore carried in the unique row rather than the state-wide common row. Lac does not appear anywhere in the source material for Madhya Pradesh and is not shown.

5.7 Sentinel indicators and sensory findings

Technical monitoring in these villages is thin: rainfall gauges are distant, groundwater readings sparse. But every village holds a dense, continuously updated record of its landscape in another form — the memory of the senses. Colour, sound, taste, temperature and smell are the community's own longitudinal dataset. Sali's report says it outright: the disappearance of the Palash bloom, the smell of chemicals and the haze from kilns "reflect the ecological transformation of the landscape more vividly than any data point."

SENSE	WHAT HAS CHANGED	WHERE THE COMMUNITIES SAID IT
Sight	Green giving way to dun and grey: hills that were forested now stand barren; fields described as "sterile" and flat where orchards and hedgerows stood; the flame-orange Palash bloom — once the visual signature of the season — gone from the horizon, with brick-kiln haze in its place; butterflies and small colourful birds vanished; plastic on the ground where leaf plates once composted themselves; and, at night, fewer stars and no fireflies	Ratanpur (barren hills); Sukhedi ("sterile, flat fields"); Sali (Palash and kiln haze); Mor (fewer stars); Richi & Sukhedi (the firefly's lost glow); Bhimkund, Sagonia, Ekalbara (plastic)
Sound	The dawn chorus thinning to silence — Ekalbara's report records that "the sounds of the forest have fallen silent"; birdsong replaced by engine noise; and the human soundscape transformed in parallel: the dhol and mandal that once carried whole-village festivals replaced by hired DJ systems, the flute of the elders unheard	Ekalbara (silent forest); Mor (birdsong to engine noise); Temla, Bhimkund, Dedla, Ekalbara, Ratanpur (dhol to DJ)
Taste	The most intimate testimony in the pilot: food cooked on firewood from forest-fed fields "simply tasted better"; "whatever we ate was full of taste — now we are eating poison itself"; fruit that has "lost its sweetness"; the cool, sweet drinking water of the well lost to the tap and the borewell	Temla, Ratanpur, Sagonia, Mor, Chikali
Touch & heat	The lost cool: concrete houses that trap summer heat where mud homes once shed it; the felled Peepal, Mahua and fruit trees that once threw shade over paths and courtyards; a "cool season" that elders say is shrinking; the cool breeze gone	Richi & Sukhedi (concrete heat, lost shade trees); Naharpura (shrinking cool season); Mor (the vanished breeze)
Smell & air	Chemical smell over sprayed fields; smoke from burning crop residue; dust and smoke from brick kilns and stone quarries at the village edge; factory smoke; vehicle exhaust on new roads	Sali (chemicals, kilns, quarries); Richi & Sukhedi (residue burning); Bhimkund (factory smoke); Ramgarh (vehicle pollution)

Read as a column, each sense tells the same story the hydrology and soil chapters tell — but in a language every villager, literate or not, speaks fluently. The sensory record is the cascade, felt.



5.7.1 Health and Daily Life

Communities repeatedly extended the sensory account into the body itself. Bhimkund's elders link new illnesses to the loss of clean air and of the medicinal forest plants that once supported health. Dedla's groups draw a direct moral line from pesticide-laden food to sickness — "even when the crop is good, the diseases do not stop." Chikali names the arrival of "BP, sugar" and cancer-like illnesses where "pure fruit" once was. Richi reports skin disease and itching from ponds contaminated by fertiliser runoff and wastewater. Ramgarh's women describe repeated colds and the rising mosquito burden of unmanaged drainage.

> A NOTE OF CARE
> These are community-attributed links between environmental change and health, not clinical findings — the LCAT records them as testimony, not epidemiology. They should be treated as serious signals for public-health verification, exactly the kind of local claim a district health system should investigate, and not as established causal facts.

5.7.2 · Loss, Grief and Changing Lifestyles

There is a word for what runs beneath this section: solastalgia (Albrecht, 2005) — the distress caused by environmental change experienced while still at home. The pilot is full of it. Ramgarh's elders: "People do not stay happy any more." Mor's report names "a new restlessness." Sagonia's grief is generational — a river that taught every child to swim, now dry before the children learn. And in Chikali the sensory change is social too: women report that the night itself feels less safe — "at night we are afraid to step out of the house."

Yet the same communities refuse a simple lament, and this summary should too. Naharpura's groups noted that modernisation has genuinely eased the body's old burdens — the hand-grinding and hand-sowing are gone, and nutrition awareness has risen. Dedla and Chikali's women name the tap as a real liberation from the daily water-carry, and Chikali records that women's freedom of movement has clearly grown. The sensory ledger, like every ledger in this pilot, has two columns — conveniences have been gained by the household while the qualities have been lost by the landscape.

5.7.3 · Using Sensory Indicators in Village Planning

The practical case for taking this life-element seriously in the GPDP–VPRP cycle is that sensory change is the cheapest, most democratic monitoring system a village owns. No instrument is needed to know whether the Palash bloomed, whether the fireflies returned, whether birdsong came back to Ekalbara's mornings, in which month Sagonia's river went dry, or whether the food has begun to taste right again. These are measurable, memorable, community-owned indicators — and several map one-to-one onto the restoration actions that follow: the firefly onto pesticide reduction and orchard revival; the bloom onto plantation; the river's dry month onto recharge works. A short, village-chosen list of sensory indicators, reviewed annually in the Gram Sabha alongside the technical ones, would let communities see and hear their plan working — or demand to know why it isn't.

5.8 · A Tiered action plan

Organised not by importance but by what each action needs to begin.

The pilot's closing logic, drawn from the Climate-Integrated GPDP plans: every Gram Panchayat can start tomorrow on Tier A, negotiate Tier B this planning season, and put Tier C into its convergence plan by name.

OVERARCHING DEMAND	A · Community-led	B · Minor support	C · External Support
1. Water restoration & recharge (the #1 demanding of 13 villages)	Shramdaan desilting of ponds and wells; protect bunds from encroachment; Gram Sabha resolutions on borewell discipline and water budgeting; rebuild traditional water-holding pits; household soak pits by local norm (the Richi model)	Recharge pits, percolation tanks, contour/field bunding via MGNREGA + GP funds; repair of existing tanks, handpumps and stop-dams; village water committees with technical guidance	Check dams, stop-dam chains and riverbed works (Sagonia's river); mechanised desilting and Amrit Sarovar-type rejuvenation; watershed treatment (PMKSY- Watershed, Jal Shakti Abhiyan); legal reversal of pond encroachment (Sukhedi); sand- mining regulation on the Mahi and Narmada (district administration + PESA Gram Sabha powers)
2. Organic farming & soil health	Revive gobar manure and household compost pits; stop residue burning by community norm; seed-saving of traditional varieties; willing-farmer demonstration plots	SHG-run vermicompost units (NRLM seed funds); soil-testing camps and balanced-nutrient advisory (Agriculture Dept / KVK / ATMA); Krishi Sakhi support on the Ekalbara model; green- manuring demos	Certified organic clusters and transition-bridging support (PKVY/NMNF); millet seed banks, processing units and market linkage (Millet Mission, ODOP); bio-input enterprise at scale with premium-market access
3. Tree & forest restoration	Community plantation with locally collected seed and saplings on bunds, commons and degraded patches; cut-and-protect and anti-hunting norms in Gram Sabha; adopt the "cut one, plant ten" ethic; intergenerational documentation of species knowledge	Village nurseries (Forest Dept saplings + MGNREGA); grazing-common demarcation and fodder-tree planting; sapling-survival care built into the MGNREGA muster	Block plantation and degraded-forest restoration (CAMPA, Green India Mission, MGNREGA convergence); orchard revival at scale — the Baags — via MIDH / Maa ki Bagiya with fruit-tree incentives that answer the MSP problem; alternative construction materials alongside PM-Awas

OVERARCHING DEMAND	A · Community-led	B · Minor Support	C · External support
4. Livestock & fodder revival	Stall-feeding norms; community fodder plots on protected commons; revive livestock-keeping among willing households; use stubble as fodder, not smoke	Fodder cultivation on commons and fallows (MGNREGA); animal-husbandry training via SHGs; veterinary camps (Animal Husbandry Dept)	Improved breeds and dairy value chain — collection and chilling (Rashtriya Gokul Mission, National Livestock Mission, dairy-federation linkage); biogas infrastructure closing the residue loop
5. Green livelihoods & youth retention	Direct existing SHG/VO meetings toward NRM roles; youth volunteer corps for plantation, water monitoring and wildlife watch; SHG cultural platforms reviving festivals, food traditions and the chaupal	SHG green enterprises — nurseries, organic inputs, vegetables, NTFP processing (NRLM-SVEP, RSETI); collective marketing to local mandis (Thandla, Bodali, Khategaon, Rajpur)	Youth green skilling at scale (DDU-GKY, Skill India); solar-enterprise financing (PM-KUSUM paired with water budgeting); NTFP and millet value chains with TRIFED/ODOP market linkage; district-level convergence platforms institutionalising LCAT findings in every GPDP–VPRP cycle

THE THROUGH-LINE

It sits in that first column: the communities' own first steps require no money at all — only the mandate. The LCAT's contribution is to have produced, village by village, the shared diagnosis and the ranked demand list that turn scattered goodwill into a plan a Gram Sabha can vote on, a department can fund, and a grandmother in Sukhedi can measure — in feet of water, in the return of the firefly, in food that tastes the way she remembers.

5.9 Gender and the Changing Landscape

The gender findings from the thirteen Madhya Pradesh assessments do not sit comfortably in a single column of a plan. They range from the intimate — a woman measuring an aquifer's collapse against the year she arrived as a bride — to the structural: whose name the land is held in, and who is present when a Gram Sabha decides what to do about water. To read them as one system, we map them onto the Gender at Work framework, which sorts change across two axes: whether it happens at the level of the individual or the system, and whether it operates through informal culture or formal rules. The value of the frame here is diagnostic. It shows that Madhya Pradesh's gains cluster in the upper-left quadrant — consciousness, capability, women's awareness and organisation — while the deeper structures below the line, from sex ratios and literacy gaps to who signs off on a borewell, have moved far less. The figure that follows places the LCAT's own evidence, and the communities' own words, in each of the four arenas.

Madhya Pradesh

Where the LCAT gender findings sit across the four arenas of change: women as the landscape's observers, its restoration workforce, and its emerging decision-makers.

Gender at Work framework (Rao & Kelleher) — change mapped across the Individual–Systemic and Informal–Formal axes. Corner quotes are verbatim community voices from the village LCAT reports.

Individual

Informal — *Formal*

Systemic

"*Earlier women had to stay in ghoonghat and did not step out of the home; now, joined into SHGs, they have begun to take decisions.*

— SHG discussion, Chikali (Dhar)

Consciousness and capabilities

Women read the landscape first — and their observations are legitimate climate data.

- Women's water- and fuel-collection time is the most sensitive early indicator of ecological stress.
- Sali's SHG women logged cultural change in metres of cloth — the precision they bring to soil and seed.
- 230+ SHGs form an organised observer network across the pilot villages.

Access to resources

Women gain access to water, land, credit and enterprise — without the aquifer paying the bill.

- Naharpura: land increasingly held in women's names — reversing the exclusion Mor recorded.
- Taps genuinely lifted women's burden, but draw the same aquifer — pair relief with recharge.
- SHG credit routes into vermicompost, orchards and natural farming — 125 farmers in Ekalbara.

"*Now, more and more, land is being held in women's names.*

— Community voice, Naharpura (Jhabua)

"*Women's participation in groups has grown, but decisions are still mostly taken by men.*

— Women's discussion, Dedla (Dhar)

Social norms and deep structure

Norms are shifting from ghoonghat to decision-making — but the deep structure resists.

- Dedla: sex ratio 892 (child 856) and a 31-point female-literacy gap — the widest in the pilot.
- "Decisions are still mostly taken by men" — participation has outrun authority.
- Chikali's women report new night-time safety anxiety alongside wider mobility.

Policies and rules

Plans assign women's institutions decision-making authority — not consultation.

- Route Tier 1–3 actions through the SHG–VO–Gram Sabha chain with formal NRM roles.
- Braid every tap, motor and solar (KUSUM) scheme with community water-budgeting rules.
- Pair land-titling support with the literacy drives Dedla and Chikali themselves proposed.

"*Earlier women had no part in decisions; now, joined into groups, they take part.*

— SHG women, Sukhedi (Dewas)

About this figure. Quadrant statements synthesise the state gender narrative derived from the village Landscape Character Assessment reports; corner quotations are verbatim (English translations as given in the reports), attributed to the speaker or group context recorded there. Figures are as stated in the reports; several are community-reported approximations requiring primary-source verification before publication.

Read as a whole, the four quadrants describe real movement and an unfinished task. The distance travelled is not small: women who once observed the village from behind the ghoonghat now sit in more than 230 self-help groups, run vermicompost and orchard enterprises, and in Naharpura are beginning to hold land in their own names. But the change thins as it moves down the frame. Awareness and capability have grown faster than authority, and Dedla's women name the gap precisely — participation has risen while decisions remain largely with men. This matters for climate adaptation, not only for equity.

The stresses these villages face — an aquifer falling past 800 feet, soil that no longer holds, a forest that no longer buffers the heat — are cumulative and will worsen within the lifetime of the plans now being written. They cannot be met by consultation alone. Every adaptive measure the assessments propose, from water budgeting to natural farming to orchard revival, depends on sustained decisions taken season after season by the people who carry the consequences first.

Closing the lower half of this framework is therefore not a social addendum to Madhya Pradesh's climate response; it is the mechanism by which that response will either hold or fail.



DISTRICT SUMMARIES

Transform Rural India

05

District Deepdive

Thirteen villages,six districts —each read on its own terms, from the Narmada's riverine edge to the black-soil plateau.

IN THIS SECTION

Alirajpur
1 village · Temla

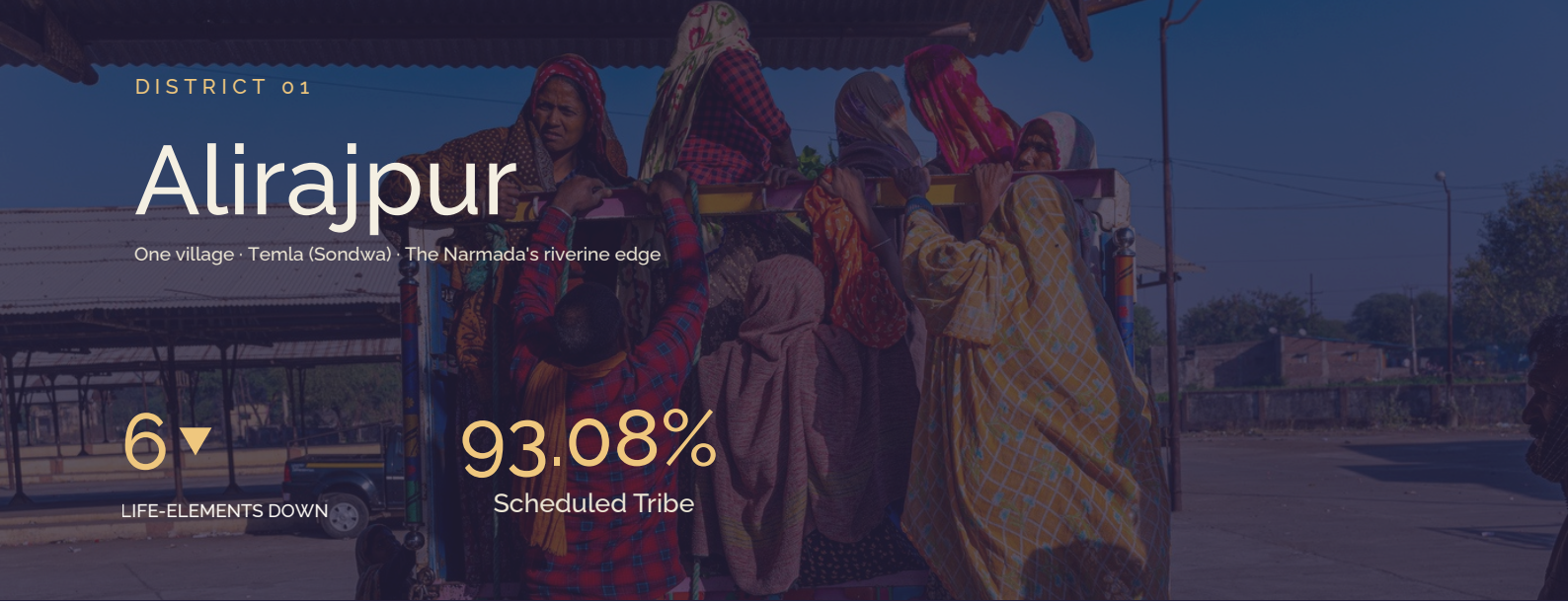
Barwani
2 villages · Sali, Ekalbara

Dewas
2 villages · Richi, Sukhedi

Dhar
2 villages · Dedla, Chikali

Jhabua
4 villages · Bhimkund, Ramgarh, Naharpura, Mor

Sehore
2 villages · Ratanpur, Sagonia



DISTRICT 01

Alirajpur

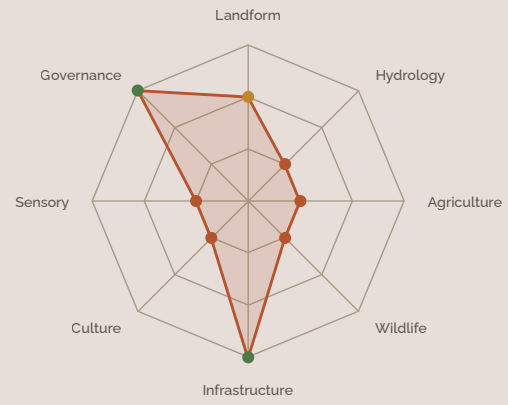
One village · Temla (Sondwa) · The Narmada's riverine edge

6▼
LIFE-ELEMENTS DOWN

93.08%
Scheduled Tribe

THE LANDSCAPE AND THE CLIMATE SIGNALS

Temla sits on the riverine edge of the Narmada in western Madhya Pradesh's tribal upland belt, with 1,264.53 hectares of village land and 305 households. Seasonal migration to Gujarat is an established livelihood strategy; MGNREGA job cards and pensions form the safety net.



The eight life-elements read in Temla. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

TEMLA'S DISTINCTIVE INSIGHT

Development schemes themselves sit inside the cascade. The community links PM-Awas housing directly to forest loss — not as a complaint against housing, but as a demand that construction carry its own ecological accounting.

The climate signals the community reports

COMMUNITY-REPORTED SIGNAL	Village
Rainfall redistributed: Rain now falls erratically across all twelve months, damaging crops and making river crossings difficult	Temla
Cropping calendar shifted: Urad, once a monsoon crop, now grows in summer — a season migrated within living memory	Temla
The river changed: The Narmada's backwater has risen — a new fishery and market sales, while the river's flow and character have changed; sand is mined from its bed	Temla
Recharge thinned as sources multiplied: Wells, borewells, check dams and ponds (largely MGNREGA-built) enable three crops, while tree-cutting reduces the forest that once regulated water	Temla

The eight life-elements in Temla

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	↔ Stable, under growing pressure	Natural landform largely intact; land-use change, house construction and riverbed sand mining exerting pressure
Hydrology	▼ Declining	From river-carried water to handpumps; changed Narmada; erratic twelve-month rainfall; sand mining
Land Cover & Agriculture	▼ Declining	Three crops now possible — but soil yield declining, chemical and urea use rising, seasons shifting, hybrids displacing indigenous seed
Wildlife & Biodiversity	▼ Declining	Tree-cutting for housing (PM-Awas, population growth); firewood scarcity; wild animals entering the village as habitat shrinks
Infrastructure & Economy	▲ Improving	Pucca roads, electricity, a functioning school, multiplied water sources, Bodali mandi access
Cultural & Historical	▼ Declining	Bhagoria and the collective Diwali dhol fading; chaupal authority unheeded and disputes escalating; DJ culture; food habits shifting
Visual & Sensory	▼ Declining	Changed river character; reduced forest; declining food taste under chemical inputs; the collective cultural soundscape lost
Community & Governance	▲ Improving	16 active SHGs; Ahilya Mahila Gram Sangathan; a PESA Gram Sabha; high community self-awareness and clearly articulated restoration priorities

What the community is asking for

The core demands: water-source development as first priority — strengthen and maintain the check dams, ponds and wells through MGNREGA, and protect the jhiri springs and handpumps; organic farming as the highest agriculture priority — manure and compost in place of urea, to restore yield and the taste of food; tree plantation as the community's flagship — "plant more trees and teach the value of trees to the next generation"; indigenous seed revival through SHG-based seed banks; crop calendars adapted to the new twelve-month rain; and Bodali-mandi value chains with collective marketing.

Tiered first moves for Alirajpur (Temla)

PRIORITY	A · community led	B · Minor Support	C · External Support
Water & the river	Shramdaan maintenance of ponds and check dams; protect jhiri springs; Gram Sabha (PESA) resolution on sand mining	Repair and strengthen water sources via MGNREGA + GP funds; drainage adapted to twelve-month rain	Sand-mining regulation enforced with district administration; drinking-water source security (JJM, 15th FC); catchment protection works (PMKSY-Watershed)
Soil, seed & crops	Revive farmyard manure and composting; SHG seed-saving of indigenous varieties; mixed cropping on willing plots	Vermicompost units; soil testing; adapted crop calendars with KVK/ATMA guidance	Natural-farming cluster (PKVY/NMNF); seed-bank and traditional-food value chain (Millet Mission/ODOP); Bodali mandi collective marketing
Forest & housing balance	Community plantation drives; teach-the-trees youth engagement; norms limiting clearing for construction	Fuelwood and fruit agroforestry plots near habitation (Forest Dept saplings, MGNREGA, NRLM)	Plantation at scale (CAMPA, Green India Mission); alternative construction materials alongside PM-Awas
Culture & institutions	Revive Bhagoria and the collective dhol; bring elders into Gram Sabha processes; document traditions	SHG-led cultural events and awareness; fisheries management norms with Fisheries Dept guidance	Youth green skilling to ease Gujarat migration (DDU-GKY, Skill India); Tribal Welfare cultural-revival support

Green stories — small proofs already running

- A River Rises, and a Fishery Is Born · NBS/LIVELIHOOD
  theNarmada's risenbackwatercreated a fishery and market income where there was none — Temla asks for the norms to keep it alive.
- Teach the Trees to the Children · NBS/CULTURE
  thecommunity'sownproposedaction pairs plantation with intergenerational teaching — restoration as curriculum.
- Three Crops on MGNREGA Water · PUBLIC WORKS AS NBS
  thecheckdamsandpondsthattransformed Temla's farming are the proof-of-concept for recharge-led development.
- From Smoke to Manure · CIRCULAR ECONOMY
  compostandwastemanagement to reduce burning and rebuild the soil the chemicals hardened.

GREEN VALUE CHAINS

organic and natural farming with vermicompost (SHG enterprise)
indigenous seed banks and traditional-crop revival
riverine fisheries (Narmada backwater) with women's income
the three-season crop value chain into Bodali mandi with collective marketing and value addition
tree plantation and agroforestry (fuelwood and fruit)
watershed and water-harvesting works through MGNREGA
SHG-led enterprise and collective marketing on the 16-SHG base
compost and waste management

Money & the gaps

Temla's Climate-Integrated GPDP plan runs on the standard three tiers. Its financial signature: MGNREGA is already the village's water engine (the multiplied sources that enable three crops), so the marginal ask is to point the same instrument at recharge, plantation and fuelwood plots. Tier-3 convergence routes (indicative — verify with block and district administration): drinking-water security via Jal Jeevan Mission and 15th-FC water funds; climate-resilient cropping via PKVY/NMNF and ATMA; plantation via Forest Department, MGNREGA and NRLM; youth green skilling and cultural-revival support via DDU-GKY, RSETI and Tribal Welfare programmes. The gaps: no channel funds sapling survival or seed-bank organisation as readily as it funds construction; and nothing yet compensates the household choosing alternative building materials over free-standing trees.

The senses' record

Temla's sensory testimony is anchored in taste and sound: food from firewood stoves and forest-fed soil that simply tasted better , now changed by urea and spraying; the single dhol that once moved the whole village at Diwali, replaced by hired sound; the flute of the elders unheard; the river that was bathed in, now crossed with difficulty when the unseasonal rain comes. These sensory markers double as the village's most natural monitoring indicators — the taste of the harvest, the sound of a collective festival, the months the river behaves like itself. The communityattributed link between chemical inputs and declining food quality is testimony, not clinical finding, and merits followup. And the ledger's other column is real: the school, the road, the light, and sixteen women's groups that did not exist a generation ago.

DISTRICT 02

Barwani

· Two villages · Sali & Ekalbara (Rajpur block) The irrigation paradox

5▼
LIFE-ELEMENTS DOWN

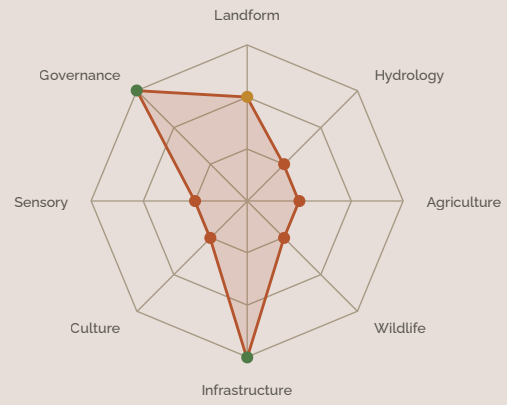
2,252/2,409
ST residents · Ekalbara

125
FARMERS GOING NATURAL

THE LANDSCAPE AND THE CLIMATE SIGNALS

Both villages sit in the Nimar plain of Barwani district, flatter agrarian country where canal and lift irrigation rewrote the farming calendar within a decade. Brick kilns and stone quarries have appeared at Sali's edge, adding dust, smoke and casual employment in the same breath.

COMMUNITY-REPORTED SIGNAL	Village
Groundwater falling despite irrigation: More canals, ponds and lift irrigation — yet groundwater levels dropping and summer scarcity persisting; over-extraction without recharge	Sali, Ekalbara
The third crop blocked: Summer water scarcity prevents a third crop, cutting smallholder income	Ekalbara
Water quality changing: The natural taste of water has changed — communities suspect agricultural chemical runoff	Sali, Ekalbara
Rain at the wrong moment: Rainfall "sometimes too late or too sudden during harvest," causing crop damage; erratic rainfall disrupting the seasonal character	Sali, Ekalbara
Heat and cold both sharpening: Extreme summer heat and winter cold intensifying	Sali



The eight life-elements read across Sali and Ekalbara. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

The senses' record

Barwani's sensory ledger is the pilot's most vivid: the flame-orange Palash bloom gone from Sali's horizon with kilnhaze in its place; the soil clods that no longer form under the plough; the silenced forest and vanished morning birdsong of Ekalbara; the smell of chemicals over the fields and of burning residue in the air; jowar-bajra rotis remembered against the wheat that replaced them; and the women's own chosen marker of cultural change — the ghagra of 10–12 metres giving way to the 5–6 metre saree. These are measurable, community- owned indicators: the Palash's return, the first vulture, the season's first birdsong, the reappearing clod. Water- taste changes and health worries are community-attributed observations, recorded as testimony and deserving of water-quality and publichealth verification.

BARWANI'S DISTINCTIVE INSIGHT

Intensification is not the same as development. Sali's report states that the sensory changes — the vanished Palash, the smell of chemicals, the kiln haze — "reflect the ecological transformation of the landscape more vividly than any data point."

Green stories — small proofs already running

- 125 Farmers Walk Back from the Chemical Edge · EKALBARA — NBS/AGRICULTURE
  thepilot'slargestlivenaturalfarmingtransition,built on Krishi Sakhis and SHG trust.
- An Orchard in Mother's Name · EKALBARA — NBS
  Ek Bagiya Maa Ke Naambringing fruit trees and green cover back, household by household.
- The Colour Returns · SALI — NBS/CULTURE
  Palashplantationasthecommunity's chosen flagship — restoring the season's visual signature and the ecology beneath it together.
- Let the Land Rest · SALI — NBS/GOVERNANCE
  GramSabha-agreed seasonal fallow — the oldest soil technology, revived as collective decision.
- From Smoke to Soil · BOTH — CIRCULAR ECONOMY
  compostingcropresidue and animal waste instead of burning it — cleaner air and the organic matter the soil clods need.
- Leaf Plates Against Plastic · EKALBARA — CIRCULAR ECONOMY
  SHGcloth-bagandleaf-plate enterprise turning cultural memory into livelihood.

GREEN VALUE CHAINS

vermicompost and organic manure through SHGs | natural-farming demonstration clusters | integrated crop–livestock–agroforestry systems | fodder cultivation on commons and fallows | millet processing (jowar, bajra) | vegetable farming (50 SHG members in Sali, 57 in Ekalbara already engaged) | animal husbandry and dairy | tailoring and stitching on the existing SHG base | Palash and native agroforestry products | indigenous seed banks | check dams and water-harvesting works | community forest protection and NTFP enterprise | SHG-led waste management and compost pits

Money & the gaps

The Rajpur cluster convergence note groups the shared Tier-3 asks (indicative routes — verify with block and district administration): groundwater recharge and water conservation (PMKSY-Watershed, MGNREGA, Amrit Sarovar, Jal Shakti Abhiyan); drinking water and pond restoration (JJM, Amrit Sarovar, 15th FC); soil health and organic/natural farming — Sali's fallow-and-organic transition and Ekalbara's 125-farmer scale-up (PKVY/NMNF, ATMA, NRLM); millet and indigenous-seed value chains (Millet Mission/ODOP); plantation, forest and biodiversity — Sali's Palash flagship and Ekalbara's forest protection and vulture/soundscape recovery (MGNREGA, CAMPA, Green India Mission, MIDH); plus youth green skilling (DDU-GKY, RSETI).

The gaps: no instrument pays a farmer to rest land (the fallow demand has no scheme), transition finance for the organic shift is thin even where Krishi Sakhis exist, and kiln regulation requires district enforcement no village budget can buy.

The eight life-elements in Barwani

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	↔ Stable / slight pressure	No major structural change; pressure from agricultural expansion, roads and land-use change on slopes and commons
Hydrology	▼ Declining	The irrigation paradox — infrastructure up, aquifer down; summer scarcity; water taste changing
Land Cover & Agriculture	▼ Declining	Fallow eliminated by three-season cropping; chemical and hybrid dependency rising; the soil clods gone; indigenous seed practices weakening
Wildlife & Biodiversity	▼ Declining	Palash trees disappearing (Sali); vultures nearly gone (Ekalbara); grazing commons shrinking; wildlife entering fields; livestock diversity narrowing to high-yield animals
Infrastructure & Economy	▲ Improving	Canal irrigation, tap water reaching every household (Ekalbara), roads, kiln employment, market connectivity to Rajpur
Cultural & Historical	▼ Declining	Ghagra to saree (a marker the women themselves named); jowar-bajra rotis to wheat-maize diets; dhol-mandal to DJ; leaf plates to plastic — alongside a genuine gain, the shift toward collective inter-community worship
Visual & Sensory	▼ Declining	The flame-orange Palash gone from the seasonal horizon; kiln and quarry haze; residue-burning smoke; the silenced forest soundscape
Community & Governance	▲ Improving	20 SHGs (Sali) and 32 SHGs (Ekalbara) under active Mahila Gram Sangathans; rising Gram Sabha participation; caste barriers reducing; women contesting Panchayat elections

Tiered first moves for Barwani

PRIORITY	A · community led	B · Minor Support	C · External Support
Soil & fallow	Gram Sabha-agreed seasonal fallow rotation; revive gobar manure and compost pits; end residue burning by norm	Soil-testing camps and balanced-nutrient advisory (KVK/ATMA); vermicompost units (NRLM); natural-farming demos with Krishi Sakhi support on the Ekalbara model	Certified organic clusters with transition support (PKVY/NMNF); millet seed banks, processing and market linkage (Millet Mission, ODOP)
Groundwater	Shramdaan pond desilting; protect bunds and commons from cultivation creep; water-budgeting norms	Check dams, percolation tanks, recharge pits, contour bunding (MGNREGA + GP funds)	Watershed treatment ridge-to-valley (PMKSY); Amrit Sarovar-type rejuvenation; regulated-irrigation planning with Agriculture Dept
Trees & biodiversity	Palash and native plantation drives with local saplings; Gram Sabha tree-protection resolutions; grazing norms	Village nurseries; grazing-common demarcation with native grasses and fodder trees (MGNREGA, Forest Dept)	Palash and agroforestry at scale (MGNREGA, CAMPA, Green India Mission, MIDH); Ek Bagiya Maa Ke Naam expansion; kiln and quarry regulation (district administration / MPPCB)
Livelihoods & institutions	Direct the 20- and 32-SHG networks toward landscape decisions; document elders' knowledge; youth engagement	Strengthen vegetable, dairy and tailoring value chains (NRLM-SVEP, RSETI; Rajpur mandi linkage); eco-product enterprise	Youth green skilling (DDU-GKY, Skill India); dairy value chain (Gokul Mission, NLM); LCAT findings institutionalised in GPDP–VPRP



DISTRICT 03

Dewas

Two villages · Richi & Sukhedi (Khategaon tehsil)

6▼
LIFE-ELEMENTS DOWN

~800 ft
Water table · Sukhedi

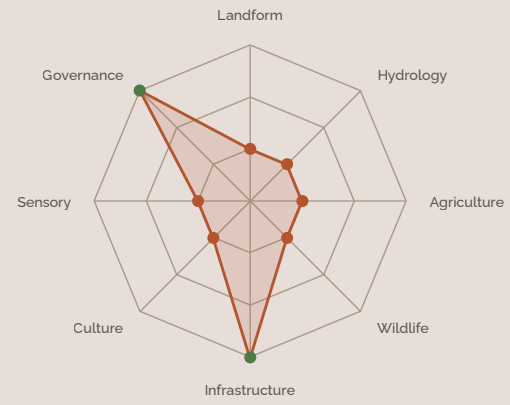
~850mm
RAINFALL, FROM ~1,200

THE LANDSCAPE AND THE CLIMATE SIGNALS

Both villages lie on black cotton soil — Kali Mitti / Shyam Mitti — in Khategaon tehsil, on the margin where Malwa Plateau country meets the Narmada valley. Sukhedi is recorded under Sonesarar Gram Panchayat.

DEWAS'S DISTINCTIVE INSIGHT

The communities have identified the policy inside their ecology. The Baags fell because MSP protects wheat and not trees; the aquifer falls because each borewell is individually rational; solar pumps make the race cheaper to run. The diagnosis is not ignorance — it is incentives.



The eight life-elements read across Richi and Sukhedi. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

The climate signals the community reports

COMMUNITY-REPORTED SIGNAL	Village
Groundwater collapse: Sukhedi ~80–90 ft a generation ago → ~800 ft today, with ~140 private and 6 government borewells against 1 public and 2 private functional wells; Richi ~100–150 ft → ~750 ft, 38 borewells against 5 functional wells	Sukhedi, Richi
Rainfall declining: From a remembered ~1,200 mm to roughly ~850 mm annually	Richi
Recharge structures lost: All 6 Panchayat ponds encroached and turned to farmland; traditional step-wells (Baawdi) completely dried	Sukhedi
Water contaminated: Fertiliser runoff and untreated wastewater polluting ponds — skin disease and itching reported	Richi
Concrete sealing the soil: 70% pakka roads and pakka housing blocking natural absorption and trapping summer heat	Both
Extraction accelerating: Solar pumps under PM-KUSUM intensifying extraction; triple-cropping leaving aquifer and soil no rest	Sukhedi

The eight life-elements in Dewas

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	▼ Declining	Buffer and common land converted to fields and plots; quarry pits (Richi); concrete sealing recharge and trapping heat
Hydrology	▼ Declining — the pilot's steepest fall	The depth race; lost ponds and step-wells; contaminated surface water; recharge blocked by concretisation
Land Cover & Agriculture	▼ Declining	Orchards cut for MSP crops; mono/triple-cropping; Shyam Mitti compacted under urea-DAP; residue burned
Wildlife & Biodiversity	▼ Declining — food-chain collapse	Vultures and eagles nearly gone (chemical residues); foxes, rabbits, deer and peacocks rare; the firefly vanished; Neelgai explosion; tiger–deer incursions at the water's edge
Infrastructure & Economy	▲ Improving (mixed)	High road connectivity, 100% electrification (Sukhedi), the Khategaon haat — against pumping bills, input costs and youth migration
Cultural & Historical	▼ Declining (mixed)	Ram Leela and Phalgun Geet fading; bullock-cart barat motorised; clay-lamp traditions and cultural songs thinning; outside and market food rising
Visual & Sensory	▼ Declining	Shade trees (Peepal, Mahua, fruit) lost — visual aridity; concrete heat; “sterile, flat fields”; vanished butterflies and colour; the silent, firefly-less night
Community & Governance	▲ Improving	Active Panchayats (18 wards in Richi; Sarpanch Manju Bai in Sukhedi); 21 + 5 SHGs; women informed, mobile and decision-making; reduced moneylender dependence

What the communities are asking for

Common across both villages: aggressive groundwater recharge before all else — restore Sukhedi's six pond sites and step-wells, enforce anti-encroachment rules, dig soak pits across Richi; community water budgeting through Village Organisation rules on flood irrigation and the borewell race; revive the Baags — agroforestry and orchard restoration for shade, income and biodiversity, with the jugnu named as its indicator; shift to organic Jaivik Kheti with gobar khad and end residue burning; rebuild livestock so manure returns and stubble becomes fodder; and local SHG-led livelihoods to retain the young. Why it hasn't happened yet: the commons problem in its purest form — no household can stop drilling while its neighbour deepens; encroached ponds have occupants; MSP arithmetic beats orchard patience in every season's budget; cheap, now solar, pumping energy finances the race; and the strong Panchayats and SHGs have had no formal mandate over the aquifer — the “agency gap on water” Richi's own demands table names.

Tiered first moves for Dewas

PRIORITY	A · Community-led	B · Minor Support	C · External Support
Recharge & the depth race	Household soak pits by village norm; Gram Sabha/VO water-budgeting rules on flood irrigation and borewell depth; protect remaining commons and drainage	Soak pits and recharge structures via MGNREGA + GP funds; pond cleaning and protection; village water committees	Restore the 6 pond sites and step-wells with legal reversal of encroachment (Amrit Sarovar, MGNREGA, district administration); watershed treatment (PMKSY); condition PM-KUSUM pumping on recharge and budgeting
Soil & organic transition	Revive gobar khad; end residue burning by norm; willing-farmer Jaivik Kheti plots	Vermicompost units (NRLM); soil testing (KVK/ATMA); demonstration clusters	Organic clusters with transition support (PKVY/NMNF); premium-market and input-enterprise linkage
Orchards & biodiversity	Kitchen gardens (Badi) with local saplings; maintain forest ponds for wildlife; pesticide-reduction norms ("the firefly test")	Maa ki Bagiya orchard planting with sapling and survival support; village nurseries (Horticulture/Forest Dept, MGNREGA)	Baag revival at scale with fruit-tree incentives answering MSP (MIDH, Maa ki Bagiya, CAMPA); Neelgai and wildlife-conflict management with Forest Dept
Livestock & livelihoods	Stall-feeding norms; stubble-to-fodder exchange among households; SHG NRM mandate by resolution	Animal-husbandry training and veterinary camps; SHG enterprise on the Khategaon haat (NRLM-SVEP, RSETI)	Dairy value chain (Gokul Mission, NLM); youth skilling against Indore/Bhopal migration (DDU-GKY); pond-contamination health response (NHM)

The senses' record

Dewas's sensory ledger is written in light and heat: the jugnu that no longer lights the night; the vultures gone from the sky; butterflies and small colourful birds vanished with the flowering trees; fields the reports call visually "sterile" and flat where orchards stood; concrete houses that trap summer heat where mud once kept cool; the lost shade of Peepal and Mahua on paths that now burn underfoot. The water's register: wells that once held visible fish now contaminated, with skin disease and itching reported around Richi's ponds — a community- attributed health link, recorded as testimony and warranting water-quality and public-health verification. The cultural soundtrack thins alongside: Ram Leela, Phalgun Geet, the clay lamp. Every one of these is a monitoring indicator a village can read without an instrument — and the firefly's return is the district's own chosen headline metric.

Green stories — small proofs already running

- The Soak-Pit Village · RICHI — NBS/GOVERNANCE
  aPanchayat proposing that every pucca house and government building must return its runoff to the aquifer — recharge as building code.
- Ponds for Tigers · SUKHEDI — NBS
  temporaryforestponds dug by residents so wildlife drinks at the forest edge, not the village lane.
- Bring Back the Baags · BOTH — NBS
  replanting the ancestral mango-mahua-guava orchards through Maa ki Bagiya and Badi — shade, fruit income, pollinators and the jugnu's habitat in one intervention.
- The Firefly Test · BOTH — MONITORING
  thecommunity's own success indicator — cut the pesticide and fertiliser load until the night lights up again.
- From Stubble to Fodder · BOTH — CIRCULAR ECONOMY
  endresidueburningbyrebuilding the livestock that turns stubble into feed and feed into manure.
- Solar, With Conditions · SUKHEDI — DRE
  thedistrict'shard-wonlesson — pair every solar pump with recharge works and water budgeting, or the sun just drills deeper.

GREEN VALUE CHAINS

orchard and kitchen-garden livelihoods (Maa ki Bagiya, Badi, revived Baags)

organic input economy (gobar khad, jaivik khad, composting) | livestock and dairy

water-harvesting works via scheme convergence — recharge plus wages | diversified and millet cropping to ease the aquifer

SHG micro-enterprise on the 21- and 5-SHG bases anchored to the Khategaon Monday haat

Money & the gaps

The Khategaon cluster convergence note observes that the two villages share one story — groundwater collapse on black soil, cut orchards, a broken gobar cycle, a collapsing food chain, and strong women-led governance running the other way — making block-level convergence efficient, with emphases differing (Sukhedi's six ponds, orchard revival and wildlife conflict; Richi's contaminated ponds, soak-pit mandate and larger 21-SHG network). Indicative Tier-3 routes (verify with block and district administration): pond and recharge restoration (Amrit Sarovar, PMKSYWatershed, MGNREGA, Jal Shakti Abhiyan); orchard and agro-forestry revival at scale (MIDH/Horticulture, Maa ki Bagiya, MGNREGA, CAMPA); organic clusters (PKVY/NMNF, ATMA, NRLM); livestock and dairy (Gokul Mission, NLM); and pond-contamination and health response (NHM; water testing).

The gaps carry a warning the whole state should read: PM-KUSUM solar pumps, unaccompanied by water budgeting, are financing deeper extraction — clean energy accelerating the very collapse other schemes fund works against. Dewas is where the pilot's case for conditional convergence (recharge and rules first, pumping subsidies second) is strongest. And household distress finance is already climate finance by another name: the 800-foot electricity bill is a climate cost paid monthly by those least able.

DISTRICT 04

Dhar

Two villages · Dedla & Chikali (Manawar block)·Improved access,declining sustainability

5▼
LIFE-ELEMENTS DOWN

86.18%
Scheduled Tribe · Chikali

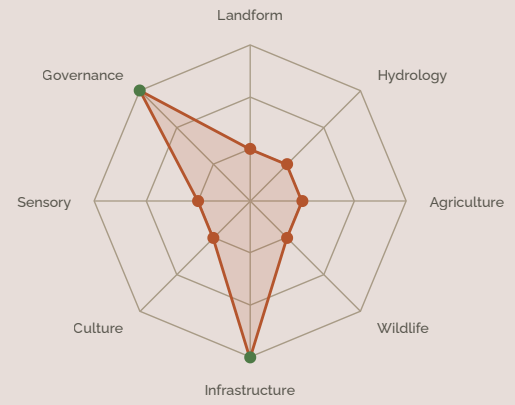
4 → 1–2
YEAR-ROUND WELLS · DEDLA

52.40%
FEMALE LITERACY

THE LANDSCAPE AND THE CLIMATE SIGNALS

Both villages sit in the agrarian Nimar country of Manawar tehsil: tribal-influenced farming villages squeezed, in the reports' phrase, between rising aspirations and falling resources, under partial well- and-motor irrigation.

COMMUNITY-REPORTED SIGNAL	Village
Wells failing one by one: Four year-round wells reduced to one or two	Dedla
Rains visibly fewer: The rains of the last two-to-four years visibly reduced; irregular and delayed monsoons; rising pest attacks	Dedla
Groundwater falling under the tap: Tap connections reached the homes while groundwater falls, ponds silt and summer scarcity persists	Both
Heat rising: Rising temperatures; the cool well-water of memory lost	Both
No safety net for shocks: No structured disaster-risk-reduction mechanism in place for the increasingly uncertain crop	Dedla



The eight life-elements read across Dedla and Chikali. Hydrology is plotted at its declining ordinal: access improved while sustainability fell — one axis moving in two directions. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

DHAR'S DISTINCTIVE INSIGHT

The community here names a moral chain the other districts imply — from the chemical sack to the hardened soil to the sick body to the bankrupt farmer. Chikali's SC group put the health end plainly: “New diseases have arrived — BP, sugar and so on; earlier we ate pure fruit, now sickness rises because of the pesticide-laden food.”

The eight life-elements in Dhar

Dhar's hydrology row carries the pilot's most precise paradox notation: improved access, declining sustainability.

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	▼ Declining	Soil hardened by continuous chemical inputs; land drying; commons converted to farmland and plots
Hydrology	▲ Access improved / ▼ sustainability declining	Tap water at home eased women's daily burden — while wells vanish, ponds silt and the aquifer falls beneath the pipe
Land Cover & Agriculture	▼ Declining	Traditional jowar, mungfali and bhutta under bullock-ploughing replaced by chemical double-cropping with tractors; output up, profit down; the gobar cycle broken
Wildlife & Biodiversity	▼ Declining	Forest cut for furniture and house construction; grazing land shrunk; jackals, rabbits, monkeys, snakes and pollinators now rare
Infrastructure & Economy	▲ Improving (mixed)	Taps, roads, schools, anganwadis, a reachable hospital (Chikali) — but electricity irregular, no in-village health facility (Dedla), costs rising, youth migrating
Cultural & Historical	▼ Declining, with a living anchor	Walked wedding processions now motorised; DJ events replacing family festivity; children's outdoor play displaced by mobile and TV — while Bhagoria and Bhil identity remain a living source of cohesion
Visual & Sensory	▼ Declining (mixed)	Trees cut around homes; shade and greenery lost; the built environment warmer; a new night-time unease (Chikali) — alongside a real rise in women's freedom of movement
Community & Governance	▲ Improving	Accessible Panchayats (“ab Sarpanch aur panch nyay karte hain” — Chikali); 16 and 12–15 SHGs; women in decisions — shadowed by the sex-ratio and literacy gaps

What the communities are asking for

Common across both villages: de-silt the ponds, revive the wells, build recharge pits and rainwater harvesting — and pair the tap with village-level borewell discipline; transition to jaivik kheti with gobar manure and bio-pesticides to break the chemical–disease–bankruptcy cycle; revive animal husbandry to restore the gobar cycle; plantation and forest protection driven through the Panchayat; solar pumps and street lights against costs and irregular power; SHG- and youth-led local livelihoods to slow migration; and channel SHG and Panchayat decision-making into water, soil and forest — the “NRM agency gap” both villages name. Why it hasn't happened yet: household finance routes through input debt and migration; nothing bridges the organic transition's lean seasons; maintenance — de-silting cycles, well revival — remains the orphan of capital budgets; and no convergence route exists for “night safety” or “family festivity,” community demands that cost little but fit no scheme box, which is precisely why the Tier-A column matters.

Tiered first moves for Dhar

PRIORITY	A · Community-led	B · Minor Support	C · External Support
Water & recharge	Shramdaan pond de-silting; protect commons and natural drainage; Gram Sabha borewell-discipline norms; rainwater harvesting by household norm	Recharge pits and structures via MGNREGA + GP funds; well revival where feasible; village water committees	Amrit Sarovar-type rejuvenation; watershed treatment (PMKSY); drinking-water source security (JJM, 15th FC)
Organic & livestock	Revive gobar manure and compost pits; stop residue burning; willing-farmer jaivik plots; stall-feeding norms	Vermicompost and bio-pesticide units (NRLM); soil testing (KVK/ATMA); animal-husbandry training via SHGs; veterinary camps	Organic clusters with transition support (PKVY/NMNF); dairy value chain (Gokul Mission, NLM); biogas infrastructure
Forest & greening	Panchayat-led plantation and protection drives; pasture-revival norms; plant around homes, schools and commons	Village nurseries and grazing-common development (Forest Dept, MGNREGA)	Afforestation at scale (CAMPA, Green India Mission, MGNREGA)
People & institutions	SHG/Panchayat NRM mandate by resolution; community night-vigilance arrangements; family-centred and outdoor festivity for the young; Bhagoria and Bhil identity events	Female literacy and awareness drives (education dept + NRLM); SHG and youth enterprise (NRLM-SVEP, RSETI); solar street lights (GP funds)	Solar pumps (PM-KUSUM, paired with water budgeting); youth skilling (DDU-GKY); in-village health resource advocacy (NHM); LCAT findings institutionalised in GPDP–VPRP

The senses' record

Dhar's sensory ledger runs through the household: the cool, sweet drinking water of the well lost to the borewell's tap; the chulha's wood-smoke cooking traded for gas — convenience gained, forest and money spent; shade trees cut from around homes, the built environment warmer; children indoors with screens where open-air play was; the walked, family-paced wedding replaced by the motorised, DJ-driven event. And the body's register: the community's insistence that "pure fruit" has given way to pesticide-laden food and new diseases — BP, sugar, worse. These health links are community-attributed testimony, not clinical findings — they warrant public-health and water-quality verification, and the villages' own demand for an in-village health resource is the right first response. The honest counterpoint stands: women's mobility and public voice have genuinely risen, and the daily water-carry is gone. Sensory indicators for Dhar's plan: the number of living wells, the coolness of drinking water, the first jackal heard again, children visible at outdoor play.

Green stories — small proofs already running

- The Gobar Economy Restarts · BOTH — CIRCULAR ECONOMY/NBS
  gobarkhad, vermicompost andbio-pesticides produced locally by SHGs — the input economy brought home, with biogas as its modern extension.
- Bhagoria Holds the Line · CHIKALI — CULTURE AS RESILIENCE
  afestivalstillbindingaBhil community together — the social capital every restoration plan here will run on.
- From Ghoonghat to Gram Sabha · BOTH — GOVERNANCE
  thewomen's-institutiontransformation that gives Dhar its delivery engine — and its unfinished business in the literacy gap.
- Sun Over the Fields · BOTH — DRE
  solar pumps andstreet lights against pumping costs and irregular grid power — to be paired with recharge so cheap energy doesn't deepen extraction.
- Four Wells Again · DEDLA — NBS
  wellrevivalandpond de-silting as the village's own success metric — counting its water sources back up.

GREEN VALUE CHAINS

organic input economy (gobar khad, vermicompost, bio-pesticides) | livestock and dairy | composting and biogas from crop and animal residue | agroforestry and plantation | solar energy (pumps, street lights) | pond de-silting and recharge works via MGNREGA convergence — recharge plus wages | SHG micro-enterprise and credit on the 16and 12–15-SHG bases | revived traditional crops (jowar, mungfali, bhutta) with local processing potential

Money & the gaps

The Manawar cluster convergence note groups the shared Tier-3 asks (indicative routes — verify with block and district administration): water conservation and recharge (Amrit Sarovar, PMKSY-Watershed, MGNREGA, Jal Shakti Abhiyan); organic/jaivik transition (PKVY/NMNF, ATMA, NRLM); livestock and dairy (Rashtriya Gokul Mission, NLM); afforestation at scale (MGNREGA, CAMPA, Green India Mission); solar pumps and lighting (PM- KUSUM, MNRE); biogas and residue circular economy; and health-and-literacy convergence (NHM; education and NRLM literacy drives) — the district's distinctive addition, treating the gender gap as a financeable line item.

The gaps: distress currently routes through input debt and migration; nothing bridges the organic transition's lean seasons; and maintenance (de-silting cycles, well revival) remains the orphan of capital budgets. Dhar adds one more: no convergence route exists for "night safety" or "family festivity" — community demands that cost little but fit no scheme box, which is precisely why the Tier-A column matters.

DISTRICT 05

Jhabua

Four villages · Bhimku nd (Thandla) · Ramgarh, Naharpura, Mor (Petlawad)·Theforest was the

6▼
LIFE-ELEMENTS DOWN

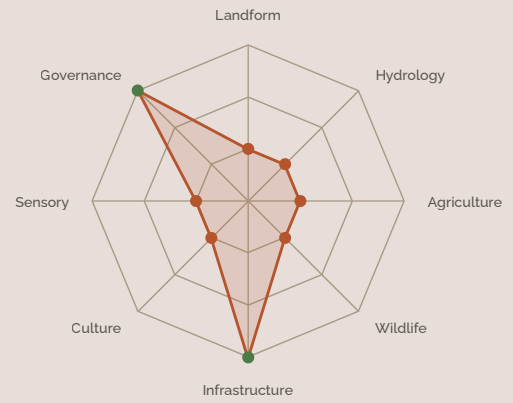
~400 ft
Water table · Bhimkund

~20- 30%
MIGRATION · MOR,

THE LANDSCAPE AND THE CLIMATE SIGNALS

The four villages sit in the western tribal uplands — hilly to gently undulating terrain on red, black and rocky soils. Water endowments differ sharply and drive each village's story: Ramgarh has a canal and the Ladhki river; Mor has the Mahi; Bhimkund has ponds, wells and stop-dams; Naharpura has only ponds, wells and its dry tank.

COMMUNITY-REPORTED SIGNAL	Village
Groundwater falling: Roughly 50% availability at depths of ~400 ft	Bhimkund
Groundwater beyond reach: Deep drilling yields nothing; the built tank stands dry; ponds run low each summer	Naharpura
River losing its recharge: Continuous sand extraction hollowing the Mahi — “without sand the river no longer holds or recharges water”; the river dries in summer	Mor
Surface water weakening despite the Canal lifted water levels (a named gain), but ponds no longer retain water, streams (nalis) dry, water quality slipping	Ramgarh
Rainfall destabilising: Irregular rainfall and rising temperature felt by all groups; unseasonal rain bringing crop losses, pests and new fevers	All four
A wetter past: Paddy was once grown — evidence in living memory of a wetter landscape	Ramgarh



The eight life-elements read across the four Jhabua villages. Ramgarh's hydrology is locally mixed — the canal's gain is real. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

What the communities report the climate has done

SIGNAL	WHAT COMMUNITIES REPORT	VILLAGE
Groundwater falling	Roughly 50% availability at depths of ~400 ft	Bhimkund
Groundwater beyond reach	Deep drilling yields nothing; the built tank stands dry; ponds run low each summer	Naharpura
River losing its recharge	Continuous sand extraction hollowing the Mahi — "without sand the river no longer holds or recharges water"; the river dries in summer	Mor
Surface water weakening despite the canal	Canal lifted water levels (a named gain), but ponds no longer retain water, streams (nalis) dry, water quality slipping	Ramgarh
Rainfall destabilising	Irregular rainfall and rising temperature felt by all groups; unseasonal rain bringing crop losses, pests and new fevers	All four
A wetter past	Paddy was once grown — evidence in living memory of a wetter landscape	Ramgarh



The eight life-elements in Jhabua

The district reads six-down / two-up, with two local nuances: Ramgarh's hydrology is genuinely mixed (the canal's gain is real), and its community-and-governance reading is mixed too — women's awareness is rising but formal commons management remains weak.

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	▼ Declining	Soil hardening under tractors and chemicals (Naharpura's land turning banjar); hills perceived as reducing; erosion rising; vacant land exhausted
Hydrology	▼ Declining (mixed in Ramgarh)	Recharge broken — lost water-holding pits, sand-mined riverbed, thinned forest — while taps and canals improved access; the classic access-up/source-down paradox
Land Cover & Agriculture	▼ Declining	Jowar, bajra, kodo-kutki and paddy giving way to tractor-and-chemical soybean, cotton, maize and wheat; soil barren, input costs up, production falling — "the land's power to give has weakened" (Mor farmer)
Wildlife & Biodiversity	▼ Declining — steepest fall	Lowest-scored theme in Mor and Naharpura; sparrow and honeybee gone from Ramgarh, leopard "only a memory" in Naharpura, mahua and neem reduced, nilgai multiplying into the fields
Infrastructure & Economy	▲ Improving	Roads, a new bridge (Naharpura), pucca housing, taps, schools and health sub-centres (Ramgarh's is the cluster's strongest service base); small enterprises emerging — but migration runs ~20–30% in Mor and Naharpura
Cultural & Historical	▼ Declining, with anchors	Collective life thinning; sacred groves cut and Dussehra fading (Mor) — yet the Ramgarh Fort endures, a stepwell is still tended in Naharpura, and Mor has adopted a thoughtful deep-pit idol-immersion practice
Visual & Sensory	▼ Declining	Birdsong to engine noise, fewer stars, fruit that "lost its sweetness," heat rising and the cool breeze gone (Mor); plastic and DJ noise (Bhimkund) — offset honestly by eased drudgery (Naharpura's hand-grinding gone)
Community & Governance	▲ Improving	23 + 38 + 22 SHGs in Bhimkund, Naharpura and Mor (Ramgarh's SHG/VO platforms also rising); women's land ownership growing; family planning and immunisation adopted from a low base

What the communities are asking for

Shared priorities across all four villages focus on immediate water recharge—including desilting ponds, reviving wells, and maintaining dams. The communities also want to restore organic farming using the traditional manure cycle, revive native millets, plant native trees, and integrate Self-Help Groups (SHGs) into green livelihoods within official village plans.

Unique village demands highlight specific local needs. Naharpura prioritizes repairing failing infrastructure like dry tanks, while Mor demands community oversight of the sand-mining industry. Ramgarh requests solar micro-irrigation, and both Ramgarh and Naharpura want to introduce beekeeping to restore local pollination. Furthermore, Naharpura and Mor are actively advocating for women's land rights as a core environmental policy, while Bhimkund and Ramgarh are using local heritage and legends to anchor their conservation efforts.

Current barriers stalling these initiatives include a broken manure cycle that deprives organic farming of its raw materials, alongside a lack of transition financing and premium pricing in local markets. Additionally, villages currently have no legal mandate to regulate groundwater or sand mining, and the region's powerful SHG networks remain focused solely on credit, leaving them completely untapped for natural resource management

Money, the gaps, and green stories

The communities' shared requests map easily onto major government schemes aimed at water revival, organic farming, traditional crop value chains, afforestation, and solar energy. However, progress is stalled by systemic policy gaps that fund new infrastructure but ignore maintenance, prioritize tap access without ensuring groundwater recharge, and lack the transition financing required for organic farming.

Despite these barriers, five grassroots initiatives are already thriving. In Mor, the community champions a "Cut One, Plant Ten" replanting ethic alongside a proposed self-help group enterprise for waste management. Naharpura demonstrates a deep devotion to upkeep by maintaining an ancient stepwell even as modern works fail. Ramgarh is maximizing its current water resources by adopting solar drip irrigation, and Bhimkund is successfully leveraging its local origin legend to inspire community-wide forest and water conservation.

The senses' record

The gauraiya — the house sparrow — is Ramgarh's own extinction indicator. Mor's mornings have traded birdsong for engine noise and its nights show fewer stars; fruit has lost its sweetness; the cool breeze is gone and heat rising; plastic lies where leaf-litter was; DJ sound plays where the village's own music did (Bhimkund). Health sits inside the ledger — elders link new illnesses to lost clean air and medicinal forest plants (Bhimkund), and unseasonal rain arrives “with new fevers” (Mor). These are community-attributed links, recorded as testimony rather than clinical findings, and deserve public-health follow-up. The counterpoints are honest too: drudgery eased, nutrition awareness up (Naharpura), women's mobility transformed (Mor). The sparrow's return, the month the Mahi runs and the first birdsong are the cheapest monitoring system the district owns.

Tiered first moves for Jhabua

PRIORITY	A · Community-led	B · Minor Support	C · External Support
Water recharge & revival	Shramdaan desilting of ponds and wells; protect bunds; Gram Sabha water-budgeting norms; rebuild traditional water-holding pits	Recharge pits, percolation tanks and bunding via MGNREGA + GP funds; repair the Naharpura tank and handpumps; village water committees	Watershed treatment and Amrit Sarovar-type works (PMKSY, MGNREGA); Mahi sand-mining regulation with local monitoring (district administration); solar drip on the Ramgarh canal (PM-KUSUM, PMKSY-Per Drop More Crop)
Organic farming & soil	Revive gobar manure and compost pits; seed-saving; willing-farmer plots	Vermicompost units (NRLM); soil-testing and advisory camps (KVK/ATMA); demonstration clusters	Organic clusters with transition support (PKVY/NMNF); millet seed banks, processing and market linkage (Millet Mission, ODOP)
Forest & biodiversity	Plantation drives with local saplings; cut-and-protect and anti-hunting norms (Bhimkund); the plant-ten ethic	Village nurseries (Forest Dept saplings + MGNREGA); grazing-common demarcation and fodder trees	Block plantation and degraded-forest restoration (CAMPA, Green India Mission); beekeeping and pollinator recovery (Horticulture/NRLM)
Livelihoods & institutions	Direct SHG/VO meetings toward NRM; youth plantation and water- monitoring corps; women's land- rights awareness	SHG green enterprises — nurseries, organic inputs, waste collection (NRLM-SVEP, RSETI)	Youth green skilling (DDU-GKY, Skill India); forest-produce and NTFP value chains (TRIFED linkage); embed LCAT findings in every GPDP–VPRP cycle

Green stories — small proofs already running

- Cut One, Plant Ten · MOR — NBS
  thevillage'sownreplanting ethic, ready to be aimed at the Mahi and the vanished forest at scale.
- The Stepwell That Never Stopped Being Loved · NAHARPURA — NBS/CULTURE
  oneoldbawdi,stillcleanedandusedamidfailedmodern works — maintenance as devotion.
- Sunlight on the Canal's Gift · RAMGARH — DRE
  community-requestedsolardrip irrigation to stretch water the village already has.
- A Village Sorts Itself Out · MOR — CIRCULAR ECONOMY
  aproposedSHG-runwet–dry waste collection and recyclable-sale enterprise where no waste system exists today.
- The Legend Goes to Work · BHIMKUND — CULTURE AS NBS
  usingtheBhimoriginstoryas the banner for water and forest restoration.

GREEN VALUE CHAINS

vermicompost and organic inputs through SHGs (all four)

plantation, agroforestry and nurseries — mahua and tamarind value addition

millet processing (jowar/bajra

kodo/kutki in Mor)

fodder and grazing restoration with livestock and dairy (Bhimkund)

forest produce — gum, herbs, medicinal plants (Bhimkund)

beekeeping (Ramgarh, Naharpura)

solar enterprise — pumps, lighting, biogas (Mor, Naharpura)

pond-based vegetables, fisheries and nursery work once recharge improves (Mor)

dairy, repair and digital micro-enterprise (Ramgarh)



DISTRICT 06

Sehore

Two villages · Ratanpur & Sagonia (Budni block)

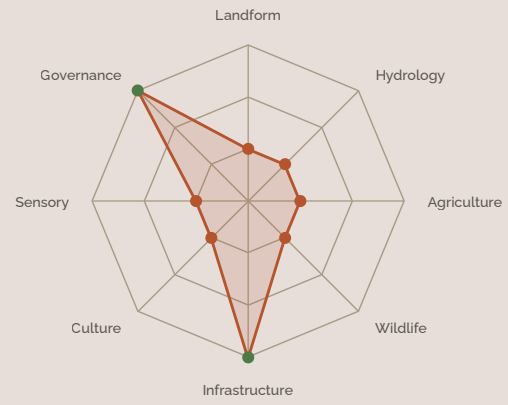
6▼

LIFE-ELEMENTS DOWN

THE LANDSCAPE AND THE CLIMATE SIGNALS

Budni block sits along the Narmada valley on the Vindhyan plateau's edge: a landscape of forested hills within memory, now showing what Ratanpur's report calls a growing imbalance between the regeneration of natural resources and the pace at which they are consumed. Livelihoods combine agriculture with NTFP collection (Mahua, Tendupatta), animal husbandry and seasonal wage migration.

COMMUNITY-REPORTED SIGNAL	Village
The river dying: A once-perennial river dry by February–March; erosion rising near its banks	Sagonia
Ponds that no longer hold: Water flows away from the ponds rather than being retained; pond water quality deteriorating	Ratanpur
Tube wells failing: Summer failures "where such problems were once unknown"	Sagonia
Cropping constrained: Only two crops now possible for want of water	Ratanpur
Heat up, rain down, green gone: Rising heat, reduced rainfall, hill greenery giving way to barrenness, less clean air	Both



The eight life-elements read across Ratanpur and Sagonia. Encoding is ordinal — inner→outer: declining · mixed/stable · improving. Not a measured index.

SEHORE'S DISTINCTIVE INSIGHT

The district states the pilot's moral economy most plainly — the trade of taste, strength and the swimmable river for yield and convenience — and states its fear just as plainly: "If it continues like this, people will have to go to the city for work and families will scatter." (Sagonia)

The eight life-elements in Sehore

LIFE-ELEMENT	DIRECTION	WHY
Landform & Topography	▼ Declining	Soil hardening and compaction; natural slopes flattened by agricultural expansion; erosion near the river; hill barrenness
Hydrology	▼ Declining	The drying river and seasonal ponds; failing tube wells; water flowing away unheld; drinking-water concern in half of Ratanpur
Land Cover & Agriculture	▼ Declining	Organic, livestock-based farming replaced by urea-DAP-pesticide systems within a decade; fertility falling; costs rising
Wildlife & Biodiversity	▼ Declining	Fish, large game and even crocodile reduced; tree cover thinned; forest cut for homes and furniture; mechanisation displacing livestock
Infrastructure & Economy	▲ Improving	Pucca roads, electrification, piped and handpump water, pucca housing; Ratanpur's full school chain (primary to higher-secondary); shift toward self-employment in Sagonia
Cultural & Historical	▼ Declining (mixed)	A once Gond-dominated village now mixed (Ratanpur); Ramleela and bhajan traditions thinning; festivals louder, costlier and more polluting — DJs, fireworks, chemical colours
Visual & Sensory	▼ Declining	Greenery gone from the hills; rising heat and plastic waste; the cool, clean environment of memory eroded
Community & Governance	▲ Improving	9 + 6 SHGs under two Mahila Gram Sangathans and the shared Ekta CLF; collective, women-inclusive decision-making; reduced caste barriers

What the communities are asking for

Common across both villages: bring the water back first — stop-dams built and repaired and the riverbed deepened in Sagonia; ponds repaired, deepened and new soak pits and small ponds built at named field sites where rainwater already gathers in Ratanpur; return to gobar manure and organic farming to restore the soil and the food's nourishment; rebuild animal husbandry to restart the manure cycle; plant and protect trees on cleared land and hill slopes; and keep decision-making collective, women-led and inclusive — a demand both villages list under governance in nearly identical words. Why it hasn't happened yet: the river's decline is a catchment problem no single village can reverse alone — recharge failed upstream of every stop-dam; livestock cannot return without fodder and the hill commons that carried it; the chemical treadmill finances itself seasonally while the organic transition does not; and festival economics ride wider market currents the village can name but not control. The distinctive financial asset here is the Ekta CLF, a cluster federation already spanning both villages, giving convergence a single institutional counterpart.

Tiered first moves for Sehore

PRIORITY	A · Community-led	B · Minor Support	C · External Support
Surface water	Shramdaan pond repair and cleaning; protect pond bunds; community water-management norms; identify and agree the named soak-pit and pond sites	Soak pits and small ponds at the named field sites (MGNREGA + GP funds); repair the existing stop-dam; village water committees	Stop-dam chain and riverbed deepening (Amrit Sarovar, PMKSY-Watershed, MGNREGA, Jal Shakti Abhiyan); drinking-water security for failing tube wells (JJM, 15th FC); water access at the anganwadi
Soil & organic transition	Revive gobar manure and ash-and-compost inputs; reduce chemical use on willing plots; protect hill vegetation from cutting and burning	Vermicompost units (NRLM); soil testing and advisory (KVK/ATMA); demonstration plots	Organic clusters with transition support (PKVY/NMNF); premium-market linkage
Livestock, forest & fisheries	Promote animal husbandry among willing households; plantation and sapling care on cleared land and slopes; collective norms against deforestation	Fodder development; veterinary support; nursery raising (Forest Dept, MGNREGA, NRLM)	Dairy value chain (Gokul Mission, NLM); afforestation at scale (CAMPA, Green India Mission); fish-farming development in restored waters (Fisheries Dept)
Culture & institution s	Curb DJs, fireworks and chemical colours by community norm; balanced-festival agreements; parents-and-teachers cultural transmission; keep decisions collective and women-led	SHG cultural platforms and awareness; NTFP processing enterprise (NRLM)	NTFP value chains at scale (TRIFED/ODOP linkage); youth skilling and anti-migration livelihoods (DDU-GKY, RSETI, NRLM-SVEP); LCAT findings institutionalised in GPDP–VPRP via the Ekta CLF platform

The senses' record

Sehore's sensory ledger begins on the tongue and ends in the river. Food that once carried the forest's taste — "whatever we ate was full of taste" — now fills without strengthening, in the community's own words; the elders link the change directly to urea, DAP and pesticide. The hills that framed the villages in green now stand barren; the air is warmer and less clean; plastic accumulates where leaf and ash once returned to the soil. The river's The health and food-quality attributions are community testimony, not clinical findings, and warrant public-health follow-up — but as monitoring indicators they are unmatched: the month the river runs dry, the taste of the harvest, the first fish back in the pond, a child learning to swim register is generational, a watercourse that taught every child to swim now dries before the lesson can begiven. Festival sound has changed character too —louder, brighter, morechemical, less collective.

Green stories — small proofs already running

- Teach the River to Stay · SAGONIA — NBS
  stop-dams,repair andriverbed deepening to hold the water that now escapes — with the children's swimming as the generational success metric.
- The Village That Mapped Its Own Water · RATANPUR — NBS/GOVERNANCE
  soak pitsand pondsdemandedatnamedfield sites where rainwater already gathers — participatory hydrology done before any engineer arrives.
- Fish in the Restored Pond · BOTH — NBS/LIVELIHOOD
  fisheriesasthedividendofwater-body restoration — income designed to arrive only when the ecology does.
- The Gobar Economy · BOTH — CIRCULAR ECONOMY
  livestockrevivedsomanure feeds the soil again — vermicompost and gobar inputs as SHG enterprise replacing purchased chemicals.
- Mahua and Tendupatta, Value Added · BOTH — NBS/LIVELIHOOD
  NTFPprocessingthroughSHGenterprise — remonetising the standing forest the district is losing.
- A Quieter, Cleaner Festival · RATANPUR — CULTURE
  curbingDJs,fireworksandchemical colours — celebration reclaimed as community practice rather than expenditure.

GREEN VALUE CHAINS

organic farming and bio-fertiliser (vermicompost, gobar-based inputs) | NTFP value addition (Mahua, Tendupatta) | livestock and dairy | fisheries in restored ponds and river pools | pond and soak-pit construction as recharge-plus-employment | agroforestry and plantation-based livelihoods | local enterprise and self-employment on improved roads and electricity (Sagonia)

Money & the gaps

The Budni cluster convergence note observes that the two villages tell one story — drying surface water, the "eating poison" transition, the broken livestock–manure cycle, thinning forest, and women-led governance rising — with the water entry-point differing only in form: a river and stop-dams in Sagonia; ponds and soak-pits at named field sites in Ratanpur. Indicative Tier-3 routes (verify with block and district administration): surface- water restoration (Amrit Sarovar, PMKSY-Watershed, MGNREGA, Jal Shakti Abhiyan); drinking-water security for failing tube wells and the halfvillage scarcity (JJM, 15th FC); organic/natural farming (PKVY/NMNF, ATMA, NRLM); NTFP value chains for Mahua and Tendupatta; fisheries in restored waters; and green livelihoods against migration (NRLM-SVEP, DDU-GKY, RSETI, ODOP).

The distinctive financial asset here is the Ekta CLF — a cluster federation already spanning both villages, giving convergence a single institutional counterpart. The gaps are the state's usual three — maintenance, transition finance, and the household squeeze — plus one local irony: festivals are absorbing rising household spend even as farm profit falls, a private finance drain no scheme addresses but the villages themselves have flagged.

Conclusion

What thirteen villages, across six districts, taught one state about itself.

Thirteen villages in six districts, assessed between February and April 2026, were never meant to speak with one voice. They sit in three different landscape belts, on red and rocky upland soils, on canal-irrigated Nimar plain and on the black cotton soil of the plateau edge. They keep different festivals and pray at different shrines. Yet asked to read their own landscape across eight life- elements, they returned very nearly the same reading: six elements falling, two rising — the natural and cultural systems in decline, the built and institutional systems improving. That convergence, arrived at independently in thirteen separate exercises, is the central finding of this pilot.

The shape of it is consistent enough to state plainly. Recharge broke before extraction accelerated. Forests thinned, ponds silted or were encroached, the traditional water-holding pits fell out of use and pucca surfaces sealed the ground — and only then did borewells chase the water down: to roughly 800 feet in Sukhedi, 750 in Richi, past the reach of drilling altogether in Naharpura, where the tank stands built and dry. The manure cycle broke next. Livestock left, gobar dwindled, urea and DAP filled the vacuum, and the soil that once formed firm clods under the plough in Sali hardened into what Dedla's farmers call bankruptcy on their own inputs. And culture frayed alongside the ecology, not separately from it — the same market logic that swapped gobar for urea swapped the dhol for the DJ, and the communities said both things in the same breath.

> WHAT THE VILLAGES ARE NOT ASKING FOR
>
> Not one of the thirteen asked to be given something it had never had. Every substantive demand was for repair — the pond returned, the well revived, the orchard replanted, the grazing common demarcated, the festival danced collectively again. Even the most radical asks are asks for restraint: water budgeting, borewell discipline, a rested fallow, a hunting ban, a quieter festival. The state is more used to receiving demands for assets than demands for rules.

Three things follow, and none of them requires a new scheme. First, the first steps cost nothing but a mandate. Across every district's tiered plan, the Tier-A column — shramdaan desilting, Gram Sabha resolutions on extraction, compost pits, seed-saving, plantation with locally collected saplings — needs no external money at all. What it needs is permission and standing. Second, the institution to carry it already exists and is pointed the wrong way. More than two hundred self-help groups, their Mahila Gram Sangathans, Village Organisations and the Ekta CLF are, in the villages' own assessment, powerful on credit and welfare and nearly silent on water, soil and forest. Closing that agency gap is the single highest-leverage act available in these six districts. Third, convergence must become conditional. Dewas supplies the warning the whole state should read: solar pumping subsidised without water budgeting simply drills the depth race deeper, for free. A tap above a falling water table, a tank without a maintenance budget, an orchard felled because wheat has a support price and fruit does not — each is a scheme working correctly against a landscape nobody was reading.

That is what the Community-led Landscape Assessment changes. It does not arrive with answers; it arrives with questions, and it treats the grief of a changed landscape as the earliest, finest-grained data a warming state possesses. Its outputs — a landscape profile, an element-wise scorecard, a tiered and ranked action list — are built to enter the GPDP–VPRP cycle the village already runs each year, which is the only route by which a reading becomes a budget. Thirteen villages have now done that reading and written their priorities down. The instrument works; what remains is whether the planning system will read what they wrote.

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“This is the first time we have looked at our village, and all that has changed in it, together — as one community.”

A self-help-group member, LCAT field conversations

ABOUT THIS REPORT

Reading the Village Whole —a state report on the Community-Led Landscape Assessment (LCAT) pilot in Madhya Pradesh.

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