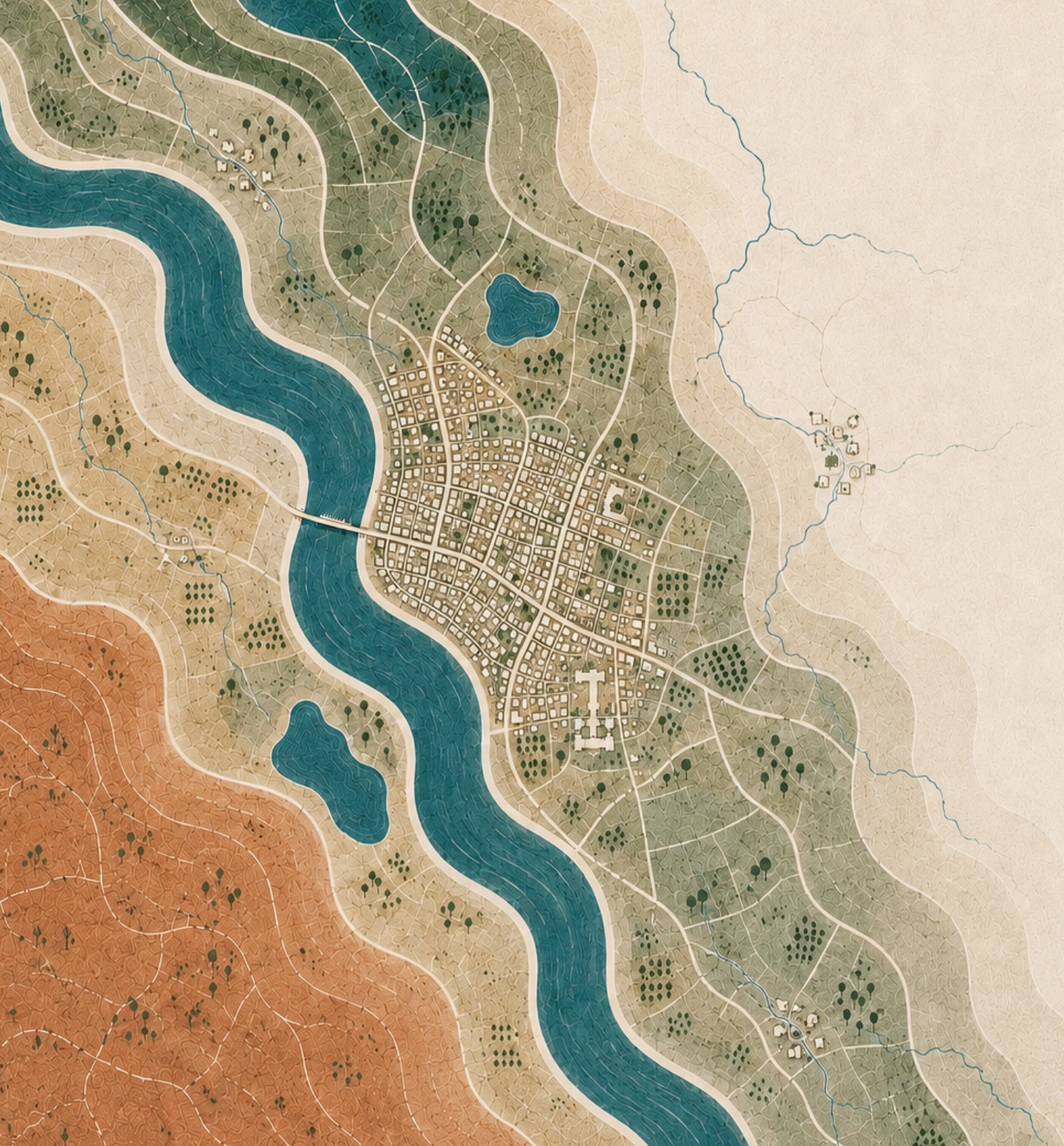




What We Learnt from Climate Action Planning in Small Towns



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acknowledgements

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abbreviations

AMRUT	Atal Mission for Rejuvenation and Urban Transformation	LAHDC	Ladakh Autonomous Hill Development Council
BMZ	German Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)	LCB	Local Council Body
BORDA	Bremen Overseas Research and Development Association	MI	Minor Irrigation Department
CAP	Climate Action Plan	MLA	Member of the Legislative Assembly
DC	District Collector	MT	Metric Tonnes
DDMA	District Disaster Management Authority	MVD	Minimum Viable Dataset
CGWB	Central Groundwater Board	NBS	Nature-Based Solutions
DMA	Directorate of Municipal Administration	NGO	Non-Governmental Organisation
DPR	Detailed Project Report	NGT	National Green Tribunal
DUDC	District Urban Development Cell	O&M	Operation and Maintenance
DULT	Directorate of Urban Land Transport	PPP	Public-Private Partnership
EMPRI	Environmental Management and Policy Research Institute	RDPR	Rural Development and Panchayat Raj Department
FC	Finance Commission	RTO	Regional Transport Office
FSM	Faecal Sludge Management	SBM	Swachh Bharat Mission
GHG	Greenhouse Gas	SFC	State Finance Commission
IMD	India Meteorological Department	SHG	Self-Help Group
KPTCL	Karnataka Power Transmission Corporation Limited	SWM	Solid Waste Management
KSDB	Karnataka Slum Development Board	TPA	Town Planning Authority
KSDMC	Karnataka State Disaster Management Centre	TPD	Tonnes Per Day
KSPCB	Karnataka State Pollution Control Board	UDD	Urban Development Department
KSRTC	Karnataka State Road Transport Corporation	ULB	Urban Local Body
KUIDFC	Karnataka Urban Infrastructure Development and Finance Corporation	WASH	Water, Sanitation and Hygiene
KUWSDB	Karnataka Urban Water Supply and Drainage Board	ZP	Zilla Panchayat

about the document

This learning note brings together reflections from FISH and all its partners' experience supporting climate action planning in small towns through the lens of WASH, governance, municipal systems, and everyday service delivery.

It is **not a manual** or step-by-step guide to preparing a Climate Action Plan (CAP). Rather, it captures **practical learnings** that emerged as we worked with municipalities, state institutions, local stakeholders, and field realities - many **challenging our initial assumptions** about how climate action is planned, financed, governed, and implemented in small towns.



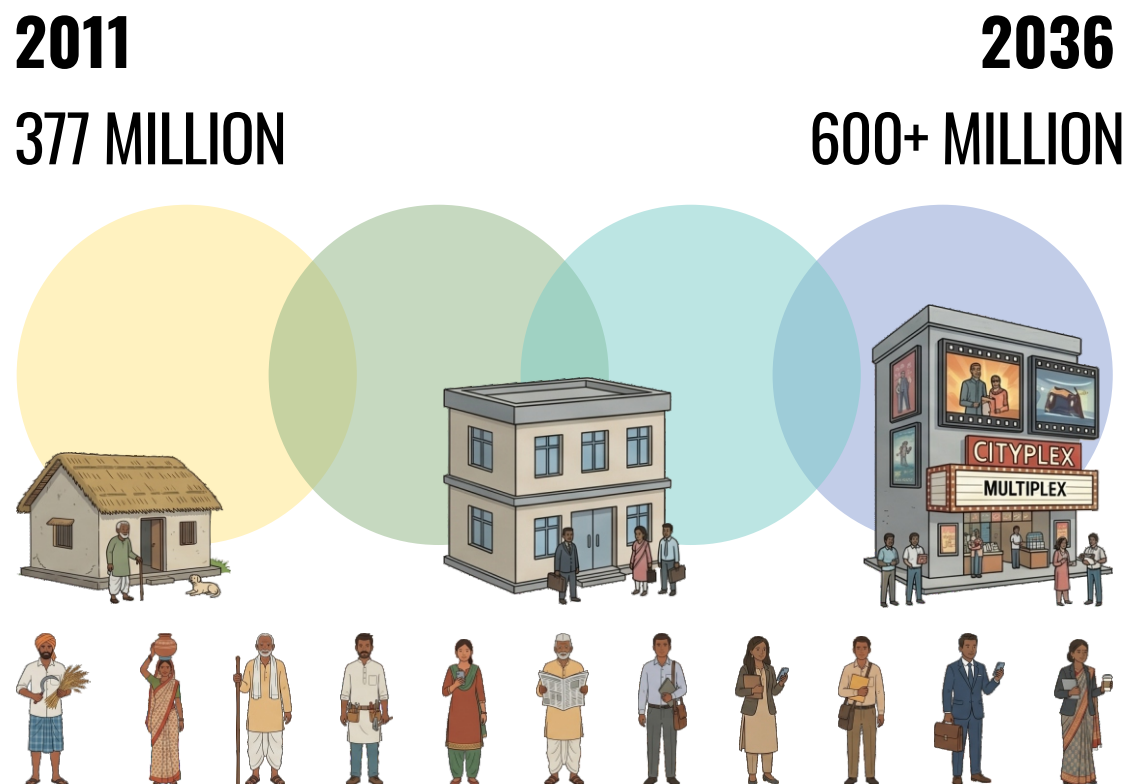
BACKGROUND:

Small Towns, Climate Stress, and the Development Question

1 INDIA'S URBAN TRANSITION BEYOND METROS

India's urban transition is unfolding beyond metros. Census 2011 counted 7,935 towns with 377 million urban residents. By 2036, urbanization will cross 40%, reaching 600+ million by 2036. Small towns are changing in how they consume water, generate waste, or use infrastructure. Yet planning, finance, and governance often lag. This creates risk and opportunities. These towns are the frontline of change - vulnerable to weak systems, but pivotal as laboratories for scalable, replicable solutions. India's urban future will be decided as much in these towns as in its largest cities.

India's urbanization is not just about where it is happening, but whether we truly recognize the towns and settlements where this transition is taking shape on the ground.



2 SMALL TOWNS, BIG RESPONSIBILITIES, WEAK SYSTEMS

Small towns are expected to deliver everything - water, sanitation, housing, roads, waste management, health, livelihoods, and environmental protection. Yet they operate with limited staff, weak data, tight finances, and dependence on higher tiers of government. Urban planning skills are evolving fast, but recruitment and training remain outdated. The result is a vicious cycle: low growth, low revenue, and too few skilled professionals, leaving towns underprepared even as they carry India's urban future.

India's urbanization is not defined by speed, but by whether small towns have the systems, resources, and authority to manage that transition.

3 CLIMATE RISKS IN EVERYDAY SYSTEMS

Climate change is adding a new layer of pressure to this already stretched transition. Heat, flooding, drought, erratic rainfall, and water stress are not distant events for small towns - they cut directly into everyday systems: a dry borewell, an overflowing drain, a toilet without water, a school without shade, a waste route exposed to extreme heat, or a ward that floods each monsoon. The risks are widespread: 85% of districts face extreme climate events, and 45% are seeing shifting patterns. Groundwater stress deepens the challenge, with 193 districts already over exploited or critical. For towns dependent on groundwater, this is not just environmental - it threatens service reliability, public health, and resilience.

Small towns are not at risk because of climate exposure alone, but because of whether their water, sanitation, waste, labour, and public health systems can withstand those shocks.

WASH AS THE GATEWAY TO CLIMATE-RESILIENT DEVELOPMENT

Water, sanitation, and waste systems are where climate risks first show up, making WASH a practical starting point for small town climate action. But resilience cannot be confined to WASH. It must extend into planning, land use, public health, worker safety, local economies, disaster preparedness, finance, and governance. The challenge is not simply acknowledging risks, it is building the systems, data, authority, and capacity to act.

The question is not whether WASH alone can absorb climate shocks, but whether it can unlock planning, governance, finance, and public health systems that make small towns truly climate resilient.

LEARNING

1 Water and Waste – The Frontline of Municipal Agency

Climate resilience is limited to what municipalities control; water and waste are the truly actionable frontline.

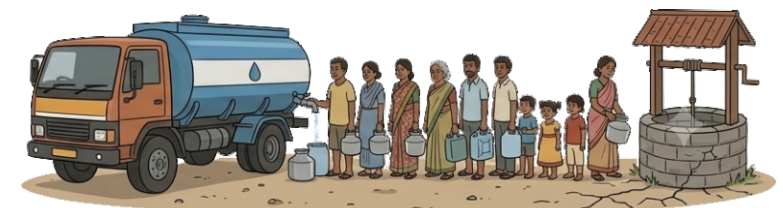


The Strategic Entry Point

In fragmented small-town governance, WASH (Water, Sanitation, and Hygiene) is not just a service - it is where the 74th Amendment's vision of "local self-government" is realised. While energy, transport, and land use remain tied to state parastatals, WASH is where the ULB holds the mandate, budget, and staff.

	Planning	Implementation	Operations / Monitoring
Mobility 	DULT	KUIDFC	RTO, KSRTC
Energy 	BESCOM, KREL		
Urban Planning & Biodiversity 	TPA	TPA, CMC, KFD	TPA, CMC
Housing 	TPA, CMC	CMC, KHB, KSDB	CMC
Water & Sanitation 	CMC, KUWDSDB	CMC, KUWDSDB	CMC
Solid Waste 	CMC	CMC	CMC

Sectoral Institutional Responsibility Matrix in a Small Town





Why WASH is the "Practical Anchor"

1. **Unrivalled mandate** : WASH is the sector where ULBs can act directly without waiting on external approvals. This makes climate resilience actions feasible, locally controlled, and immediately actionable.
2. **Resource density** : In small towns, ~60% of budgets and ~80% of personnel are already dedicated to WASH. Climate action needs no "new money," "smart spending" of existing funds, embedding interventions into current systems and avoiding new funding burdens.
3. **Direct climate impact interface** : Flooding, drought, and heat stress first disrupt water supply systems, drainage, and sanitation networks. Strengthening WASH systems enables municipalities to address climate risks at their point of first impact.
4. **High political and public accountability** : Water shortages, flooding, or waste mismanagement trigger immediate citizen response and pressure, turning service failures into visible climate action.
5. **The 16th Finance Commission (FC) factor** : With increasing tied grants directed toward water and sanitation, the ULB has the financial ammunition to pivot toward climate-sensitive infrastructure.
6. **Direct climate-health nexus** : Climate shocks hit water and waste first, triggering health crises (e.g., post-flood cholera) and pollution. Fixing WASH prevents escalation, cuts waste methane, and advances adaptation, equity, and net-zero goals - fitting small-town realities.



What It Means For Practice

1. **Own the mandate** : Focus where ULB control is real - WASH enables immediate climate action without waiting for approvals.
2. **Redirect the flow** : Shift existing budgets and staff towards climate-aligned investments - do not wait for new funding.
3. **Target the first Impact** : Build resilience where climate shocks hit first - water, waste, and service continuity.
4. **Leverage public pressure** : Turn visible service failures into political momentum for long-term climate action.
5. **Operationalize health** : Climate-proof sanitation now to prevent future health crises and reduce long-term costs

LEARNING

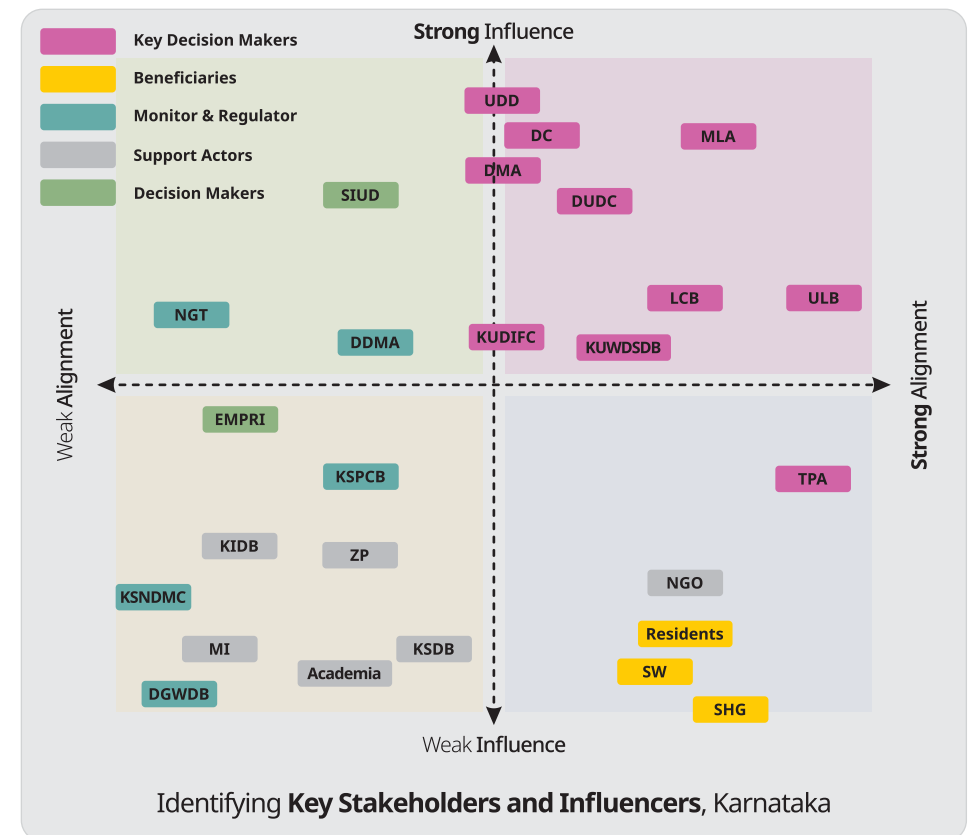
2 What Actually Shapes Outcomes In Small Towns

Climate action in small towns works when it is embedded in systems, aligned with power and funding, and proven through visible results.



The Institutional Reality and Political Reality

Climate-resilient WASH delivery in small towns operates within complex political and institutional realities, marked by overlapping mandates and competing priorities. Building collective ownership requires aligning political, administrative, regulatory, and community interests.





What Actually Shapes Decisions

1. **Power shapes delivery:** While many stakeholders influence WASH, funding and implementation depend on a small group of key state, district, and political decision-makers.
2. **Influence drives delivery:** Projects move through approval, funding and political backing, not formal designation alone.
3. **Money and mandates matter:** Climate actions succeed when linked to schemes, incentives, and existing funding channels.
4. **Visibility secures buy-in:** Visible public gains create political support faster than stand-alone climate plans.
5. **Quick wins build momentum:** Small pilots and peer examples prove feasibility and accelerate uptake.



What It Means For Practice

1. **Use existing budgets strategically:** Channel tied grants and municipal allocations toward climate-sensitive upgrades instead of waiting for new climate finance.
2. **Anchor resilience in schemes and mandates:** Link actions to Swachh Survekshan, 16th Finance Commission incentives and state programmes so resilience becomes part of routine compliance.
3. **Prioritise visible public gains:** Revived lakes, improved drainage and cleared waste sites build public trust and political momentum faster than abstract climate plans.
4. **Demonstrate through quick wins:** Use low-cost pilots and peer examples to prove feasibility, reduce risk, and accelerate adoption.
5. **Plan actions aligned to political tenure:** Design climate actions with political tenures in mind, ensuring visible, short- to medium-term impacts. This creates ownership among elected representatives and provides recognition for delivering meaningful climate outcomes during their term.
6. **Build coalitions, not single champions:** Sustain momentum by aligning political leaders, officials, and communities rather than relying on individual champions.
7. **Bring decision-makers into planning early:** Integrate funders, approvers and political leaders into the CAP process and align actions with budget and political cycles.



3 Climate Solutions Must Match Capacity

Climate action in small towns succeeds not only through technical ambition, but when climate priorities align with municipal systems, institutional realities, financing pathways, and practical implementation capacity.



Climate Solutions That Municipalities Can Deliver

Climate action in small towns succeeds only when ambition matches municipal reality. Beyond technical merit, actions must pass a feasibility filter - whether municipalities can finance, implement, and sustain them within existing capacity and realistic timelines. Actions aligned with local systems, budgets, and governance are the ones that scale.



Example: From Recommendation to Project

Broad Recommendation :

"Improve solid waste management"

Project-Oriented Action :

Specify the priority - decentralised waste processing, composting, dry waste recovery, collection improvement, legacy waste remediation, or landfill recovery - so the action has a clear scope, ownership, and implementation pathway.





Five Feasibility Filters for Small-Town Climate Action

1. **Plan to the window of influence** : Sequence actions across immediate, short- and long-term horizons, prioritising visible actions that can move within 1–5 years and existing political cycles.
2. **Keep adaptation at the centre** : Focus on reducing service stress, protecting vulnerable groups, and improving preparedness.
3. **Convert recommendations into projects** : Move beyond policy statements. Climate priorities become actionable only when translated into projects with timelines, costs, ownership, and funding routes.
4. **Test municipal capacity early** : Assess staff, skills, systems, and O&M capacity before recommending interventions. Technically sound projects fail when ownership or responsibility of maintenance is unclear.
5. **Align with existing programmes and funding** : Climate actions rarely move through stand-alone budgets. Linking them to schemes, DPRs and departmental mandates creates practical pathways for approval and financing.

In Chintamani, climate action was integrated with ongoing water, sanitation, waste, drainage, health, and disaster programmes - shifting the plan from a climate wish list to a practical municipal tool for coordination, approvals, and funding.



What It Means For Practice

For practitioners, feasibility is not a final check - it is the starting point of climate planning.

1. **Diagnose service stress** : Identify climate risks through flooding, water, sanitation, and heat-related disruptions.
2. **Assess municipal readiness** : Evaluate staffing, budgets, institutions, and political priorities.
3. **Sequence for delivery** : Advance quick wins while phasing longer-term investments.
4. **Work through municipal services** : Prioritise WASH and sectors within ULB mandate.
5. **Turn priorities into projects** : Define scope, ownership, timelines, and delivery routes.
6. **Test feasibility early** : Confirm municipal capacity and long-term ownership.
7. **Secure funding pathways** : Link actions to schemes, DPRs and investment pipelines.
8. **Demonstrate early results** : Use visible gains to build trust, momentum, and political support.

LEARNING

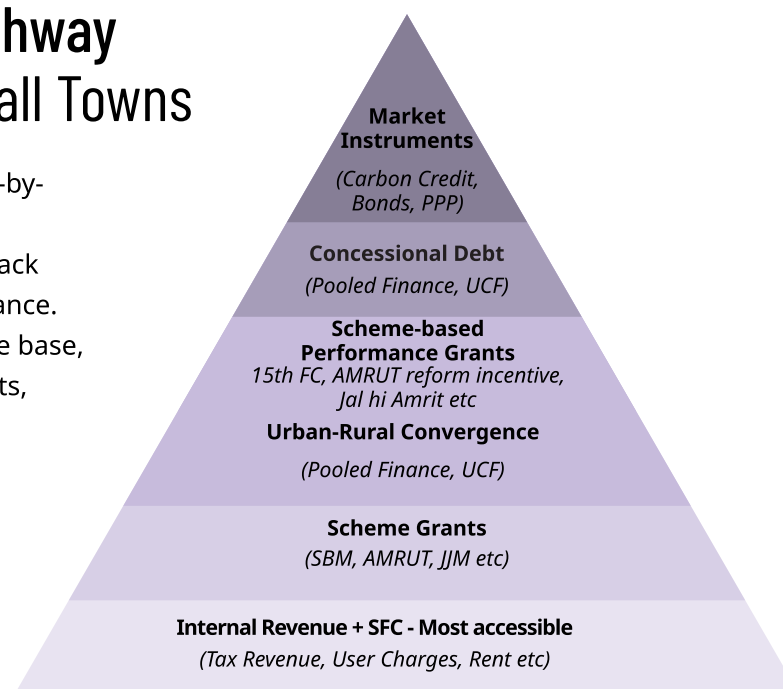
4 Financing Climate Resilience through a Practical Financing Ladder

Climate finance for small towns is not a leap to sophisticated instruments but a ladder - built first on local revenues, converged investments, and financial credibility



A Stepwise Financing Pathway For Climate-Resilient Small Towns

Climate resilience in small towns needs step-by-step financing, not complex instruments. A financing ladder is essential as most towns lack scale and creditworthiness for advanced finance. Internal revenues and SFC transfers form the base, building strength and unlocking future grants, concessional finance, and investment



Financial Ladder for Small Towns

Most Difficult	Requires financial maturity to access market based financial instruments, complex structuring, poor capacity, lack of fiscal autonomy hinders access to these funds. Takes years.
Harder to access	Requires creditworthiness, aggregation, or guarantees. Suitable for resource constrained towns if intermediaries exist such as HUDCO, GoI, State financial institutes for guarantees
Conditional access	Rewards financial discipline & outcomes. Not automatic, but achievable with better performance (e.g., garbage-free rating)
Moderate access	Requires coordination but lower per-capita costs. Shared Pooling risks, costs & resources. Practical climate resilience with co-benefits
Widely available	State and national development schemes are already accessible to small towns. These schemes are targeted, address infrastructure gaps, and provide substantial capital support.
Most accessible	Most immediate pool of funds within ULB control. No external approvals. Improves operational efficiency and enhances resilience (e.g., Improved service hours, Tax recovery, etc.).



Three Financing Pathways for Climate-Resilient Small Towns

1. **Start with accessible finance** : Internal revenues, SFC transfers and municipal funds form the base layer of climate finance. Improving collections, financial discipline and governance strengthen municipal credibility and unlocks performance grants, concessional finance, and future investment.
2. **Converge Urban and Rural Investments** : Small towns at the urban-rural interface enable pooled funding across departments. Water, waste, and shared infrastructure can be financed through converged investments involving RDPR, Minor Irrigation and DDMA.
3. **Treat Market Finance as a Long-Term Goal** : Carbon markets, green bonds and private finance require scale, technical capacity, and financial credibility that most small towns lack, making them difficult to access without strong bankable projects and repayment capacity.



What It Means For Practice

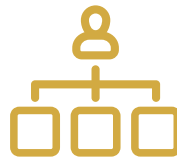
For practitioners, financing climate action means working through concrete, sequenced steps:

- **Start with what the municipality controls** : Assess internal revenues, user charges and SFC transfers, plug leakages and improve collections before looking for external funds.
- **Map funding sources and align actions early** : Identify schemes across urban, rural and district departments (water, sanitation, RDPR, irrigation, disaster management) and embed climate works into them instead of standalone projects.
- **Bundle projects for convergence** : Combine interventions (water, drainage, waste, public spaces) so they can tap multiple funding streams together.
- **Test municipal capacity** : Check staffing, procurement systems, O&M and financial authority; downscale or phase if capacity is weak.
- **Use existing schemes and projects** : Insert climate actions into DPRs and departmental plans rather than creating separate project lines.
- **Build future finance readiness while implementing today** : Improve DPR quality, data systems, and audit readiness to unlock concessional and performance-based finance over time.

LEARNING

5 Climate Action Needs A Home Inside The System

Climate action in small towns becomes durable not through stand-alone structures, but when embedded in the plans, people, systems, and institutions that already govern service delivery.



Climate Action Fails When It Sits Outside the System

A Climate Action Plan (CAP) is effective only when embedded in existing planning, administrative and financing systems. In small towns, CAPs are often non-statutory - strong in analysis but weak in authority. Climate actions gain traction only when integrated into DPRs, budgets, Master Plans, and departmental systems, making them part of formal approvals, funding, and implementation rather than stand-alone recommendations.



Three Principles for Institutionalising Climate Action

1. **Integrate CAPs into existing systems** : Climate priorities must be embedded in plans, DPRs and budgets, linked to service delivery, and tracked through existing municipal systems. Priority actions should be scheme-linked and supported by simple, monitorable indicators.
2. **Treat capacity as core infrastructure** : Capacity building is not a training add-on but the bridge between planning and implementation. In small towns, it must be continuous, hands-on and tied to real municipal tasks. Since climate staff are limited and teams overstretched, institutionalisation depends on building capacity at three levels - municipal skills, institutional continuity, and wider ecosystem support - to help officials identify risks, prioritise actions, coordinate during hazards, and connect climate resilience with WASH, finance, public health, and service delivery. State agencies and technical partners must also be equipped to support this process.
3. **Strengthen existing Institutions, not parallel cells** : Standalone Climate Action Cells rarely match the staffing and operational realities of small towns. Staffing shortages, limited technical capacity, dependence on schemes and approvals, non-statutory CAPs, and staff or political transitions often weaken such structures. Small towns need climate governance - but embedded within existing municipal and district systems, not isolated parallel cells.



What It Means For Practice

1. **Embed CAPs in formal plans** : Insert climate actions directly into Master Plans, DPRs, sector plans and budgets so they become part of approved pipelines and routine funding.
2. **Use existing review systems** : Track progress through municipal and district monitoring platforms and enforce accountability within appraisal cycles.
3. **Link climate actions to service delivery outcomes** : Not to limit to only environmental indicators - so departments recognise them as part of their operational mandate.
4. **Build hands-on capacity** : Train staff through live projects on DPR preparation, coordination, O&M, and service delivery - not classroom training alone.
5. **Assign clear ownership** : Allocate responsibilities across departments with defined roles to prevent reliance on individual officers.
6. **Build institutional continuity** through dedicated roles, review mechanisms, and support systems so climate action survives staff turnover and political transitions.
7. **Activate support ecosystems** : Engage state agencies, training institutes, and technical partners to continuously support implementation.
8. **Use existing institutions only** : Deliver climate action through current municipal and district systems instead of creating parallel committees or cells

6

Differentiated Development Pathways for Urban Typologies

Climate action becomes effective only when urban strategies are differentiated - designed for scale, grounded in context, and aligned with the real capacities of different urban typologies.



Climate Action Must Reflect Urban Diversity

A one-size-fits-all approach to urban climate action does not work. Small towns differ from large cities in scale, governance and capacity, requiring tailored climate and development pathways. Urban policy must formally recognise context-specific solutions rather than scaled-down metropolitan models.



Aspects	Big Cities	Small Towns
Planning Approach	Multi sectoral plan	Cluster approach Town level Single-Sectoral entry point
Infrastructure	High-tech, centralized / Decentralised systems	Low-cost, decentralize / NbS solutions
Governance	Multi-sectoral coordination	Grounded and Community- driven approaches
Finance	PPPs, green bonds, carbon markets	Grants, local subsidies, Internal
Climate Focus	Mitigation (decarbonization) + Adaptation	Adaptation (drought/flood resilience)
WASH Priorities	Efficiency, reuse, equity	Accessibility, affordability, Equity sustainability



Key Pathways for Context-Sensitive Planning and Action

1. **District planning, town-level action** : Small towns cannot be planned in isolation. Since districts control funding, approvals and project pipelines, the practical approach is cluster- or district-level planning with implementation at the town level. This enables coordinated financing and approvals while retaining community-driven, context-specific actions anchored in local capacities and sectoral systems such as water, sanitation, drainage, and waste management.
2. **Prioritise appropriate and sustainable solutions** : Technology choices in small towns must prioritise viability over sophistication. The most advanced solution is not always the most effective; the most workable is the one that can be sustained locally. This means prioritising low capital and low O&M systems, decentralised and nature-based solutions, and technologies that can be operated with local skills and resources. Low-cost and low-complexity solutions are often more resilient because they reduce long-term operational and maintenance burdens.
3. **Ensure Equity First** : In small towns, basic service gaps remain significant. Before advancing mitigation-focused actions such as decarbonisation, the priority must be ensuring equitable access to essential services. Resilience begins with universal access to water, sanitation and waste services, closing service gaps for vulnerable groups, and ensuring reliable and functional basic infrastructure.



What It Means For Practice

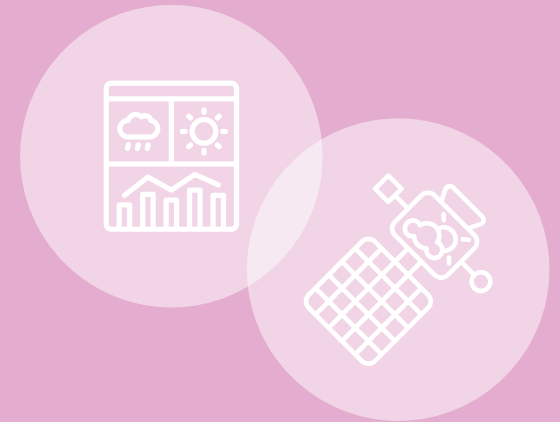
For practitioners, context-sensitive planning embeds climate action in local scale, capacity, and conditions instead of uniform templates.

1. **Plan at cluster scale, implement at town level** : Prepare district-level climate plans that pool schemes, budgets, and approvals across towns, then convert them into town-specific action lists with clear departments, timelines, and funding sources.
2. **Match solutions to capacity** : Screen every intervention against ULB staffing, O&M systems, and budget limits; scale down, phase, or simplify designs before approval.
3. **Avoid over-engineered solutions** : Reject complex technologies that cannot be locally operated; choose options that can be repaired, managed, and financed within municipal systems.
4. **Prioritise service equity first** : Identify underserved wards and ensure water, sanitation, drainage, and waste service gaps are closed before adding advanced mitigation measures.
5. **Ground action in local realities** : Test every action against institutional ownership, procurement feasibility, and political acceptability before final inclusion in the plan.

LEARNING

7 Minimum Viable Data : Pragmatic, Local and Actionable for Small Towns

Small-town climate action is stronger when data is simplified, contextualised and designed for municipal decision-making.



Data Must Be Pragmatic, Not Perfect

Small towns need a fundamentally different approach to climate data - pragmatic, low-cost and decision-oriented, not model-heavy, or high-resolution. Climate frameworks often assume intensive surveys and fine-scale models, but small towns need **data sufficiency and directionality**: just enough reliable information to decide where to act first and how to prioritise. Standardised, district-level or grid-based data often masks local variation and can distort planning if left unvalidated. The practical solution is **ground truthing and lean Minimum Viable Datasets (MVDs)** that are regularly updated and directly usable for decision-making.



IMD
25 km² GRID



CHINTAMANI
(~10 km²)



Key Insights - Data Must Fit Small Town Reality

1. **Data sufficiency over precision** : Small towns need directional data signaling priorities, not perfect granularity. Trend and service metrics are more useful than complex inventories in initial stages.
2. **Scale mismatch matters** : National datasets (IMD 25 km² grids) often exceed small town size (Chintamani ~10 km²), so regional models miss hyper-local realities like street floods or asset failures.
3. **Ground truthing is essential** : Local observations, ward mapping, key interviews, and seasonal reviews correct coarse data and produce usable baselines.
4. **Avoid default proxies** : Assuming standardized data or using default emission factors without context creates distorted baselines and misdirected investments.
5. **Break silos with MVDs** : Departments hold fragmented data; a lean, cross-departmental Minimum Viable Dataset solves silos, capacity limits, and complex indicators.
6. **Modelling limits** : Town-level climate modelling is infeasible for small towns due to instrument gaps; coarse regional modelling shows trends but not asset impacts.



What It Means For Practice

1. **Start with what exists and validate** : Use IMD/national data for trends; validate with ward visits before setting baselines.
2. **Build a Minimum Viable Dataset (MVD)** : Define 5–8 low-cost indicators (water hours, flood incidents, drainage access, waste diversion). Update quarterly via simple paper or digital forms.
3. **Use ward-level mapping and asset inventories** : Map drains, pumps, tanks, waste sites, and link to service metrics.
4. **Institutionalize ground truthing** : Run short seasonal post-event surveys (e.g., after monsoon) and key informant interviews with utility staff, councillors, and frontline workers to capture damage and service gaps.
5. **Assign data ownership** : Name an officer per indicator; set frequency; keep protocols simple.
6. **Avoid over-modelling** : Use models for direction; rely on field validation.
7. **Use staff insights** : Formalize frontline knowledge in the data system.
8. **Align for funding** : Match MVD indicators to SBM/AMRUT/16th FC reporting to unlock funds.
9. **Start lean and scale** : Begin with high-impact indicators; expand only when routines and capacity are established.

LEARNING

8 Process Emissions First : Fast, Feasible Mitigation For Small Towns

Prioritise process emissions—they deliver the fastest and most feasible mitigation gains for small towns.



Process Emissions are the Low-Hanging Fruit

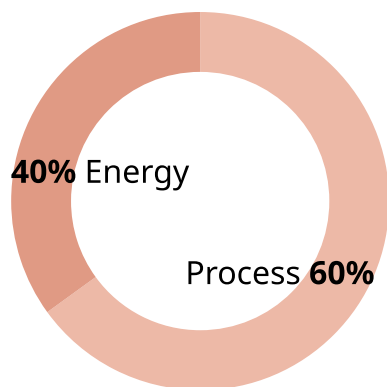
For small towns, process emissions offer the quickest and most controllable mitigation pathway. Emissions from waste and wastewater often exceed grid emissions and fall within municipal control, making them the most practical near-term strategy while grid decarbonisation progresses gradually.





Why Process Emissions Come First

1. **Process emissions dominate** : Waste and wastewater emissions often exceed grid emissions in small towns with legacy waste frequently the largest source. In Chintamani, solid waste accounts for 67% of WASH emissions, from unprocessed waste and legacy dumps.
2. **Municipal control makes action feasible** : Legacy waste, untreated wastewater, faecal sludge, and solid waste systems fall directly within ULB mandate, unlike electricity generation or wider grid decarbonisation. This makes mitigation more controllable and accountable.
3. **Faster and measurable gains** : Process-based interventions can be implemented and monitored within 1–5 years, delivering visible mitigation and service improvements. Examples include legacy waste remediation, decentralised composting, wastewater treatment, and faecal sludge management.
4. **Grid decarbonisation remains difficult** : Solarisation and electrification require higher capital, technical servicing, and long-term institutional support often beyond the capacity of small towns.
5. **Feasible grid measures still matter** : Simple, locally manageable measures should complement process mitigation. Groundwater recharge and energy-efficient pumping can reduce energy demand while improving resilience



PROCESS EMISSION	GRID EMISSION
Legacy Waste 39%	Ground Water Extraction 18%
Fresh Solid Waste 19%	Water Distribution 17%
Transport Fuel 1%	Waste Water Pumping 5%
Wastewater 1%	



What It Means For Practice

1. **Prioritise process emissions** : Target legacy waste, wastewater, faecal sludge, and solid waste systems before complex energy transitions.
2. **Implement quick and visible projects** : Remediate dumpsites, expand composting, improve waste processing, and strengthen wastewater and FSM systems to deliver early results.
3. **Use existing schemes and grants** : Link projects to SBM, AMRUT, state SWM programmes and 16th FC tied grants rather than creating standalone climate projects.
4. **Track simple mitigation indicators** : Measure methane reduction, waste diversion, and wastewater treatment volumes as part of Minimum Viable Datasets (MVDs)
5. **Choose feasible technologies** : Avoid high-tech systems with complex O&M needs; select low-cost and maintainable solutions that municipalities can manage locally.
6. **Assign ownership and scale gradually** : Nominate responsible officers, define timelines and O&M arrangements, pilot interventions first and expand after demonstrated success.

Closing Note : An Open Call for a Small-Town Climate Agenda

This learning document is an invitation to take the conversation further.

Through these learnings, FISH seeks to highlight that climate action in small towns cannot be treated as a scaled-down version of metropolitan planning. Small towns need approaches that reflect their own scale, capacities, institutions, financing realities, and development pressures.

Yet, small towns continue to remain underrepresented in national and state-level climate policy, urban planning frameworks, financing instruments, and capacity-building systems. Their challenges are visible on the ground, but not yet fully reflected in the larger policy imagination. This gap must now become an advocacy priority.

For FISH, this document is a starting point for building a stronger small-town climate agenda. We see this as a space for collective action — bringing together municipalities, state agencies, civil society organisations, research institutions, technical partners, funders, and policy actors to shape practical and policy-relevant pathways for climate action.



Scan for
our resources

We invite organisations, practitioners, researchers, and institutions working in this space to engage with these learnings, challenge them, build on them, and contribute their own field experiences. The next phase must be collaborative, grounded in practice, and connected to policy.

FISH remains committed to carrying this conversation forward - with small towns at the centre, partners alongside us, and the shared goal of ensuring that small-town realities are embedded in India's climate policy, planning, and investment frameworks.





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