Rejuvenating Urban Water Commons

A Process Manual for Multi-Stakeholder, Community-Led Governance

Knowledge. Voice. Democracy.
PRIA
Since 1982

iied International Institute for Environment and Development

Authors

Nidhi Batra, Sehreeti Developmental Practices Foundation (consultant for PRIA); Anshuman Karol, Lead- Governance and Climate Action, PRIA; Rabi Raj, Senior Program Officer (Research), PRIA; Sowmia Phillip, Program Officer, PRIA
Designed by Charu Agarwal, Communications Assistant, PRIA

Acknowledgements

Established in 1982, PRIA is a global centre for participatory research and training. Our mission is to build capacities of citizens, communities and institutions, to enable vibrant, gender-equal societies. For over four decades our efforts have been focused towards empowering citizens through information and mobilisation, and at the same time, sensitising government agencies towards citizens' needs. We work towards creating a bridge between the two to ensure that the right kind of government efforts reach the right people, at the right time. For more information please visit www.pria.org

We are grateful to Dr. Kaustuv Bandyopadhyay, Director, PRIA, for his continuous guidance and thoughtful review throughout the process. We also extend our sincere thanks to Dr. Rajesh Tandon, Founder-President of PRIA, for his guidance and support.

We would like to acknowledge the International Institute for Environment and Development (IIED-UK) for their support. IIED is one of the world's leading independent policy and action research organisations, with a mission to build a fairer, more sustainable world, using evidence, action and influence in partnership with others.

Contents

Acronyms

AMC	Ajmer Municipal Corporation
AMRUT 2.0	Atal Mission for Rejuvenation and Urban Transformation 2.0
CFC	Central Finance Commission
CLAC	City-Level Advisory Committee
CSO	Civil Society Organisation
CWAP	City Water Action Plan
CWBP	City Water Balance Plan
GESI	Gender Equality and Social Inclusion
GIS	Geographic Information System
IIED	International Institute for Environment and Development
JMC	Jodhpur Municipal Corporation
JNVU	Jai Narayan Vyas University
MJSA	Mukhyamantri Jal Swavlamban Abhiyan
MDSU	Maharshi Dayanand Saraswati University
NGO	Non-Governmental Organisation
NULM	National Urban Livelihoods Mission
PHED	Public Health Engineering Department
PRIA	Participatory Research in Asia
RWA	Resident Welfare Association
SBM-U 2.0	Swachh Bharat Mission – Urban 2.0
SECURe	Strengthening and Enhancing Contextual Urban Resilience
SFC	State Finance Commission
SHG	Self-Help Group
SPV	Special Purpose Vehicle
TKS	Traditional Knowledge Systems
ULB	Urban Local Body
WBNC	Ward-Based Neighbourhood Committee

List of Figures

List of Figures

List of Field Insights

EXECUTIVE SUMMARY

This process manual presents a field-tested, governance-oriented framework for community-led, multi-stakeholder urban water body rejuvenation, developed through a year's action-research initiative implemented by PRIA in Ajmer and Jodhpur with support from IIED-UK. The initiative responded to growing evidence that degradation of traditional water bodies—baoris, jhalaras, talabs, lakes, and johads—is driven less by technical gaps and more by fragmented governance, weak institutional convergence, and declining community stewardship.

Across the two cities, 88 traditional water bodies (30 in Ajmer and 58 in Jodhpur) were profiled using a structured socio-ecological methodology integrating hydrological assessment, institutional mapping, climate vulnerability analysis, cultural valuation, and Gender Equality and Social Inclusion (GESI) perspectives. Two demonstration pilots in each city operationalised the approach through collaborative planning, ward-level engagement, and inter-departmental coordination.

The methodology is grounded in commons theory, adaptive governance principles, and the SECURe (Strengthening and Enhancing Contextual Urban Resilience) framework, and aligned with national missions including AMRUT 2.0, Swachh Bharat Mission–Urban (SBM-U 2.0), and the National Urban Livelihoods Mission (NULM). It translates policy intent—particularly AMRUT 2.0's emphasis on City Water Action Plans (CWAPs) and GESI integration—into operational steps that Urban Local Bodies (ULBs) can adopt within existing administrative systems.

The manual documents a four-step process:

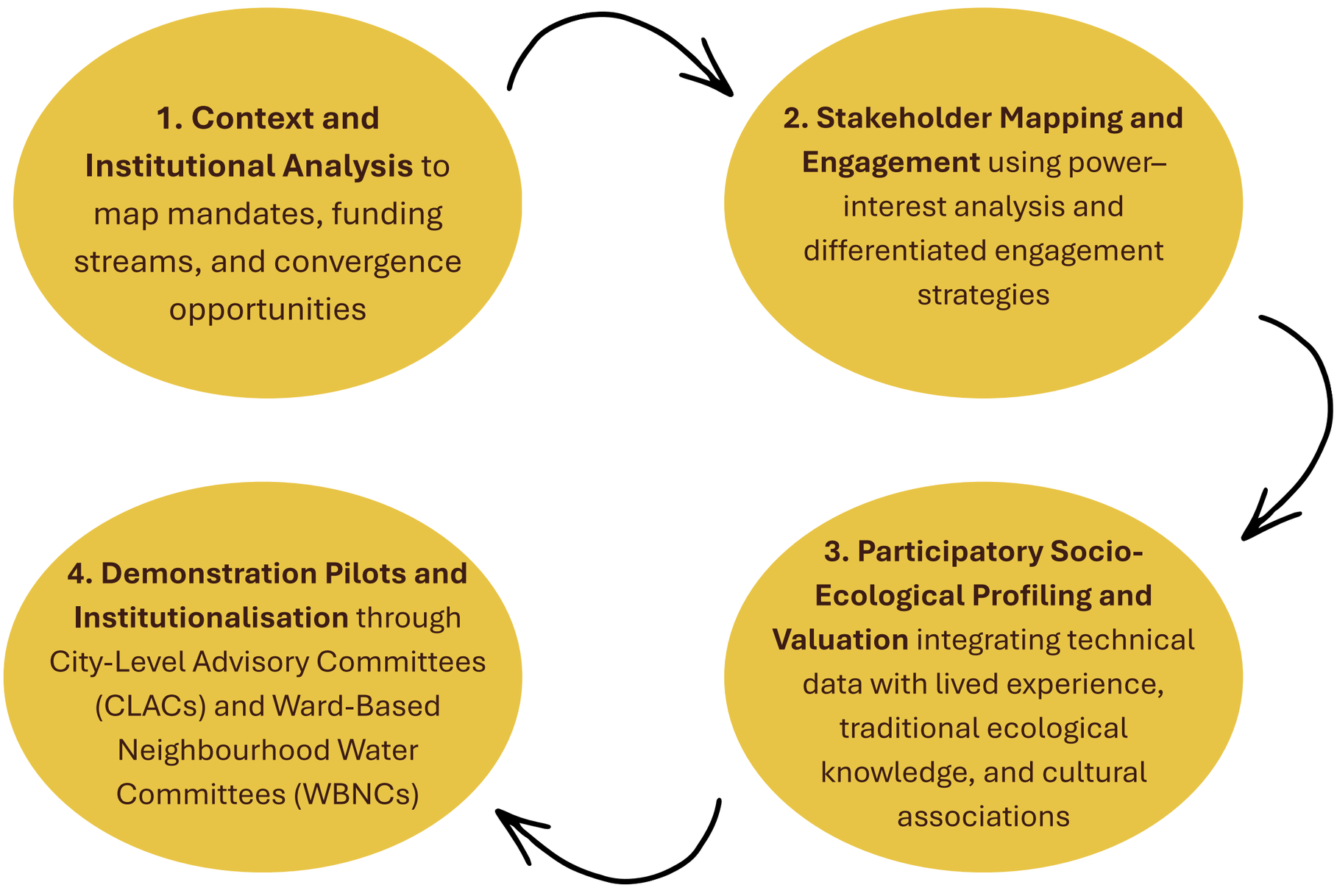

Figure 1: Process for community-led, multi-stakeholder urban water body rejuvenation

Key outcomes extend beyond site-level restoration. The initiative strengthened CWAP inputs, institutionalised convergence platforms across municipal and line departments, empowered SHG women and youth as governance actors, generated validated socio-ecological databases, and demonstrated low-cost, high-legitimacy restoration pathways. Importantly, it repositioned water bodies from neglected heritage assets to climate infrastructure and community commons.

This manual offers a scalable governance blueprint for embedding participatory, GESI-responsive water body rejuvenation within municipal systems. It enables ULBs, state agencies, civil society organisations, and academic institutions to move from consultation-based participation toward structured co-ownership, ensuring that ecological restoration, institutional coordination, and social inclusion reinforce one another in advancing climate-resilient urban water governance.

CHAPTER 1

1.1 Introduction to the Process Manual

Urban water systems in India constitute complex socio-ecological infrastructures rather than purely hydraulic assets. Traditional baoris, bawdis, jhalaras (stepwells), lakes, and talabs function as urban water commons—supporting groundwater recharge, regulating micro-climates, sustaining biodiversity, and anchoring social, cultural, and spiritual practices. Their deterioration reflects not only infrastructural deficits but also fragmented governance, weak inter-departmental convergence, erosion of traditional knowledge systems, and declining collective stewardship.

In cities such as Ajmer and Jodhpur, rapid urbanisation, encroachment, groundwater abstraction, pollution, and climate variability have exposed the limitations of department-centric planning. Rejuvenation efforts that remain confined to engineering interventions fail to address the institutional, socio-cultural, and governance dimensions that sustain water bodies as commons. Effective restoration therefore requires multi-stakeholder governance arrangements that integrate hydrological science, community knowledge, gender-responsive planning, and institutional coordination within existing policy frameworks.

To address this gap, Participatory Research in Asia (PRIA), with support from the International Institute for Environment and Development (IIED-UK), implemented a 1.5-year action-research initiative on community-led participatory planning for traditional water body rejuvenation and green space development in Ajmer and Jodhpur. The initiative aimed to design, test, and document a replicable methodology for strengthening multi-stakeholder partnerships for climate-responsive urban water governance.

Grounded in commons theory (Ostrom, 1990), adaptive governance literature (Pahl-Wostl, 2009), and operationalised through the Strengthening and Enhancing Contextual Urban Resilience (SECURe) framework, the approach aligned with AMRUT 2.0 guidelines and converged with ongoing missions such as NULM and SBM-U 2.0. The methodology integrated:

1.	Contextual and institutional analysis of water bodies as socio-ecological systems
2.	Stakeholder mapping at city and ward levels
3.	Formation of City-Level Advisory Committees (CLAC-type platforms)
4.	Academic collaboration (e.g., Maharshi Dayanand Saraswati University, Ajmer; Jai Narayan Vyas University, Jodhpur)
5.	Capacity building of women's Self-Help Groups (SHGs) as climate and stewardship actors
6.	Participatory socio-cultural and spiritual profiling (beyond physical mapping)
7.	Ward-level convergence mechanisms
8.	Demonstration pilots to showcase coordinated, multi-actor rejuvenation processes

A total of 88 traditional water bodies were profiled across the two cities (30 in Ajmer and 58 in Jodhpur), documenting not only hydrological attributes but also institutional mandates, socio-cultural associations, traditional ecological knowledge, gendered use patterns, and community perceptions. Two pilot sites in each city functioned as governance demonstration laboratories—illustrating how structured participation, institutional convergence, and visible action can strengthen legitimacy, co-ownership, and scalability.

This process manual consolidates the conceptual foundations, institutional mechanisms, participatory tools, operational steps, and field-tested lessons emerging from the initiative. It provides a structured framework for embedding community-led, inclusive, and climate-responsive water body rejuvenation within formal urban governance systems.

1.2 Intended Users and Applicability

This manual serves as a governance integration and operationalisation framework for stakeholders engaged in urban water body rejuvenation and climate-responsive planning.

1. Urban Local Bodies (ULBs)

ULBs may find the manual useful to:

1.	Integrate participatory socio-ecological profiling into City Water Action Plans (CWAPs) under AMRUT 2.0
2.	Operationalise Gender Equality and Social Inclusion (GESI) principles within rejuvenation planning
3.	Establish structured multi-stakeholder convergence platforms
4.	Institutionalise community validation within technical planning processes
5.	Strengthen sustainability of investments through stewardship mechanisms

For ULBs, the manual supports a transition from department-centric execution to coordinated, inclusive governance.

2. State Line Departments and Mission Directorates

Departments responsible for urban development, water resources, Public Health Engineering (PHED), environment, and climate missions may utilise this manual to:

1.	Design convergence models across schemes (AMRUT 2.0, SBM-U 2.0, NULM, resilience programmes)
2.	Embed participatory and inclusion-responsive approaches within state guidelines
3.	Strengthen inter-departmental coordination frameworks
4.	Incorporate community-validated data into monitoring systems

The manual offers an implementation-tested bridge between policy mandates and field-level practice.

3. Civil Society Organisations (CSOs)

For CSOs and NGOs, the manual provides:

1.	A structured methodology for constructive engagement with ULBs
2.	Tools for socio-cultural and institutional mapping
3.	Frameworks for advancing inclusive and gender-responsive environmental governance
4.	Approaches for facilitating dialogue-to-action pathways

It functions as a partnership-building blueprint grounded in institutional collaboration rather than standalone advocacy.

4. Academic and Research Institutions

Higher educational institutions can leverage the manual to:

1.	Integrate applied urban resilience research into field processes
2.	Support participatory data generation and validation
3.	Contribute technical expertise to climate risk and hydrological assessments
4.	Build student capacity in community-engaged governance

The framework demonstrates how academic institutions can complement municipal systems and community knowledge.

5. Community Institutions and SHG Federations

Women's SHGs, youth groups, and neighbourhood associations can use the manual to:

1.	Understand roles in urban water governance
2.	Document traditional knowledge and socio-cultural associations
3.	Strengthen stewardship mechanisms
4.	Engage effectively with municipal authorities

The manual positions communities as co-governance actors rather than passive beneficiaries.

1.3 Conceptual Positioning: Urban Water Bodies as Multi-Actor, Multi-Value Systems

Traditional Knowledge Systems (TKS) and community participation historically underpinned water management across the Indian subcontinent. Communities developed decentralised systems—baodis, stepwells, and talabs (ponds)—that combined hydrological intelligence with social regulation, ritual practice, and collective labour. These structures functioned not merely as storage infrastructure but as socio-ecological institutions, integrating ecological function with social norms and locally grounded accountability (Agarwal and Narain 1997; Mosse 2003).

In urban centres such as Ajmer and Jodhpur, historic water bodies constructed under Rajput and princely patronage formed integral components of settlement morphology. They simultaneously delivered multiple values: regulating groundwater recharge, moderating local micro-climates, supporting biodiversity, and serving as sites for social interaction, gendered labour, and religious observance. Governance was relational, embedded within community institutions, and distributed across local actors rather than confined to formal administrative departments.

The transition to centralised and technocratic urban water regimes during the colonial and post-independence periods reshaped this institutional landscape. Planning frameworks prioritised networked supply systems, groundwater abstraction, and sectoral efficiency, often marginalising community-based stewardship arrangements (Shah 2009). Modern systems expanded service coverage but also fragmented responsibility across multiple agencies—municipal corporations, Public Health Engineering Departments, Water Resources Departments—without a unified framework to maintain the ecological integrity and socio-cultural continuity of historic water bodies.

Research on collective resource governance demonstrates that such fragmentation erodes accountability and undermines the social norms necessary for sustained maintenance (Ostrom 1990). In the absence of coordinated oversight and community engagement, many historic stepwells and tanks in Ajmer and Jodhpur have experienced siltation, pollution, encroachment, and functional decline. Their deterioration reflects not only environmental stress but also the breakdown of institutional relationships linking communities, local authorities, and water infrastructures.

Contemporary scholarship on adaptive water governance emphasises polycentric and collaborative institutional arrangements that integrate technical expertise, social learning, and participatory engagement (Pahl-Wostl 2009). From this perspective, traditional water bodies should be recognised as multi-functional urban assets, whose significance extends beyond hydrological performance. They provide ecological services —groundwater recharge, flood moderation, checking soil erosion, natural filteration and heat mitigation—while also embodying socio-cultural values, historical memory, and local identity.

Modern scientific tools, including hydrological modelling, GIS-based mapping, and environmental assessment, provide essential analytical support for restoration. However, indigenous ecological knowledge contributes complementary insights on seasonal variability, maintenance practices, and culturally embedded norms of care. A multi-stakeholder approach—engaging communities, municipal authorities, technical experts, and heritage practitioners—ensures that ecological restoration, institutional coordination, and socio-cultural revitalisation are mutually reinforcing components of sustainable urban water governance.

Reframing traditional water bodies through this integrated lens is essential in contemporary urban contexts. While patterns of direct water use have shifted, the ecological functions and socio-cultural meanings of these systems remain significant. Sustainable rejuvenation requires reconnecting administrative systems, technical institutions, and community actors within a shared governance framework capable of supporting environmental resilience and cultural continuity.

1.4 Approach, Frameworks, and Methodological Architecture

Grounded in commons theory, adaptive governance principles, and the SECURe (Strengthening and Enhancing Contextual Urban Resilience) framework—and aligned with AMRUT 2.0, particularly its emphasis on City Water Action Plan (CWAP) strengthening and GESI integration—the methodology applied in Ajmer and Jodhpur was designed as a governance-centred approach to urban water body rejuvenation.

1.4.1 Conceptual Foundations

Commons theory informed the treatment of traditional water bodies not as isolated municipal assets but as shared socio-ecological systems requiring collective stewardship, clearly defined institutional roles, and locally embedded monitoring mechanisms. Adaptive governance principles shaped the emphasis on iterative dialogue, cross-departmental coordination, feedback loops, and learning through

practice rather than rigid, top-down planning structures.The SECURe framework provided a resilience lens, integrating ecological restoration, institutional strengthening, climate responsiveness, and social inclusion within a unified operational architecture. Alignment with AMRUT 2.0 ensured that participatory processes directly strengthened formal planning instruments—particularly CWAPs—while operationalising Gender Equality and Social Inclusion (GESI) commitments through structured engagement of women's Self-Help Groups (SHGs), youth, and marginalised communities. These frameworks positioned water body rejuvenation as both an ecological restoration process and an institutional reform pathway.

1.4.2 Methodological Principles

Across implementation stages, five core principles guided action:	
Multi-Value Recognition	Water bodies were assessed for hydrological, ecological, socio-cultural, spiritual, and institutional value.
Polycentric Governance	Responsibility was distributed across municipal departments, line agencies, community institutions, academic actors, and civil society through structured convergence platforms.
Relational Evidence Generation	Profiling extended beyond physical surveys to capture memory, meaning, traditional ecological knowledge, gendered experiences, and climate vulnerabilities.
Inclusion as Structural Design	GESI was embedded within engagement architecture, not treated as an add-on.
Institutional Embedding and Scalability	All processes were aligned with ongoing missions and mandates to enable replication and mainstreaming.

1.4.3 Operational Architecture

Within this conceptual foundation, the methodology progressed through interlinked stages.

Governance Baseline and Institutional Mapping	The process began with a structured context and institutional analysis. Policies, mandates, departmental jurisdictions, funding streams, and mission linkages (AMRUT 2.0, SBM-U, NULM) were mapped to identify overlaps, fragmentation, and opportunities for convergence. Stakeholders were analysed based on proximity, functional responsibility, influence, and vulnerability. Power–interest assessments anticipated potential areas of alignment or contestation—such as flood mitigation priorities, land-use pressures, ecological protection, or ritual access—informing engagement strategies.
Structured Multi-Stakeholder Convergence	To address fragmentation, City-Level Advisory Committees (CLACs) and neighbourhood-level platforms were established or strengthened. These forums institutionalised dialogue, enabled joint validation of evidence, and supported coordinated decision-making across Municipal Corporations, PHED, Water Resources, Forest and Tourism Departments, alongside academic institutions and civil society actors. Convergence was thus formalised rather than dependent on ad hoc coordination.

Socio-Ecological and Relational Profiling of Water Bodies	Profiling was deliberately conceived as socio-ecological and relational mapping rather than a conventional technical survey. In addition to hydrological status, encroachments, and infrastructure conditions, the process documented cultural and spiritual associations, oral histories, traditional ecological knowledge, gendered access patterns, safety concerns, and lived climate vulnerabilities. Participatory tools—including transect walks, timeline exercises, oral history documentation, and valuation exercises—surfaced embedded memory and customary practices connected to baoris, jhalaras, talabs, and lakes. This expanded evidence base strengthened planning inputs while simultaneously regenerating community–water relationships. By recognising emotional, cultural, and spiritual linkages, the methodology reframed water bodies as living commons and reinforced stewardship motivation.
Demonstration Pilots as Governance Laboratories	Selected water bodies served as demonstration sites to operationalise the governance architecture. These pilots were not iterative engineering trials; rather, they functioned as practice-based laboratories where collaborative planning, inclusive participation, and coordinated implementation could be tested. Visible actions—cleaning, desilting, demarcation, awareness mobilisation—were combined with joint monitoring discussions and shared documentation. The pilots generated insights into barriers (mistrust, mandate overlaps, participation fatigue) and enabling conditions (transparent facilitation, phased engagement, recognition of stakeholder contributions). Systematic documentation ensured that learning extended beyond site-level restoration.
Institutionalisation and Replication	Lessons and profiling outputs were integrated into CWAP strengthening and municipal planning processes. GESI-responsive participation was embedded within committee structures and stewardship mechanisms. Convergence with ongoing schemes supported financial and administrative continuity. This stage transitioned the initiative from project implementation to institutional embedding and replication.

Context & Institutional Analysis

- Policy & Program Review (AMRUT 2.0, SBM-U, Finance commission)
- Urban Partnership Ecosystem Mapping
- Stakeholder Identification & Prioritization
- Power-Interest Matrix & Role Classification
- Resource & Capacity Mapping
- Convergence-Divergence Assessment

Structured Stakeholder Engagement

- Municipal & Line Department Convergence
- Elected Representative Engagement
- Civil Society & Academic Collaboration
- Community & SHG Participation
- Formation of City-Level Advisory & Convergence Committee (CLAC)
- Formation of Water Bodies Neighbourhood Committees

Community Mapping & Valuation

- Mobilize SHGs, Youth, Residents & Students
- Orientation & Capacity Building
- Participatory Mapping (Transect Walks, Timeline, Oral Histories)
- Standardized Water Body Profiling
- Community Validation & Feedback
- Water Body Compendium & CWAP Inputs

Pilot Waterbody Rejuvenation

- elect Representative Water Bodies
- Baseline Assessment (Ecological + Social + Governance)
- Institutional Alignment & Role Allocation
- Community Clean-Up & Demonstration Actions
- Monitoring, Documentation & Validation
- Learning Capture & Replication Strategy

Institutional Embedding, scaling and replication

- IEC activities through out
- GESI integration
- Institutionalized participatory governance-CLAC and WBNC
- strengthening
- Convergence with schemes and programs - scalable model under
- AMRUT 2.0

Figure 2: Methodological approach towards multi-stakeholder partnerships for community-led urban water governance

The combined conceptual and operational architecture demonstrates a replicable pathway for embedding water body rejuvenation within formal governance systems while strengthening inclusion, resilience, and co-ownership. By integrating institutional convergence, socio-cultural profiling, traditional knowledge systems, and climate-sensitive planning, the methodology bridges infrastructure development with community systems and transforms restoration from a technical intervention into a sustained governance reform process.

CHAPTER 2

Step 1: Context and Institutional Analysis

The process begins with understanding the urban partnership ecosystem, identifying stakeholders, assessing their stakes and influence, mapping resources and capacities, aligning stakeholders with resources, and anticipating conflicts or convergence points. Each step builds on the previous one, creating a continuum from understanding the system to actionable engagement strategies.

	Activity	Output	Tools / Methods
1.	Mapping programs, policies and schemes	Policies, programmes and schemes mapping	Desk research, consultations, mapping
2.	Map partnership ecosystem	Stakeholder ecosystem map	Desk research, consultations, mapping
3.	Identify key stakeholders	Prioritized stakeholder list	Formation of City-Level Advisory Committees (CLAC-type platforms)
4.	Assess stakes and influence	Prioritized stakeholder list	Ward-level convergence mechanisms
5.	Assess assets and capacities	Resource inventory	Data review, institutional mapping
6.	Align stakeholders with resources	Engagement plan	Matrix development, consultation
7.	Anticipate conflicts and convergence	Convergence/divergence framework	Scenario analysis, negotiation meetings

2.1 Understanding the Policy and Programmatic Context

A systematic review of relevant national and state-level programmes, schemes, and policy instruments should be undertaken to identify formal entry points for financing, technical assistance, and institutional convergence for urban water body rejuvenation.

This review should assess each instrument against the following criteria:

1.	Whether it provides funding for water supply, sanitation, green infrastructure, or climate resilience
2.	Whether it enables decentralized, ward-level, or community-based implementation;
3.	Whether it permits inter-departmental convergence or multi-sector coordination
4.	Whether it includes performance-based, reform-linked, or outcome-driven incentives.

The review should categorize instruments into three groups:

1. National missions and centrally sponsored schemes
2. State-level programmes and initiatives
3. Fiscal transfer mechanisms (e.g., Finance Commission grants)

Figure 3: Policy Instruments at the central level, state level and for financing

The purpose of this exercise is to determine:

1.	Which instruments can directly finance water body rejuvenation
2.	Which can provide indirect or complementary support
3.	Which require convergence with other departments or community-led initiatives.

This step establishes the operative financial and regulatory environment within which restoration interventions can be designed, approved, and scaled.

Table 1: Key National and State Programmes Relevant to Urban Water Rejuvenation, as applicable to Ajmer and Jodhpur

Programme / Scheme	Level	Thematic Focus	Relevance to Water Body Rejuvenation	Funding / Operational Mechanism
AMRUT 2.0	National	Urban water security, sewerage, green spaces, water body rejuvenation	Direct support for restoration of water bodies, CWBP/CWAP preparation, decentralized treatment, rainwater harvesting	Central assistance through States to ULBs; annual allocations, performance-linked releases
Smart Cities Mission	National	Sustainable urban infrastructure, data-driven governance	Area-based development; smart water monitoring; open space and lakefront development	Central grants (basic + performance-based) via SPVs; project-based cycles
Swachh Bharat Mission – Urban (SBM-U 2.0)	National	Sanitation, septage management, waste management and processing	Reduction of solid and liquid waste inflows into water bodies; remediation near lakes	Central and state funds released to ULBs through city sanitation plans

Programme / Scheme	Level	Thematic Focus	Relevance to Water Body Rejuvenation	Funding / Operational Mechanism
National Urban Livelihoods Mission (NULM)	National	SHGs, livelihoods, skilling	Scope for engaging SHGs in plantation, maintenance, water management, eco-restoration, green jobs as AMRUT Mitras	Annual allocations via ULB NULM cells; proposal-based
Mukhyamantri Jal Swavlamban Abhiyan (MJSA 2.0)	State (Rajasthan)	Water conservation, recharge, revival of traditional water bodies	Supports conservation structures, recharge works; applicable in selected urban areas	State-supported; proposals routed via District Administration / ULB
16th Central Finance Commission (CFC)	National Fiscal Transfer	Grants to States and ULBs for service delivery, climate resilience	Tied grants for water supply, sanitation, rainwater harvesting; untied funds for local priorities	Formula-based devolution; performance-linked components
6th State Finance Commission (SFC), Rajasthan	State Fiscal Transfer	Revenue devolution to ULBs	Flexible funding pool supporting water and sanitation infrastructure	Formula-based state-level allocation to municipalities

AMRUT 2.0 presents the strongest direct convergence opportunity, given its explicit mandate for water security and rejuvenation of urban water bodies. Finance Commission grants provide complementary fiscal space, particularly for decentralized and ward-level improvements. SBM-U and NULM offer indirect but strategic support through sanitation control and community workforce mobilization.

Together, these instruments create a structured financing ecosystem that can support both infrastructure-led and community-led water bodies restoration initiatives.

2.2 Mapping the Urban Partnership Ecosystem – Institutional and Actor Mapping

The next task in the analysis is to identify the ecosystem of stakeholders and institutions that shape water management and green infrastructure in the cities. Recognizing water bodies as shared systems rather than isolated sectoral assets allowed for a broader lens, capturing the interconnections between ecology, communities, governance, and economic activities.

Stakeholders can be categorized into functional groups to clarify their roles, responsibilities, and influence:

Stakeholder Group	Examples in Ajmer/Jodhpur	Primary Functions
Government	Ajmer Municipal Corporation (AMC), Jodhpur Municipal Corporation (JMC), Public Health & Engineering Dept (PHED), Urban Development Dept., Forest Dept., Tourism Dept., Water Resource Dept.	Policy, planning, regulation, service delivery
Communities	Residents, SHGs, youth groups, informal settlers, Citizen leaders, RWAs, Traders Associations	Daily use, monitoring, local stewardship
Civil Society & NGOs	PRIA, local CSOs (Unnati and CFAR), local CBOs	Community mobilization, awareness, co-production

Stakeholder Group	Examples in Ajmer/Jodhpur	Primary Functions
Academic Institutions	MDS University, Ajmer, JNV University, Jodhpur	Research, monitoring, decision-support
Private Sector & Philanthropy	Mehrangarh Museum Trust, Jodhpur, CSRs	Funding, technical innovation, pilot projects
Elected & Cultural Actors	Ward Councillors, temple and Dargah trusts	Legitimacy, mediation, advocacy

This mapping highlights who influences the water bodies, who uses them, and who benefits from them, providing the foundation for subsequent steps.

2.3 Identifying Key Stakeholders and their Roles

Once the ecosystem is mapped, the next step is to prioritize stakeholders based on their proximity, authority, influence, and vulnerability. This step helps answer “who matters and why?”

Key principles that guide the identification are:

Proximity	Communities or individuals directly interacting with water bodies.
Functional Responsibility	Departments, agencies, or organizations tasked with water, land, or green space management.
Decision Influence	Those with formal or informal authority to approve, fund, or shape interventions.
Vulnerability	Groups or sectors exposed to climate, ecological, or water-related risks.

Tools for identification include the following :

- Stakeholder meetings and consultations.
- Social and institutional mapping to visualize networks.
- Snowball identification through existing contacts.
- Review of statutory mandates, schemes, and budgets.

Figure 4: Tools for identification of stakeholders

Through this process, stakeholders can be categorized, prioritized, and linked to their potential contribution, enabling focused engagement in later phases.

2.4 Understanding Stakeholder Stakes, Interest and Influence

After identifying stakeholders, it is beneficial to assess why each actor is invested in the water body and the nature of their interests. Recognizing ecological, social, economic, institutional, and political stakes ensures that interventions can be negotiated in a way that balances competing priorities.

Table 3: Stakeholder interests

Stake Type	Examples	Implications for Action
Ecological	Conservation, recharge, flood control	Align interventions with sustainability targets
Social & Cultural	Ritual use, heritage, daily access	Negotiate access and protection measures

Stake Type	Examples	Implications for Action
Economic	Tourism, livelihoods, land value	Balance development and restoration goals
Institutional	Budgets, mandates, targets	Engage actors according to capacity and authority
Political	Visibility, accountability	Identify champions and gatekeepers

Stakeholder mapping for water rejuvenation shall integrate **functional role classification, power–interest assessment, and resource control analysis** within a unified framework. The objective is to identify who holds decision authority, who regulates access to critical resources, who shapes legitimacy, and how engagement intensity should be calibrated to ensure implementation feasibility.

Stakeholders shall first be categorised by institutional role:

Decision Makers: Hold formal authority over land allocation, public expenditure, regulatory approvals, and infrastructure delivery (e.g., Municipal Bodies, PHED, Land Development Authorities, State Urban Departments).

Subordinates: Operate within institutional hierarchies and influence outcomes through technical inputs, documentation, and procedural processing (e.g., engineers, planners, nodal officers).

Gatekeepers: Control access to valuable resources such as funding streams, land parcels, institutional platforms, or data systems; regulate procedural entry points (e.g., ward councillors, CSR heads, planning cell officials, Smart City SPV representatives).

Influencers: Shape behaviour, public legitimacy, and negotiation dynamics without statutory authority, deriving influence from expertise or social capital (e.g., SHG leaders, CSOs, academic institutions, community leaders, journalists).

Figure 5: Categorisation of stakeholders

Simultaneously, stakeholders shall be systematically assessed through a power–interest matrix to determine engagement intensity and facilitation requirements:

High Power–High Interest: Active collaboration and joint planning required, as these actors control budgets, regulatory approvals, and infrastructure delivery (e.g., Municipal Bodies, PHED, Water Resource Dept, Forest Dept).

High Power–Low Interest: Strategic alignment and inter-departmental coordination required to address jurisdictional overlaps, approval delays, and resource inefficiencies (e.g., certain Development Authorities, state departments).

Low Power–High Interest: Structured consultation, institutional inclusion, and capacity strengthening required, given high exposure to outcomes but limited formal authority (e.g., SHGs, informal settlement residents, RWAs, water-based livelihood groups).

Low Power–Low Interest: Targeted mobilisation and incentive alignment required, particularly where financial leverage exists but intrinsic engagement is limited (e.g., CSR entities, peripheral departments).

Figure 6: Power-Interest matrix

The Power–Interest matrix reveals the distribution of decision-making authority and stakeholder motivation within the urban water governance system, identifying which actors must be directly engaged in co-decision processes, which require strategic alignment, and which require structured inclusion to ensure equitable and effective implementation.

In the context of Ajmer and Jodhpur, this power-interest matrix was articulated as below:

Power and Interest Matrix						
Stakeholder	**Level of Power**	**Level of Interest**	**Quadrant Classification**	**Source of Power / Influence**	**Primary Resource Controlled**	**Recommended Engagement Strategy**
Municipal Commissionor	High	High	High Power – High Interest	Administrative authority; budget control; hierarchical leadership	Urban budget, inter-departmental coordination, approvals	Continuous engagement; institutional anchoring; convergence platform leadership
Municipal Corporation (AMC/JMC)	High	High	High Power – High Interest	Statutory mandate for urban infrastructure & planning	Infrastructure delivery, ward budgets, policy execution	Embed within Annual Action Plans; formal role allocation
PHED	High	High	High Power – High Interest	Technical authority over water supply & testing	Water quality systems, technical validation	Joint technical planning; data integration
Water Resource Department	High	High	High Power – High Interest	Legal jurisdiction over water bodies & groundwater	Groundwater data, recharge permissions	Early-stage consultation; regulatory alignment
Forest Department	High	High	High Power – High Interest	Land-use approvals; biodiversity mandate	Land access, native species, ecosystem restoration authority	Co-design ecological restoration plans
Tourism Department	High	Moderate	High Power – Low/Moderate Interest	State-level positioning; tourism revenue influence	Branding, tourism budgets	Frame rejuvenation as tourism asset

Stakeholder	Level of Power	Level of Interest	Quadrant Classification	Source of Power / Influence	Primary Resource Controlled	Recommended Engagement Strategy
Development Authority	High	Moderate	High Power – Low/Moderate Interest	Land allocation and planning control	Urban land, zoning authority	Integrate within master plans; strategic coordination
Media (Print/Social)	High	Variable	High Power – Variable Interest	Narrative control; public pressure	Public opinion, political credibility	Strategic communication; visibility of success
Self-Help Groups (SHGs)	Low	High	Low Power – High Interest	Grassroots mobilisation; lived experience	Community legitimacy, NULM-linked livelihoods	Capacity building; structured participation; monitoring roles
Residents & Informal Settlements	Low	High	Low Power – High Interest	Direct exposure to flooding, pollution	Local knowledge, daily usage patterns	Participatory mapping; ward-level platforms
RWAs	Low	High	Low Power – High Interest	Organized neighborhood representation	Local stewardship capacity	Formal consultation; co-management roles
IIT-Jodhpur / MDS University	Moderate	High	Low/Moderate Power – High Interest	Technical expertise; research credibility	GIS, technical assessments, evidence	Embed as knowledge partners
NIUA	Moderate	Moderate	Moderate Power – Moderate Interest	National policy advisory role	Scheme design influence, good practice repository	Evidence-sharing for scaling
Private Donors (CSR / Foundations)	Moderate	Moderate	Low/Moderate Power – Moderate Interest	Financial leverage; branding	Grants, innovation funds, technology	Pilot-based engagement; impact visibility
Mehrangarh Museum Trust	Low–Moderate	Moderate	Low Power – Moderate Interest	Heritage conservation advocacy	Historic water bodies, cultural spaces	Align through heritage-led framing

2.5 Resources, Actors and Strategic Alignment

To operationalise water body rejuvenation, it is essential to identify key resources, assess their availability, and map the actors who control or influence access. This enables targeted facilitation and coordinated action across governance, technical, social, and financial domains. Resources may include:

Government Funds (AMRUT, SBM, Finance Commission grants): high strategic leverage; controlled by urban departments and municipal corporations.

Land and Public Space: regulated by municipal bodies and development authorities; frequent approval bottleneck.

Information and Data Systems: managed by planning cells and IT units; essential for transparency and technical validation.

Institutional Access Platforms: SHGs, ward committees, NULM structures enabling community integration.

Technical Capacity: universities, engineering divisions, PHED laboratories supporting feasibility and compliance.

Social Capital: SHG federations, NGO field teams, community leaders sustaining legitimacy and stewardship.

Private Finance (CSR/philanthropy): supplementary resource requiring facilitation to align with public and community priorities.

Digital Infrastructure: Smart City platforms and grievance systems supporting monitoring and accountability.

Figure 7: Identification of key resources

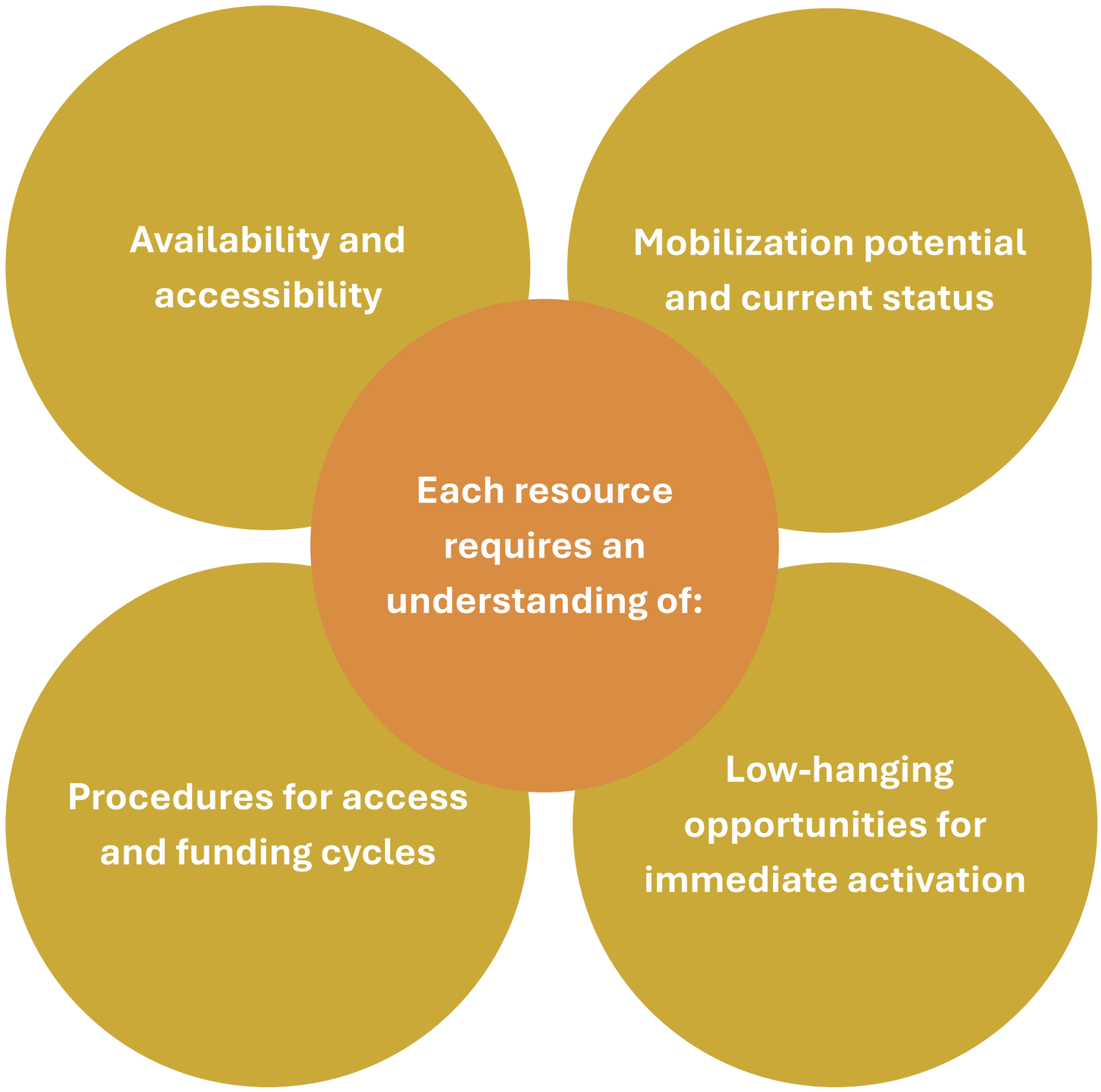

Figure 8: Understanding resources

Annexure 1 systematically maps resources, programs, and actors relevant to urban development, water management, and community initiatives. It integrates information on resource types, governance actors, program availability, and mobilisation status. By combining formal and informal influencers, access procedures, and funding cycles, the table provides a framework for analysing stakeholder engagement, resource mobilisation, and strategic alignment. This structure helps researchers and practitioners identify high-impact resources, assess underutilized assets, and plan coordinated actions across multiple programs.

2.6 Divergence and Convergence of Interests

Power–interest mapping provides a clear lens to identify where facilitation is most needed and highlights that stakeholder influence derives from diverse sources—financial capital, regulatory authority, technical expertise, data ownership, or social legitimacy. Influence becomes operational when actors control resources or legitimacy that others depend on, shaping negotiation leverage, coordination dynamics, and implementation feasibility. **However, influence alone does not determine outcomes; stakeholders also bring different priorities, values, and motivations. Understanding where these interests converge and diverge is critical for designing engagement strategies that are both effective and sustainable.**

Stakeholders rarely share identical priorities, and success hinges on recognizing both areas of alignment and points of tension. **Convergence** occurs where multiple actors' objectives overlap, creating natural entry points for collaboration. Common areas of alignment in urban water rejuvenation include reducing flood risk, improving public health and safety, enhancing urban liveability, and advancing climate resilience. These shared stakes allow municipal authorities, development agencies, elected representatives, and local communities to coordinate interventions, pool resources, and jointly plan for measurable outcomes.

Divergence, in contrast, arises where ecological, social, economic, or political interests conflict. Tensions can appear in various forms, such as encroachment removal versus constituency pressures, short-term infrastructure gains versus long-term ecological health, contested access and jurisdiction over water bodies, and reconciling ritual or cultural use with water quality objectives. These divergences are not governance failures—they are structural realities that reveal competing priorities and potential friction points that must be managed proactively.

Effectively managing divergence requires treating conflict as actionable information. Evidence, lived experience, and scenario-based framing can help stakeholders see their own priorities reflected in shared outcomes, building alignment where possible. **Phased, negotiated interventions**, starting with achievable early wins, generate confidence and create space for deeper systemic reforms. This approach transforms points of tension into opportunities for dialogue, trust-building, and collaborative problem-solving.

Recognising both convergence and divergence allows water rejuvenation initiatives to structure engagement strategically. Effective facilitation involves:

Aligning high-leverage decision makers and gatekeepers, ensuring that authority, regulatory control, and access to critical resources support implementation.

Including high-interest community actors, such as SHGs, community leaders, and water-based livelihood groups, to incorporate local knowledge and legitimacy.

Coordinating overlapping institutional mandates, reducing bottlenecks and enabling integrated planning across municipal bodies, development authorities, and state departments.

Figure 9: Effective facilitation of interests

Field Insight 1- Institutional Mapping Revealing Convergence and Divergence

Before any on-ground intervention was designed, institutional mapping in Jodhpur revealed that while multiple departments were connected to the same water body, their mandates and incentives were only partially aligned. The Municipal Corporation held operational responsibility for sanitation and desilting, PHED viewed the site through a groundwater recharge lens, the Development Authority was concerned with adjacent land-use pressures, and the Tourism Department prioritised aesthetic improvement.

Simultaneously, SHGs and local residents expressed concerns around access, safety, and cultural continuity. The mapping exercise—combining mandate review, budget analysis, and power–interest assessment— showed clear areas of convergence: flood mitigation, visible improvement under AMRUT 2.0, and political value in revitalised public space. However, it also surfaced divergence: fragmented jurisdiction, infrastructure-focused budgeting, limited space for community decision-making, and competing land priorities.

By making these dynamics explicit before initiating any pilot, the process shifted from assuming coordination to designing it. The exercise clarified where incentives overlapped, where negotiation would be required, and which actors needed formal convergence platforms. This early diagnostic step prevented later implementation conflicts and grounded subsequent planning in a realistic understanding of governance complexity.

Step 2: Stakeholder Engagement

Mapping various stakeholders including government bodies, institutions, academia, CSOs, community leaders etc. and their interest, areas and powers of influence led to engaging them appropriately towards the action of participatory multi-stakeholder waterbody rejuvenation.

Engagement strategies should be calibrated to stakeholder type, authority, and sphere of influence. A uniform consultation model is discouraged. Instead, differentiated modalities shall be applied as described below:

3.1 Municipal Corporations, development authorities and line departments

Urban waterbody rejuvenation initiatives should be embedded within statutory planning, budgeting, and regulatory frameworks while ensuring institutional convergence, clarity of jurisdictional roles, and sustained inter-departmental coordination.

Engagement with Municipal Corporations, Development Authorities, and line departments should be mandate-driven and evidence-based. The process should prioritize institutional anchoring—integrating rejuvenation within existing schemes (e.g., AMRUT 2.0, SBM-U, NULM, urban forestry, tourism programs, and state urban development frameworks)—rather than establishing parallel project structures.

1.	Systematic mapping of relevant schemes and funding windows.
2.	Presentation of technical evidence from baseline assessments and participatory diagnostics.
3.	Framing of co-benefits (public health, flood mitigation, climate resilience, tourism enhancement, ecological restoration).
4.	Designation of a nodal officer within the Municipal Corporation.
5.	Integration of actions into Annual Action Plans and departmental budgets.

6.	Bilateral consultations with departments (e.g., AMRUT, NULM and SBM units of Municipal Corporations, Garden, PHED, Forest, Tourism, Water Resource, Urban Development) prior to convening structured convergence meetings to formalize role allocation and maintenance responsibilities.
7.	Institutionalization of an advisory and coordinating committee for water rejuvenation across departments and different stakeholders

In Ajmer and Jodhpur, this structured engagement process culminated in the facilitation of a **City-Level Advisory Committee (CLAC)** and **Water Bodies Neighbourhood Committees (WBNC)** by PRIA. The CLAC functions as a formal multi-stakeholder platform for institutional convergence, technical validation, and coordinated oversight of participatory rejuvenation efforts and resonated with directives of AMRUT 2.0.

3.1.1 Core Responsibilities and Composition of CLAC

The key responsibilities of CLAC are envisioned as:

1.	Strategic Guidance: Provide policy and technical direction for conservation, rejuvenation, and sustainable management of traditional urban water bodies.
2.	Institutional Convergence: Facilitate coordination among municipal departments, state line agencies, ward representatives, academic institutions, and civil society actors.
3.	Prioritisation & Phasing: Approve criteria-based identification and phased selection of water bodies for intervention.
4.	Participatory Governance: Institutionalise community engagement mechanisms, including neighbourhood water committees and SHG participation.
5.	Regulatory Oversight: Recommend measures to address encroachment, pollution inflows, and solid waste dumping, and support enforcement coordination.
6.	Conflict Resolution: Act as a platform for negotiated conflict resolution related to traditional water bodies, including disputes over land use, access, encroachment, inter-departmental jurisdiction, or competing institutional mandates.

7.	Plan Integration: Ensure integration of water body rejuvenation into city Water Action Plans and relevant urban missions.
8.	Monitoring & Review: Periodically review progress, identify implementation gaps, and provide corrective recommendations.
9.	Long-Term Governance: Advise on institutional and regulatory mechanisms for sustained protection, maintenance, and monitoring of traditional water bodies.

The City Level Advisory Committee (CLAC) shall be constituted as a formally notified, multi-sectoral advisory and convergence platform anchored within the Urban Local Body (ULB). Its composition shall ensure administrative authority, technical competence, regulatory representation, and structured community participation to support coordinated and sustainable governance of urban water bodies.

Chairperson	Municipal Commissioner / Deputy Commissioner — ensures administrative authority and decision legitimacy.
Core Municipal Members (Voting Members)	· Superintending / Executive Engineer (Water Supply & Sewerage) · Executive Engineer (Stormwater / Drainage) · Environment / Sanitation Officer · Horticulture / Parks Department Representative · Town Planning Officer · Finance / Budget Officer Rationale: Embeds rejuvenation within statutory planning, budgeting, and municipal service delivery systems.
State Line Department Representatives	· Public Health Engineering Department (PHED) · Water Resources / Irrigation Department · Forest Department (where applicable) · Urban Administration & Development Department Rationale: Ensures regulatory alignment, groundwater integration, land demarcation, and environmental compliance.
Technical & Knowledge Partners	· Academic institution representative (Environmental Science / Hydrology / Remote Sensing / Urban Planning) · Technical expert (GIS / Water Quality / Climate Resilience) Rationale: Strengthens evidence-based planning, monitoring, and adaptive management.

Community & Civil Society Representatives	· SHG representative (preferably under DAY-NULM or equivalent urban livelihood platform) · Resident Welfare Association (RWA) representative · Representative of water-dependent or vulnerable settlements · Civil society organization working in water / environment Rationale: Institutionalizes participatory governance and social accountability.
Special Invitees (As Required)	· Tourism Department (for heritage-linked water bodies) · Disaster Management Authority (for flood-prone areas) · CSR / Private sector partners (where co-financing is involved)
Composition Principles	· Administrative Authority: Chaired by a senior municipal official with decision-making powers. · Functional Representation: All departments directly or indirectly affecting water bodies shall be represented. · Technical Competence: Inclusion of domain experts in hydrology, ecology, and urban systems. · Community Voice: At least 25–30% representation from non-government stakeholders. · Gender & Social Inclusion: Representation of women's groups and marginalized communities shall be ensured. · Manageable Size: Ideally 12–18 members to ensure effectiveness without bureaucratic overload.

In Ajmer, the CLAC comprises senior municipal officials; representatives from key line departments including PHED, Forest, and Urban Administration; academic experts from MDS University (Environmental Science and Remote Sensing); technical officers from water and sanitation divisions; representatives of SHGs under DAY-NULM; RWAs; and civil society organizations such as CFAR. This multi-sectoral structure institutionalizes convergence, embeds rejuvenation within statutory systems, and provides a sustained governance interface beyond individual consultations.

3.1.2 Core Responsibilities and Composition of WBNC

The Ward-Based Neighbourhood Water Committee (WBNC) are envisioned as decentralised, ward-level community platform constituted to facilitate conservation, protection, and sustainable management of neighbourhood water bodies through structured citizen participation. The WBNC shall be formed under the guidance of the Ward Councillor and formally communicated to the Urban Local Body (ULB) to ensure institutional recognition and linkage with city-level governance mechanisms.

The WBNC comprises representatives from the local community, including resident groups, Self-Help Groups (SHGs), youth groups, and other interested stakeholders residing in or dependent on the water body. The Committee functions as the primary community interface for stewardship, participatory monitoring, and coordination with municipal departments and technical agencies. It complements statutory municipal authority by strengthening last-mile vigilance, fostering behavioural change, and ensuring sustained local ownership beyond project implementation phases.

The WBNC operates in alignment with city-level platforms such as the City Level Advisory Committee (CLAC) and supports implementation of municipal water body rejuvenation initiatives through regular communication, reporting, and collaborative action. The Committee shall function with technical guidance and institutional support from the ULB and relevant line departments.

Key Responsibilities of the WBNC are:

1.	Assume primary responsibility for protection, upkeep, and day-to-day stewardship of the designated neighbourhood water body.
2.	Prevent and discourage dumping of solid waste, discharge of wastewater, and other polluting activities through community vigilance and awareness.
3.	Monitor and report encroachment, illegal construction, or physical damage to the water body to municipal authorities and the CLAC.
4.	Organise and participate in periodic cleaning drives, minor maintenance activities, and community-led shramdaan initiatives.
5.	Mobilise community awareness and participation on water conservation, sanitation, hygiene, and public health.
6.	Facilitate coordination with municipal departments, technical institutions, and civil society organisations for maintenance support, grievance redressal, and technical inputs.

7.	Provide feedback and local knowledge inputs during planning, prioritisation, and review processes related to water body rejuvenation.

The WBNC is not an executing authority but a community-based stewardship and monitoring mechanism that strengthens decentralised governance, enhances accountability, and promotes long-term sustainability of urban water body conservation efforts. In Ajmer, ward councillors from Ward No. 18 and Ward No. 62 formally communicated the constitution of such committees to the Municipal Commissioner, thereby institutionalising community-led stewardship within the municipal governance framework.

3.2 Elected Representatives

Engagement with elected representatives is necessary to secure political legitimacy, constituency-level advocacy, and sustained administrative support for waterbody rejuvenation initiatives. It should position rejuvenation as a visible public good aligned with constituency development priorities, including sanitation improvement, flood mitigation, environmental enhancement, and public amenity creation. The framing should emphasize tangible and demonstrable benefits for residents to strengthen political ownership.

Structured involvement of elected representatives is recommended through:

Figure 10: Involvement of elected representatives

Political endorsement is critical for accelerating administrative processes, resolving jurisdictional bottlenecks, and sustaining cooperation across departments.

3.3 Civil Society Organizations and Academic Institutions

Civil Society Organizations (CSOs) and academic institutions should be engaged to provide facilitative, research-based, and technical decision-support functions within the rejuvenation process. CSOs play a critical role in community mobilization, convening multi-stakeholder dialogues, and mediating between communities and government institutions to ensure inclusive and participatory governance.

Academic and technical institutions should strengthen evidence-based planning through baseline research, environmental assessments, GIS-based spatial mapping, and systematic documentation. They should contribute to the development of monitoring indicators and evaluation frameworks to track ecological and governance outcomes. Structured student engagement in field-based learning and applied research can expand technical capacity while reinforcing long-term institutional partnerships. The integration of technical actors enhances credibility, improves policy alignment, and ensures methodological rigor.

3.4 Community Members

Engagement with community members should emphasise trust-building, inclusive participation, and recognition of local knowledge in water management. Early interactions focus on understanding lived experiences of water stress, flooding, pollution, and access inequities, as well as memories and the cultural and social values tied to local water resources.

Key activities may include:

1.	Participatory mapping of waterbodies and surrounding settlements
2.	Documentation of seasonal variations and water usage patterns
3.	Exploration of socio-cultural values and associations
4.	Capturing diverse experiences, including Gender Equality and Social Inclusion (GESI) perspectives
5.	Identification of local stewards and volunteer monitors

6.	Visioning exercises to define desirable future conditions
7.	Identification of local stewards and volunteer monitors

Engagement should evolve from consultation toward co-design, ensuring interventions are grounded in community knowledge, lived realities, and long-term stewardship.

3.5 Women's Self-Help Groups (SHGs)

Women's Self-Help Groups (SHGs) should be recognized as structured community institutions with organizational continuity, social capital, and leadership potential, enabling them to strengthen accountability and governance within waterbody rejuvenation initiatives. Their engagement should include orientation on urban water governance frameworks and relevant public schemes, as well as capacity-building in monitoring, documentation, and facilitation skills. SHGs should be actively integrated into consultation and validation platforms to amplify women's participation in decision-making. Where feasible, livelihood linkages related to restoration activities—such as nursery development, maintenance services, or eco-based initiatives—can be developed to enhance sustainability. By positioning SHGs as intermediaries between households and municipal systems, this approach strengthens transparency, community oversight, and long-term institutional resilience, while also aligning with their role as AMRUT Mitras under AMRUT 2.0.

3.6 Operationalisation in Ajmer and Jodhpur

In Ajmer and Jodhpur, waterbody rejuvenation initiatives have been operationalised through a multi-layered approach combining institutional anchoring, community participation, and academic collaboration. Both cities have established City-Level Advisory Committees (CLACs) to coordinate municipal departments, civil society, academic institutions, and community members, ensuring GESI perspectives are embedded in planning, monitoring, and decision-making. At the local level, ward-level committees are proposed to systematically monitor waterbodies, engage GESI community members and Women's Self-Help Groups (SHGs), and facilitate problem identification, documentation, and stewardship. **IEC materials, including visual guides, posters, and pamphlets, have been strategically deployed to raise awareness, disseminate best practices, and encourage active participation in waterbody conservation among residents.**

In Ajmer, engagement progressed through alignment with the Ajmer Municipal Corporation, a nodal officer from the Garden Department, collaboration with MDS University for participatory mapping, and convergence with Forest and Tourism Departments under initiatives such as Nagar Van Yojana,. In Jodhpur, engagement began with UNNATI as a local partner and consultations with the Jodhpur Municipal Corporation, alongside academic collaboration with JNV University and other local institutions. Across both cities, participatory activities—including mapping, seasonal water usage documentation, socio-cultural value exploration, and visioning exercises—emphasize inclusion of community members, ensuring that interventions reflect lived experiences, local knowledge, and equitable access. SHGs are actively positioned as intermediaries between households and municipal systems, strengthening transparency, accountability, and long-term institutional resilience, while the overall framework aligns with AMRUT 2.0 operationalization to embed participatory approaches within national urban reform mandates.

Field Insight 2-	***IEC as a Governance Tool for Community-Centered Water Body Rejuvenation***

The Information, Education and Communication (IEC) strategy was designed not as a standalone awareness campaign but as a structured governance instrument embedded within the water body rejuvenation process. It translated technical objectives into locally grounded narratives, operationalised Gender Equality and Social Inclusion (GESI) commitments, strengthened youth engagement, and supported institutional convergence.

All IEC materials were developed in Hindi and local dialects to ensure accessibility across literacy levels and social groups. Content drew on socio-ecological profiling, oral histories, climate vulnerability assessments, and institutional mapping to connect scientific understanding with local knowledge and lived experience.

Types of IEC Materials Used

a. Illustrated Posters and Leaflets

Audience: *Ward residents, market associations, general public*

Content: *Ecological functions of water bodies (groundwater recharge, filtration, biodiversity), climate linkages, cultural associations, and community stewardship roles.*

Purpose: *Used visual storytelling and infographics to reposition water bodies as shared urban commons rather than neglected infrastructure.*

b. Climate and Traditional Knowledge Infographics

Audience: *Youth, schools, colleges, SHGs*

Content: *Climate resilience functions of baoris and talabs, drought adaptation practices, and heritage– climate linkages.*

Purpose: *Communicated simplified scientific explanations while highlighting traditional ecological knowledge systems.*

c. Stakeholder Role Communication Sheets

Audience: *Municipal departments, PHED, Tourism, Forest Department, SHGs, RWAs*

Content: *Institutional mandates, stewardship roles, and convergence pathways under programmes such as AMRUT 2.0.*

Purpose: *Clarified responsibilities and facilitated cross-departmental dialogue.*

d. School and College Engagement Modules

Audience: *Students and youth groups*

Formats: *Interactive sessions, field visits, discussions, and creative activities such as poster-making and slogan writing.*

Purpose: *Encouraged youth to interpret water heritage through creative expression, fostering emotional connection and intergenerational dialogue.*

e. Community Meeting Visual Aids

Audience: *SHGs, women's groups, ward committees*

Content: *Gendered access, safety, livelihoods, cultural practices, and seasonal water challenges.*

Purpose: *Participatory visual tools supported inclusive dialogue and operationalised GESI principles.*

f. Media and Public Visibility Efforts

Audience: *Wider urban population, policymakers, and civil society*

Formats: *Newspaper coverage, public events, and documentation of collaborative initiatives.*

Purpose: *Increased visibility of water body issues and created soft accountability through public discourse.*

Governance Outcomes and Strategic Contribution

The IEC strategy functioned as an enabling mechanism for participation and institutional coordination. It strengthened youth and SHG engagement in consultations, clarified institutional mandates across departments, and increased city-level visibility of water body issues.

Sustained communication and public engagement contributed to the formation of City-Level Advisory Committees (CLACs), neighbourhood-level water stewardship groups, and greater inclusion of women and youth in consultative processes aligned with AMRUT 2.0.

By linking technical knowledge with cultural narratives and participatory dialogue, the IEC approach helped rebuild socio-cultural associations with traditional water systems and encouraged collective stewardship.

Key Lesson: *When designed as a governance tool rather than merely a communication activity, IEC can support institutional coordination, strengthen community participation, and enable long-term stewardship of urban water commons.*

विभिन्न हितधारकों की भूमिका

समुदाय / स्थानीय नागरिक
- जलस्त्रोतों की सीमाओं की रक्षा
- कचरा और गंदा पानी न डालना
- नियमित सफ़ाई और निगरानी

महिला समूह / SHGs
- जल उपयोग और स्वच्छता की निगरानी
- जागरूकता और सामुदायिक नेतृत्व

युवा / छात्र / NSS-NCC
- श्रमदान और दस्तावेज़ीकरण
- जलवायु और जल संरक्षण पर जन-संवाद

नगर निगम व संबंधित विभाग
- तकनीकी सहयोग और योजना समन्वय
- दीर्घकालिक संरक्षण के लिए संस्थागत समर्थन

नागरिक समाज संगठन
- प्रक्रिया मार्गदर्शन
- क्षमता निर्माण
- समुदाय और प्रशासन के बीच सेतु

अजमेर के जलस्त्रोतों का संरक्षण केवल पर्यावरण का विषय नहीं है, बल्कि जलवायु परिवर्तन से निपटने, जल-सुरक्षा सुनिश्चित करने और अपने शहर के भविष्य को सुरक्षित करने का आधार है।

जलवायु सहनशील अजमेर की शुरुआत **पारंपरिक और सामुदायिक सहभागिता से होती है।**

अजमेर के पारंपरिक जलस्त्रोत महत्वपूर्ण क्यों हैं?

क्यों ?

आपको अजमेर में कई बावड़ियाँ, तालाब, कुएँ या झालरे अवश्य दिखाई दिए होंगे। ये वे संरचनाएँ हैं जिन्हें पिछली पीढ़ियों ने पानी को इकट्ठा करने और सुरक्षित रखने के लिए बनाया था। इन संरचनाओं को बनाते समय उन्होंने भूमि की भौगोलिक स्थिति और जल प्रवाह का बहुत गहराई से अध्ययन किया था।

आज हमें नलों और हैंडपंपों से आसानी से पानी मिल जाता है, इसलिए हम अपनी रोज़मर्रा की ज़रूरतों के लिए सीधे तौर पर इन जल स्रोतों पर निर्भर नहीं हैं।

तो क्या इसका मतलब यह है कि अब ये अप्रासंगिक हो गए हैं? क्या हमें इन पर ध्यान नहीं देना चाहिए?

यह बिल्कुल सही नहीं है।

आज भी अजमेर के पारंपरिक जल स्रोत बेहद महत्वपूर्ण हैं, खासकर जलवायु परिवर्तन (climate change) के दौर में। जैसे-जैसे तापमान बढ़ रहा है और बारिश अनियमित होती जा रही है, अजमेर जैसे शहरों को लंबी गर्मी, सूखे की स्थिति और कभी-कभी अचानक तेज़ बारिश का सामना करना पड़ता है।

ऐसे समय में पारंपरिक जल संरचनाएँ हमारी मदद करती हैं।

कैसे ?

01 बाढ़ और जलभराव से सुरक्षा
अरावली की पहाड़ियों से बहकर जाने वाला वर्षा जल जब तालाबों और झीलों में संचित होता है, तो शहर के निचले इलाकों में जलभराव और नुकसान कम होता है।

02 सूखे समय में जल-सुरक्षा
पारंपरिक जल निकाय भूजल रिचार्ज (recharge) में मदद करते हैं। हमारे हैंडपंपों से लगातार पानी प्राप्त करने के लिए भूजल का निरंतर रिचार्ज होना महत्वपूर्ण है।
गर्मियों में पानी की कमी के समय ये जलस्रोत शहर को सहारा देते हैं, जो अजमेर जैसे शुष्क क्षेत्र में अत्यंत आवश्यक है।

03 शहर को ठंडा रखने में भूमिका
जलस्त्रोतों और उनसे जुड़े हरित क्षेत्र शहर के तापमान को संतुलित करते हैं और लू व अत्यधिक गर्मी के प्रभाव को कम करते हैं।

04 जैव विविधता और जीवन-आधार
ये जलस्रोत पेड़-पौधों, पक्षियों और पशुओं को सहारा देते हैं तथा शहर के पर्यावरणीय संतुलन को बनाए रखतेहैं।
इसलिए, पारंपरिक जलस्त्रोत केवल पुरानी संरचनाएँ नहीं, बल्कि कम लागत वाले, स्थानीय और प्रभावी जलवायु समाधान के साथ साथपूर्वजों से मिली एक अमूल्य धरोहर हैं।

आज जलस्त्रोतों के सामने प्रमुख चुनौतियाँ

- अतिक्रमणऔर अवैध निर्माण
- कचरा और गंदे पानीका प्रवेश
- गंद भरने से जल-धारण क्षमता में कमी
- नियमित देखरेख और सामुदायिक जिम्मेदारी का अभाव

सामुदायिक सहभागिता क्यों आवश्यक है?

सरकारी योजनाओं की सफलता भी सक्रिय सामुदायिक सहभागिता पर निर्भर करती है।

जलवायु परिवर्तन के संदर्भ में पारंपरिक जलस्त्रोतों का महत्व

1 बाढ़ और जलभराव से सुरक्षा
अरावली की पहाड़ियों से बहकर आने वाला वर्षा जल जब तालाबों और झीलों में संचित होता है, तो शहर के निचले इलाकों में जलभराव और नुकसान कम होता है।

2 सूखे समय में जल-सुरक्षा
पारंपरिक जल निकाय भूजल रिचार्ज (recharge) में मदद करते हैं और गर्मियों में पानी की कमी के समय शहर को सहारा देते हैं, जो अजमेर जैसे शुष्क क्षेत्र में अत्यंत आवश्यक है।

3 शहर को ठंडा रखने में भूमिका
जलस्त्रोतों और उनसे जुड़े हरित क्षेत्र शहर के तापमान को संतुलित करते हैं और लू व अत्यधिक गर्मी के प्रभाव को कम करते हैं।

4 जैव विविधता और जीवन-आधार
ये जलस्त्रोत पेड़-पौधों, पक्षियों और पशुओं को सहारा देते हैं और
शहर के पर्यावरणीय संतुलन को बनाए रखते हैं।

राजस्थान पत्रिका
अजमेर, गोलसार, 06 जनवरी 2026

पायलट प्रोजेक्ट : नगर निगम-समुदाय- प्रिया की साझा पहल

पारंपरिक जल निकाय बावड़ियों का होगा संरक्षण व पुनर्जीवन

टीटी कॉलेज स्थित बावड़ी व मालूसर बावड़ी का होगा संरक्षण

पत्रिका न्यूज़ नेटवर्क
patrika.com

अजमेर. शहर में जलवायु परिवर्तन, घटते भूजल स्तर और पारंपरिक जल स्रोतों पर बढ़ते दबाव के मद्देनजर अजमेर नगर निगम, समुदाय और प्रतिभागिनी रिसर्च इन प्लानिंग (प्रिया), पहाड़ियों के शहर में एक समुदायिक सहभागिता आधारित जल निकाय संरक्षण एवं पुनर्जीवन [illegible]

[illegible] विकासनगर में बावड़ी का जीर्णोद्धार कार्य पूरा हो चुका है।

इस पायलट परियोजना के अंतर्गत अजमेर नगर निगम क्षेत्र के दो ऐतिहासिक जल निकाय- टीटी कॉलेज बावड़ी (खसरा संख्या 42) तथा मालूसर बावड़ी (खसरा संख्या 14) को केंद्र में रखते हुए सफाई, संरक्षण, पुनर्जीवन और दीर्घकालिक देखरेख से जुड़े व्यावहारिक उपाय अपनाए जाएंगे।

इस पायलट परियोजना के सुझाव तैयार होने के बाद ये जल निकायों का संरक्षण और पुनर्जीवन समुदाय के सहयोग से किया जाएगा। इस परियोजना का उद्देश्य केवल दो जल [illegible] विकासनगर स्थित बावड़ी का जीर्णोद्धार कार्य पूरा हो चुका है। यह एक ऐतिहासिक संरचना है, जिसे स्थानीय लोग पानी का प्रमुख स्रोत मानते थे। इस बावड़ी के जीर्णोद्धार से आसपास के क्षेत्रों में भूजल स्तर बढ़ने और पेयजल की उपलब्धता में सुधार होने की उम्मीद है। [illegible] बावड़ी के जीर्णोद्धार कार्य को लेकर प्रिया के [illegible] ने बताया कि बावड़ी के पुराने पत्थरों को हटाए बिना, उनकी मौजूदा संरचना को ध्यान में रखते हुए कार्य किया गया है। [illegible] बावड़ी में जमा गाद और मलबे को हटाया गया है। इसके बाद बावड़ी की दीवारों और तल को मजबूत किया गया है। [illegible] बावड़ी में वर्षा जल को प्राकृतिक रूप से पहुंचाने के लिए [illegible] बनाए गए हैं। [illegible] बावड़ी के आसपास की जमीन को समतल किया गया है। [illegible] बावड़ी के आसपास पौधरोपण किया जाएगा। [illegible] बावड़ी के आसपास पौधरोपण किया जाएगा।

Step 3: Engaging Communities for Profiling, Mapping and Valuation of Traditional Water Resources

Mapping is carried out to document and understand the full extent, condition, and function of traditional water bodies. Conducting mapping and profiling with communities ensures that local knowledge, usage patterns, cultural practices, and ecological significance are captured alongside technical measurements. This approach recognises water bodies as living social-ecological systems, not just infrastructure, enabling inclusive, multi-stakeholder planning, evidence-based rejuvenation, and long-term stewardship.

4.1 Principles and Approach towards profiling, mapping and valuation

The engagement process is guided by three core principles:

1. **Respect for local knowledge:** Residents possess detailed understanding of water sources, seasonal patterns, and historical management practices that are not captured in official records.

2. **Inclusion of women, youth, and marginalized groups:** Ensuring diverse participation allows GESI perspectives to shape the mapping, valuation, and future management of water bodies.

3. **Transparency and feedback loops:** Continuous reflection and validation maintain trust, allow corrections, and encourage community ownership of the process.

Figure 11: Core principals for profiling, mapping and valuation of water bodies

These principles directly inform the methods used in mapping and valuation. To operationalize them, the following approaches are applied:

1.	Stakeholder mapping identifies key participants, including SHGs, youth groups, local residents, and students from academic institutions, ensuring broad and equitable representation.
2.	Small group discussions allow participants to share experiences, usage practices, and challenges associated with each water body.
3.	Transect walks provide a spatial understanding of boundaries, inflows, outflows, and access points, combining observation with local narratives.
4.	Timeline mapping reconstructs historical changes, seasonal variations, and shifts in usage over time.
5.	Oral history and memory mapping capture stories, rituals, and cultural practices associated with the water body.
6.	Community visioning exercises enable residents to articulate aspirations for restoration, maintenance, and sustainable management.
7.	Validation and reflection sessions ensure that collected data and insights are accurate, inclusive, and aligned with community priorities.

Annexure 2 *provides more details about these methods. CSOs, SHGs and aligned academia should also be trained on these methods before actual execution.* ***Annexure 3*** *provides details about training content and tools used.*

Picture 1:Community discussions and transect walks

4.2 Profiling, mapping and valuation process

To engage communities for profiling, mapping and valuation the following steps should be taken:

4.2.1 Identify and Mobilise Community Participants

Figure 12: Identification and mobilisation of community participants

4.2.2 Orientation and Capacity Building

Train participants on:

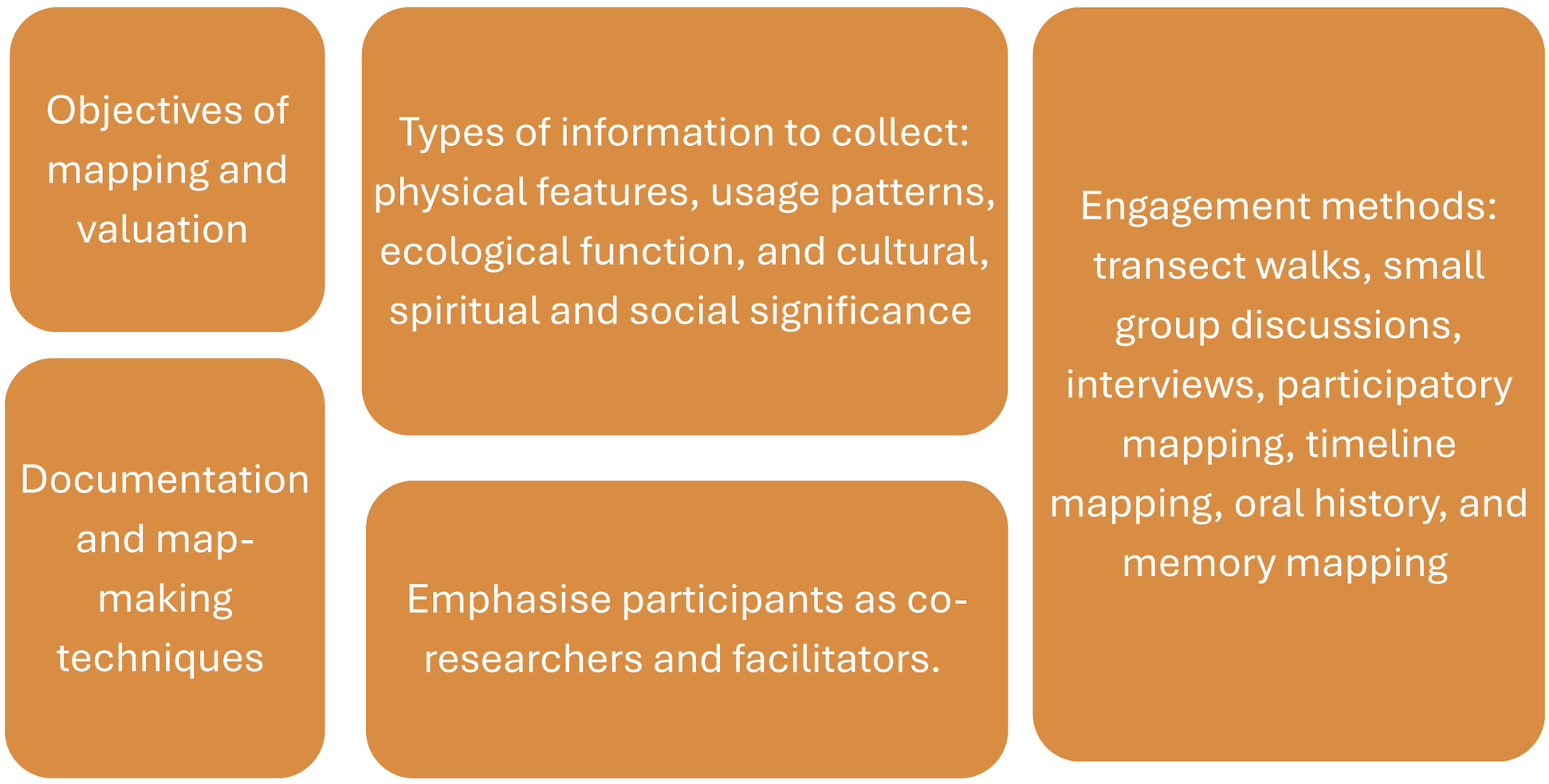

Figure 13: Training participants in participatory research methods

4.2.3 Field-Based Mapping and Assessment

Field-Based Mapping and Assessment
• Conduct systematic visits to each water body.
Document: • Physical characteristics (size, depth, inflows/outflows, condition) • Usage patterns (rituals, bathing, washing, recreation) • Cultural and historical significance • Seasonal variations and water availability
• Engage community members in mapping exercises, illustrating boundaries, landmarks, and critical features.
• Facilitate community visioning sessions to capture aspirations for restoration and management.

4.2.4 Documentation and Compilation

Standardise data for each water body, including:
Location, type, and approximate size
Current condition and maintenance needs
Social, cultural, and ecological values
Community knowledge and visions for restoration

4.2.5 Validation and Feedback

Review maps and profiles with community members to confirm accuracy and fill gaps.

Ensure inclusive participation, reflecting the voices of women, youth, and marginalised residents.

Figure 14: Steps for validation and feedback

4.2.6 Outputs and Use

Figure 15: Steps for effective outputs and utilisation

The methods were used in socio-ecological and cultural mapping of the water bodies in Ajmer and Jodhpur and a compendium was released for both cities. In Ajmer, SHG women were mobilised to map water bodies. Orientation and training equipped participants with skills in community engagement, participatory mapping, and documentation, enabling them to act as co-researchers. Field visits involved transect walks, interviews, and focus group discussions with elders, women, youth, and shopkeepers, capturing technical details as well as social, cultural, and ecological values. Collected information was compiled into standardized profiles covering location, type, dimensions, condition, usage patterns, cultural significance, and community visions for restoration. Feedback sessions facilitated by SHG women ensured inclusivity and accuracy, reflecting residents' lived experiences. In total, 30 water bodies were mapped, and a comprehensive compendium of Ajmer's water bodies was created to support municipal planning, participatory decision-making, and long-term community stewardship. Similar efforts were made to map 58 water bodies in Jodhpur, by training SHG women, community women and students from Jai Narain Vyas University.

Annexure 4 provides an example of mapping and profiling of a water body with the community.

CHAPTER 5

Step 4: Piloting waterbody rejuvenation through multi-stakeholder community led approach

Piloting water body rejuvenation interventions provides a critical transition between planning and city-wide implementation. While earlier steps generate socio-ecological profiles, institutional mapping, and stakeholder engagement strategies, pilots enable these frameworks to be operationalised under real conditions. They serve as structured learning platforms where participatory approaches, institutional coordination mechanisms, and stewardship models can be tested before scaling.

Pilot initiatives help translate conceptual frameworks—such as commons-based governance, Gender Equality and Social Inclusion (GESI), and climate-resilient urban water management—into practical processes involving municipal institutions, technical agencies, civil society organisations, and local communities.

From an implementation perspective, pilots perform several important functions:

Testing participatory governance approaches involving communities, women's groups, youth, and local institutions.

Demonstrating inter-departmental convergence among municipal departments, line agencies, academic institutions, and civil society organisations.

Identifying operational and governance challenges such as coordination gaps, unclear mandates, participation barriers, and maintenance responsibilities.

Generating evidence for planning instruments, including City Water Action Plans (CWAPs) under AMRUT 2.0.

Building community ownership and stewardship capacity, which is essential for long-term sustainability of rejuvenation efforts.

Figure 16: Functions served by pilots

By prioritising process learning alongside physical restoration activities, pilots ensure that future interventions are context-sensitive, inclusive, and institutionally grounded.

5.1 Core Elements of a Pilot Intervention

A structured pilot intervention typically includes the following components:

1.	**Selection of representative water bodies**, considering urban typology, accessibility, ecological condition, and community dependence.
2.	**Baseline assessment**, documenting physical characteristics, water quality, ecological health, historical significance, and existing governance arrangements.
3.	**Community engagement and mobilisation,** involving SHGs, residents, youth groups, schools, and local institutions in awareness, mapping, and stewardship activities.
4.	**Institutional convergence**, bringing together municipal departments, technical agencies, and civil society partners.
5.	**Demonstration activities**, including clean-up drives, participatory mapping, youth engagement events, and public awareness campaigns.
6.	**Documentation and monitoring**, generating a repository of technical, social, and cultural knowledge to inform future planning and replication.

Within the Rajasthan initiative supported by IIED-UK, pilots were implemented in Ajmer and Jodhpur to demonstrate how participatory water body rejuvenation can be operationalised through multi-stakeholder collaboration.

5.2 Ajmer Pilot: Institutional Convergence and Participatory Documentation

5.2.1 Pilot Context

In Ajmer, pilot interventions focused on two traditional stepwells:

- Malusar Baodi (Ward 18)
- Meer Shah Ali Baodi (TT College Campus, Ward 62)

These sites represent distinct governance contexts—one located within a neighbourhood setting and the other within an institutional campus—allowing the project to test engagement strategies across different social and administrative environments.

The pilot was initiated through a Commissioner-chaired inception meeting convened by the Ajmer Municipal Corporation (AMC). The meeting brought together municipal departments, line agencies, academic institutions, and civil society organisations to establish roles, responsibilities, and coordination mechanisms.

Participating institutions included:

1.	Ajmer Municipal Corporation
2.	Public Health Engineering Department (PHED)
3.	Swachh Bharat Mission – Urban
4.	Municipal Garden Department
5.	Maharshi Dayanand Saraswati (MDS) University
6.	Civil society organisations and local community representatives

This early convergence ensured that the pilot was not treated as an isolated community activity but as an **institutionally supported participatory initiative.**

5.2.2 Implementation Approach

The Ajmer pilot combined institutional convergence, community mobilisation, and academic engagement to generate a multi-dimensional understanding of the selected water bodies.

1. Institutional Coordination

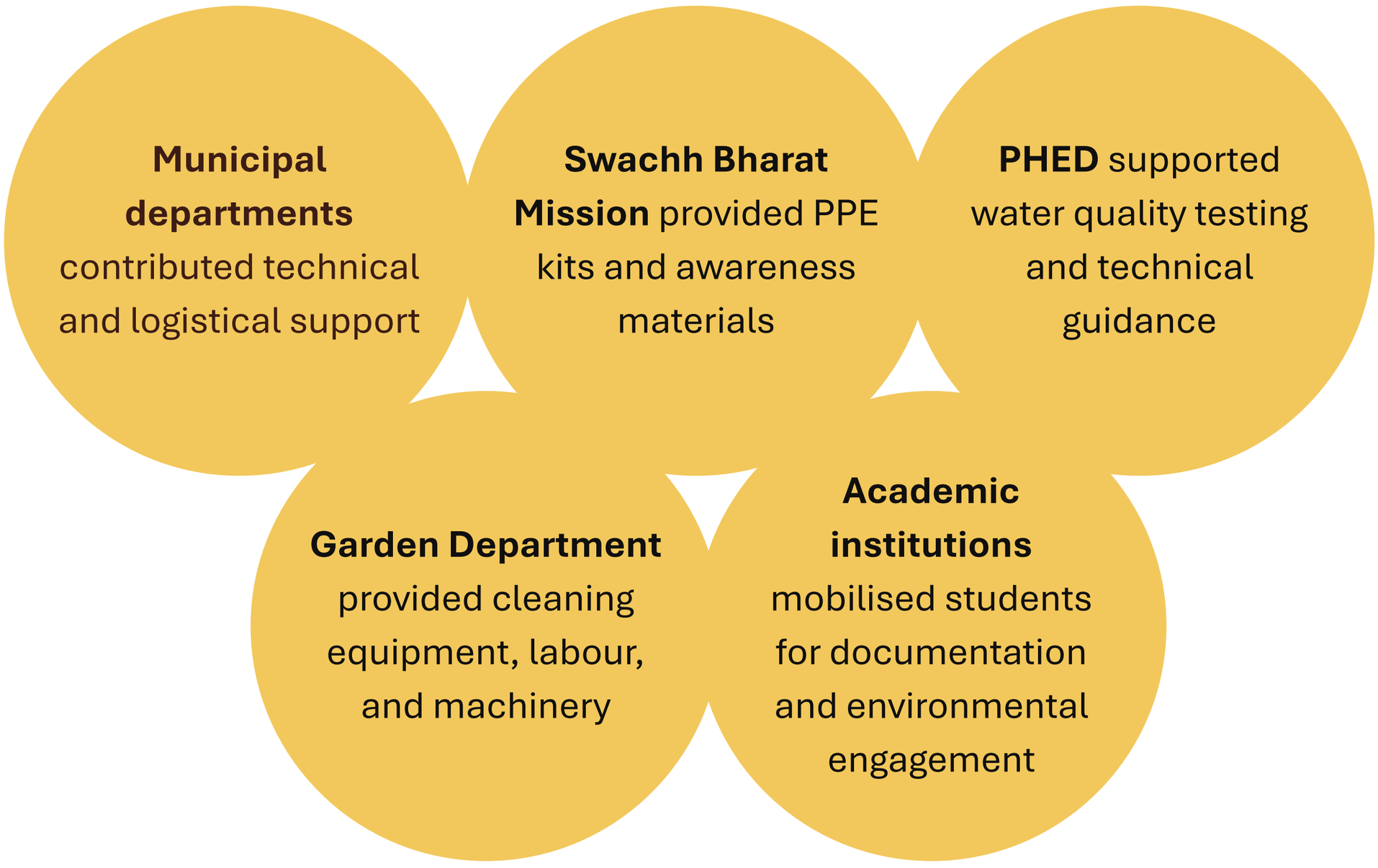

Figure 17: Contribution of various government departments to the pilot

This coordination reduced operational fragmentation and allowed the pilot to demonstrate how multiple departments can collectively support rejuvenation efforts.

2. Community Engagement and Capacity Building

Community mobilisation focused on building awareness and stewardship among residents and youth.

Key activities included:

1.	Mobilisation of Self-Help Groups (SHGs) and local residents
2.	Engagement of students from MDS University
3.	Orientation sessions on water stewardship and participatory documentation
4.	Awareness campaigns highlighting the ecological and cultural importance of traditional water bodies

These activities helped build visibility around the initiative and encouraged participation across age groups.

3. Participatory Documentation and Knowledge Generation

The pilot emphasised participatory knowledge generation, combining technical documentation with community knowledge.

Activities included:

1.	Transect walks around the water bodies
2.	Oral history documentation with long-time residents
3.	Timeline mapping to capture historical changes
4.	Participatory mapping of water use and access patterns

These exercises captured insights on cultural practices, seasonal changes, and community relationships with the stepwells—information that is often absent from formal municipal records.

4. Demonstration Actions

Clean-up drives and creative engagement activities were organised to create visible improvements and stimulate public interest.

Activities included:

- Removal of accumulated waste
- Clearing vegetation and debris
- Awareness campaigns led by students
- Creative exercises involving children and youth

Figure 18: Demonstration activities to engage the public and create awareness

Such demonstrative actions helped transform the pilot from a purely analytical exercise into a visible community movement around water conservation.

5.2.3 Outcomes

The Ajmer pilot generated several important outcomes:

Institutional outcomes	• Strengthened coordination between municipal departments and technical agencies • Recognition of traditional water bodies as critical components of urban infrastructure
Community outcomes	• Increased participation of SHGs and local residents • Youth engagement through academic institutions
Governance outcomes	• Development of standardised water body profiles • Integration of community knowledge into planning processes • Initiation of ward-level steward

Malusar Bawdi- before

Malusar Bawdi- after

Mir Shah Ali Bawdi- before

Mir Shah Ali Bawdi- after

Stakeholders at Malusar Bawdi

Awareness programs with students at Mir Shah Ali Bawdi

Picture 2: Pilot waterbody rejuvenation in Ajmer

5.3 Jodhpur Pilot: Community Mobilisation and Ward-Level Stewardship

5.3.1 Pilot Context

In Jodhpur, the pilot focused on Poonjala Nadi (also locally referred to as Ajra Sagar) located in Ward 94.

Traditional water bodies such as nadis, tanks, and stepwells historically played a critical role in water storage and groundwater recharge in Rajasthan's arid landscape. However, many of these systems have deteriorated due to neglect, waste dumping, and declining community stewardship.

The Jodhpur pilot sought to demonstrate how community mobilisation and institutional collaboration can initiate restoration of such systems.

The initiative involved collaboration between:

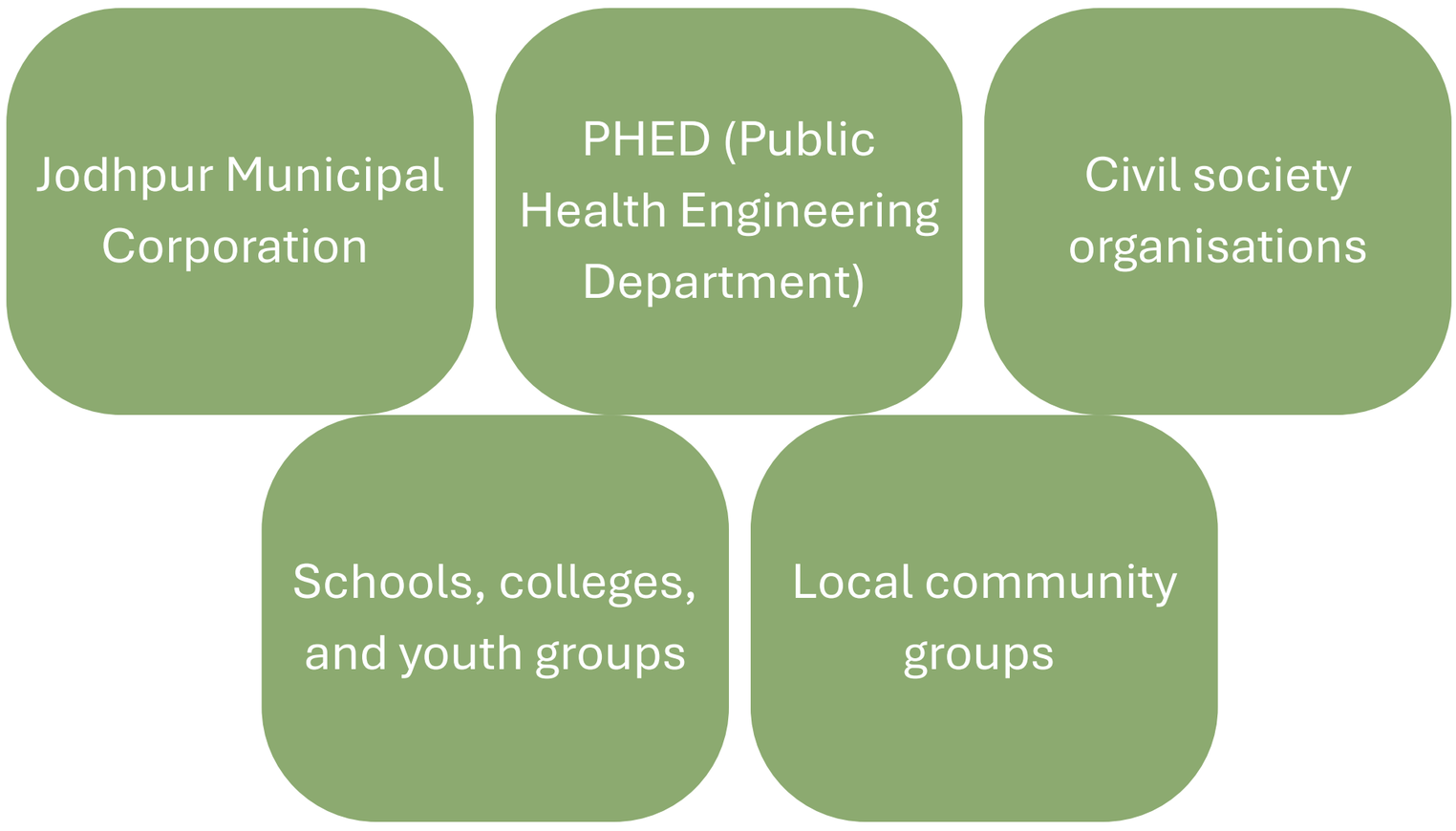

Figure 19: Stakeholder collaboration

5.3.2 Implementation Approach

The Jodhpur pilot adopted a **mobilisation-first approach**, where community participation and visible action served as the primary entry point.

1. Community Shramdaan and Site Restoration

A large-scale cleanliness drive was organised through **collective voluntary labour (shramdaan)** involving students and local residents.

Approximately 100 students and community participated in activities such as:

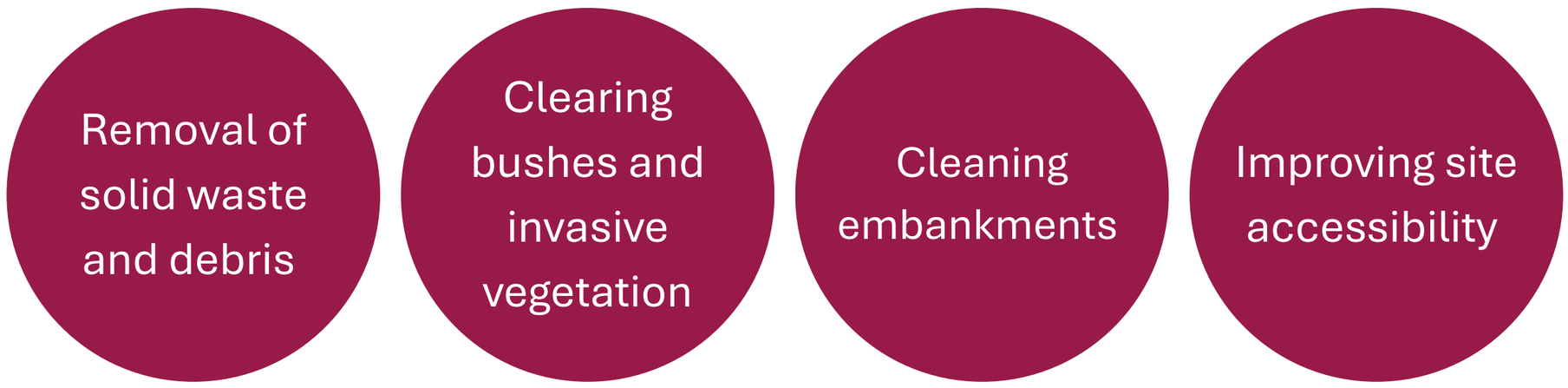

Figure 20: Activities at the pilot

The visible transformation of the site helped generate local enthusiasm and renewed interest in protecting the water body.

2. Technical Engagement and Water Quality Awareness

Officials from PHED conducted water quality testing at the site and explained key parameters to students and residents.

This activity helped:

Figure 21: Benefits of carrying out water quality testing at the pilot sites

Such interactions helped bridge the gap between technical agencies and community participants.

3. Formation of Community Stewardship Structures

To ensure continuity beyond the clean-up activity, a Water Body Neighbourhood Committee (WBNC) was established.

The committee was expected to:

Figure 22: Role of Water Bodies Neighbourhood Committee

The formation of the committee marked an important shift from event-based engagement to structured community governance.

5.3.3 Outcomes

The Jodhpur pilot generated several immediate outcomes:

Physical outcomes	• Removal of accumulated waste and debris • Improved environmental hygiene and site accessibility
Community outcomes	• Strong youth participation and environmental awareness • Renewed community engagement with traditional water systems
Governance outcomes	• Establishment of a community monitoring committee • Strengthened collaboration between municipal authorities and residents

The pilot demonstrated that low-cost community mobilisation can act as an effective catalyst for water body restoration, particularly in water-scarce urban regions.

Field Insight 3 - Community Action as an Entry Point for Water Body Rejuvenation
In Jodhpur's Punjala Nadi pilot, a community-led clean-up activity involving local schools and residents served as the starting point for restoration. Nearly 100 students participated in removing waste, clearing vegetation, and cleaning the embankments of the traditional water body. *The visible improvement in site conditions generated public attention and encouraged residents to participate in discussions on long-term stewardship. Subsequently, a* ***Water Body Neighbourhood Committee*** *was formed to coordinate monitoring, prevent waste dumping, and maintain communication with municipal authorities.* *This experience illustrates how* ***demonstrative community action can create momentum for broader governance engagement****, turning one-time activities into sustained stewardship initiatives.*

पूंजला नाडी संरक्षण के लिए अभियान चलाकर किया सामूहिक श्रमदान

100 स्टूडेंट्स ने नाडी से कचरा-मलबा निकाला, झाड़ियां काटी, जल स्वच्छता समिति भी गठित

शनिवार को पूंजला नाडी (अन्ना सागर) में सफाई अभियान चला। इसमें 100 स्टूडेंट्स ने हिस्सा लिया।

जोधपुर | वार्ड 94 स्थित पूंजला नाडी (अन्ना सागर) पर पारंपरिक जल स्रोत संरक्षण के लिए सामूहिक श्रमदान व स्वच्छता अभियान आयोजित किया गया। इस पहल में नगर निगम, प्रिया संस्था (नई दिल्ली), उन्नति संस्था तथा श्री सैनिक क्षत्रिय पूंजला नाडी संरक्षण एवं पर्यावरण विकास संस्थान ने सहयोग किया।

अभियान में नाडी से कचरा निकाला गया, झाड़ियां साफ की गईं और मलबा हटाकर परिसर को स्वच्छ बनाया गया। करीब 100 विद्यार्थियों ने श्रमदान कर जल संरक्षण का संदेश दिया। इसमें मां शारदा विद्यापीठ, जगदंबा माध्यमिक विद्यालय, ग्रेट सत्यम एकेडमी और आरएसएम स्कूल के छात्र-छात्राएं शामिल रहे।

संगठन अध्यक्ष जगदीश देवड़ा ने नियमित श्रमदान जारी रखने की घोषणा की। जल स्वच्छता समिति का गठन किया गया। मुख्य स्वास्थ्य निरीक्षक मदन सिंह, राधेश्याम सांखला, युधिष्ठिर सिंह, परवेंद्र सिंह और वार्ड प्रभारी भागीरथ सहित अनेक नागरिकों की भागीदारी रही।

पीएचईडी के अधिकारियों ने पानी का परीक्षण कर जागरूक किया

प्रिया संस्था के डॉ. रबी राज ने सामुदायिक भागीदारी व निगरानी को संरक्षण का आधार बताया, जबकि उन्नति संस्था के डॉ. शिशिर पुरोहित ने नाडी के महत्व पर प्रकाश डाला। माधोसिंह राठौड़ ने भी श्रमदान कर लोगों को प्रेरित किया। पीएचईडी के प्रतिनिधियों ने जल गुणवत्ता परीक्षण कर जागरूक किया।

Picture 3: Pilots in Jodhpur

5.4 Key Learnings from the Ajmer and Jodhpur Pilots

The pilots in Ajmer and Jodhpur highlight that water body rejuvenation is not only a technical or engineering task but also a governance and social process. Successful interventions require institutional coordination, inclusive participation, and mechanisms for long-term stewardship.

Key learnings emerging from the pilots include:

Facilitated participation is essential	Community engagement requires deliberate facilitation, trust-building, and institutional responsiveness. Participation was stronger where municipal actors actively supported dialogue and community involvement.
Context-specific engagement strategies are necessary	Different spatial contexts require tailored approaches. Open neighbourhood sites require broader community mobilisation, whereas institutional campuses may require engagement with administrative authorities and organised user groups.

Intentional GESI integration strengthens participation	Women, SHGs, and marginalised groups need dedicated spaces and facilitation to participate meaningfully in planning and monitoring processes.
Demonstrative actions help build momentum	Clean-up drives, student engagement, and creative awareness activities generate visible results that attract public interest and institutional attention.
Community knowledge enriches technical planning	Participatory documentation revealed insights on seasonal water use, cultural practices, safety concerns, and historical changes that are often absent from official records.

CHAPTER 6

Lessons and Outcomes

Urban water body rejuvenation is not only a technical restoration challenge but also a governance process involving multiple actors, institutions, and social groups. The experiences from Ajmer and Jodhpur demonstrate that the effectiveness of such initiatives depends significantly on how engagement processes are designed, facilitated, and institutionalised.

The initiative adopted a participatory and action-oriented approach that brought together municipal institutions, community groups, academic institutions, youth, and civil society organisations. Through participatory profiling, multi-stakeholder consultations, and demonstration pilots, the process generated both operational insights and institutional learning relevant for scaling under programmes such as AMRUT 2.0, climate actions plans etc.

The lessons emerging from the initiative highlight the importance of addressing structural barriers to participation, strengthening coordination among institutions, and designing engagement processes that translate dialogue into sustained stewardship. The sections below outline key considerations for effective multi-stakeholder engagement, followed by the broader outcomes and value addition generated through the initiative.

6.1 Ensuring Effective Multi-Stakeholder Engagement – Key Considerations

Multi-stakeholder engagement is foundational to community-led water body rejuvenation. However, effective implementation requires deliberate attention to structural barriers, power dynamics, institutional fragmentation, and process fatigue. This section outlines operational safeguards to ensure that engagement is inclusive, credible, and action-oriented rather than symbolic.

6.1.1 Common Barriers and Mitigation Measures

a) Mistrust between Communities and Institutions	**Challenge:** · Prior experiences of incomplete projects, fencing, or exclusion often generate skepticism. · Communities may fear privatization or displacement; institutions may perceive participatory processes as slow and resource-intensive. **Mitigation:** · Ensure full transparency on budgets, roles, and timelines. · Initiate visible, small-scale actions (e.g., debris removal, minor repairs, waste clearance) as confidence-building measures. · Share meeting minutes and progress updates publicly.
b) Power Asymmetries	**Challenge:** · Social hierarchies (gender, caste, age, income) influence who speaks, who decides, and whose knowledge counts. **Mitigation:** · Mandate representation of women, SHGs, youth, and marginalised groups in committees. · Use neutral facilitation to manage dominant voices. · Schedule meetings at accessible times and locations. · Provide basic orientation on rights, roles, and technical aspects to enable informed participation. · Inclusion must be designed—not assumed.
c) Fragmented Governance Structures	**Challenge:** · Overlapping mandates among municipal departments and line agencies create ambiguity and delays. **Mitigation:** · Document roles and departmental responsibilities explicitly. · Institutionalise structured inter-departmental meetings. · Align actions with ongoing schemes (e.g., AMRUT 2.0, SBM-Urban). · Establish nodal coordination under a designated authority (e.g., Municipal Commissioner or City Advisory Committee). · Convergence must move from ad-hoc coordination to institutional practice.

d) Participation Fatigue	**Challenge:** • Repeated consultations without visible outcomes reduce community motivation. **Mitigation:** · Link consultations to measurable milestones. · Track and publicly display commitments and progress. · Integrate community monitoring into formal governance structures (e.g., ward committees, Jal Swachhta Samitis).
e) Competing Priorities and Time Constraints	**Challenge:** • Municipal officials operate within budget cycles and performance benchmarks. · Community members balance participation with livelihood responsibilities. **Mitigation:** · Adopt a phased engagement model. · Integrate rejuvenation activities into routine municipal workflows. · Use short, structured meetings with clear agendas and outputs.

6.1.2 Strategies for Smooth Implementation

Neutral facilitation	Manage power imbalances, translate technical language, document decisions, and sustain momentum.
Phased engagement	Listening → Trust-building → Demonstration action → Institutional embedding.
Demonstration actions	Small, visible improvements build legitimacy and political support.
Clear role definition	Written documentation prevents duplication and safeguards continuity during administrative transfers.
Continuous communication	Shared minutes, follow-ups, and public feedback loops sustain engagement.

Recognition of contributions	Acknowledge municipal, SHG, academic, CSR, and volunteer inputs to reinforce ownership culture.

6.2 Outcomes and Value Addition- Operationalising Participatory, GESI-Responsive Governance of Urban Water Commons

The initiative implemented in Ajmer and Jodhpur was designed as an action-research process to strengthen multi-stakeholder governance of traditional water bodies. While tangible ecological improvements were achieved at pilot sites, the primary outcomes lie in institutional, relational, and planning transformations.

Across both cities, 88 traditional water bodies (30 in Ajmer and 58 in Jodhpur) were profiled using a structured participatory methodology. Two demonstration pilots in each city were implemented to showcase feasibility of collaborative rejuvenation within existing municipal systems.

The outcomes are organised below across five interlinked domains.

6.2.1 Strengthened Socio-Ecological Evidence for City Water Planning

The profiling process went beyond physical or hydraulic mapping. It combined:

- Technical documentation (area, condition, encroachments, hydrological linkages)
- Socio-cultural and spiritual mapping (ritual use, oral histories, community memory, festivals)
- Traditional ecological knowledge (historic water flows, recharge zones, customary practices)
- Gendered access and safety analysis
- Institutional jurisdiction mapping
- Climate vulnerability observations (flooding, heat stress, water scarcity patterns)
- Community members — including SHG women, youth, elders, and local custodians — actively contributed knowledge.

Figure 23: Profiling of water bodies

Key Outcomes:

Creation of a validated database of 88 water bodies integrating ecological and social dimensions

Inclusion of undocumented flood routes and recharge linkages in planning discussions

Recognition of water bodies as socio-ecological commons rather than isolated infrastructure assets

Strengthened inputs to City Water Action Plans (CWAPs) under AMRUT 2.0

Profiling functioned as both an evidence-generation process and a relational exercise that reactivated community connections with water bodies. This strengthened the basis for long-term stewardship.

Figure 24: Outcomes of the profiling process

6.2.2 Embedding Gender Equality and Social Inclusion (GESI) in Practice

GESI was integrated across all stages of implementation rather than treated as a parallel component.

Operational measures included:

Capacity building of women's Self-Help Groups (SHGs) as climate and water governance champions

Ensuring representation of women, youth, and marginalised neighbourhoods in ward-level and city-level discussions

Documenting gender-differentiated vulnerabilities and safety concerns

Facilitating intergenerational dialogue around traditional knowledge

Positioning women as facilitators in mapping and validation exercises

Figure 25: Incorporation of GESI principles

Observable Shifts:

Figure 26: Shifts brought about through incorporation of GESI principles

GESI integration improved both social equity and technical planning quality by incorporating lived realities that are often excluded from department-centric approaches.

Field Insight 4- Operationalising GESI Across Multi-Site Profiling and Demonstration Pilots (Ajmer & Jodhpur)

Analytical Framing

The AMRUT 2.0 GESI Guidelines (August 2023) emphasise structured participation of women and marginalised groups, capacity building for meaningful engagement, GESI-responsive IEC strategies, and inclusive governance mechanisms within urban water systems. While primarily articulated in the context of water supply and sanitation service delivery, these principles provide an enabling framework for extending a GESI lens to water body rejuvenation.

Within this policy context, PRIA's work in Ajmer and Jodhpur operationalised GESI principles through multi- site profiling and two demonstration pilots in each city. The pilots were not iterative phases; rather, they were structured as demonstration sites to showcase how multi-stakeholder, participatory water body rejuvenation can be operationalised at the ward level.

GESI was embedded not as a standalone thematic stream, but through the design of participatory processes, stakeholder composition, and institutional follow-through. The value addition lay in translating policy intent into grounded governance practice.

1. GESI in Multi-Site Water Body Profiling

1.1 Broad-Based Participation Across Multiple Water Bodies

Profiling was undertaken across several water bodies in each city, capturing variation in ecological condition, settlement patterns, usage practices, and exposure to risk. The multi-site approach enabled identification of both site-specific issues and recurring structural patterns.

Participatory tools—including transect walks, stakeholder consultations, and spatial validation—were applied consistently across locations. Women, SHG members, residents of vulnerable settlements, and youth were engaged to ensure that experiential knowledge complemented technical assessment.

GESI Value Addition:

Repeated participatory profiling across sites reduced the likelihood that dominant actors would singularly define problem narratives. It strengthened representativeness in vulnerability identification and operationalised the AMRUT 2.0 emphasis on structured stakeholder engagement.

1.2 Surfacing Socially Differentiated Vulnerabilities Across profiled water bodies, consistent patterns emerged:

· Lower-income and informal settlements were disproportionately located along flood pathways or adjacent to blocked drainage channels.

· Households dependent on daily wage labour experienced greater livelihood disruption during waterlogging events.

· Women highlighted mobility constraints and safety concerns around poorly maintained edges and overgrown vegetation.

· By aggregating findings across multiple sites, profiling moved beyond physical condition assessment toward socio-environmental vulnerability mapping.

GESI Value Addition:

The exercise demonstrated how environmental diagnostics can integrate social stratification analysis—aligning with AMRUT 2.0's directive to embed social inclusion within planning processes.

1.3 Incorporating Cultural and Public Space Dimensions

Certain water bodies held ritual and cultural significance, influencing waste disposal practices and patterns of community engagement. Youth participants across sites also identified unsafe dumping areas affecting everyday access and use.

These inputs expanded profiling parameters to include:

· Safety and accessibility

· Cultural usage patterns

· Behavioural drivers of pollution

GESI Value Addition:

Recognising water bodies as socio-cultural public spaces strengthened inclusive restoration planning and aligned with GESI-responsive design principles.

2. GESI in Demonstration Pilots (Two per City)

Following profiling, two pilot sites in each city were selected to demonstrate participatory rejuvenation processes. These pilots functioned as visible, practical examples for municipal stakeholders and ward communities, illustrating the operational feasibility of multi-stakeholder collaboration.

The intent was not sequential learning between pilots but to showcase replicable participatory models within different ward contexts.

2.1 Multi-Stakeholder Participation as an Inclusion Mechanism

Each pilot mobilised a diverse set of actors, including:

· Municipal officials

· Technical departments (e.g., water testing support)

· Self-Help Groups (SHGs)

· Local residents

· Youth and school students

In Ajmer, SHG members assumed facilitative roles during clean-up drives, mediating between residents and municipal staff in instances of hesitation regarding debris removal. Their involvement enhanced cooperation and reduced friction.

GESI Significance:

The pilots demonstrated that women's leadership in facilitation roles strengthens institutional–community interfaces and improves collective action outcomes—advancing the participatory governance intent of AMRUT 2.0 GESI.

2.2 Youth Engagement and Behavioural Outreach

In Jodhpur, approximately 100 school students participated in awareness activities and water quality demonstrations at pilot sites. In Ajmer, students supported documentation and community mobilisation.

The visible involvement of youth broadened the social base of engagement and reinforced intergenerational responsibility for environmental assets.
GESI Significance:
Youth participation extended stewardship beyond traditional leadership networks and supported behaviour change objectives embedded within GESI-responsive IEC strategies.

2.3 Culturally Responsive Implementation
At select pilot sites, particularly in Jodhpur, removal of ritual waste required prior consultation with community elders. Dialogue preceded enforcement, ensuring that restoration actions were culturally sensitive.

GESI Significance:
The pilots illustrated that environmental governance must account for socio-cultural practices, reinforcing inclusion as both procedural and relational.

3. Institutionalisation Through Ward-Level Structures
Following pilot implementation, ward-level stewardship mechanisms were established in both cities to support ongoing monitoring and maintenance.
These structures marked the transition from demonstration to institutional embedding. However, inclusive outcomes depend on design safeguards.
Recommended GESI Safeguards:
· Defined representation thresholds for women
· Inclusion of SC/ST and economically vulnerable households
· Youth representation
· Public disclosure of membership
By embedding these norms, temporary mobilisation events evolved into sustained inclusive governance frameworks.

Monitoring Indicators
To assess GESI integration within a demonstration-based model following indicators can be monitored:
· Number of profiling exercises with documented women's participation
· Diversity of stakeholders engaged in each pilot
· Representation of marginalised groups in ward committees
· Youth participation levels across pilot sites
· Inclusion of safety and cultural considerations in restoration plans

6.2.3 Institutional Convergence and Governance Coordination

Water body management responsibilities in Ajmer and Jodhpur span multiple departments. Fragmentation has historically limited effective rejuvenation.

The formation and facilitation of City-Level Advisory Committees (CLACs) enabled:

1.	Structured inter-departmental dialogue
2.	Joint validation of participatory profiling data
3.	Shared identification of pilot sites
4.	Alignment discussions with AMRUT 2.0, SBM (Urban), and NULM
5.	Engagement of academic institutions (MDSU and JNVU) for technical collaboration

Institutional Outcomes:

1.	Improved cross-departmental communication
2.	Recognition of community-generated data within official planning spaces
3.	Increased clarity on departmental roles and overlaps
4.	Enhanced alignment of local action with national mission frameworks

The CLAC mechanism demonstrated how convergence can be operationalised without creating parallel governance structures.

6.2.4 Demonstration Pilots as Governance and Stewardship Laboratories

Two pilots in each city were implemented to demonstrate participatory rejuvenation within existing municipal frameworks.

The pilots were not designed as iterative engineering cycles; rather, they served to:

1.	Showcase feasibility of multi-stakeholder collaboration
2.	Build trust between communities and Urban Local Bodies
3.	Demonstrate GESI-responsive implementation
4.	Generate institutional learning for scaling
5.	Physical interventions included desilting, cleaning, demarcation, and awareness drives. However, their deeper value lay in:
6.	Strengthening community monitoring dialogue
7.	Enhancing confidence in collaborative action
8.	Demonstrating that stewardship and technical restoration can proceed simultaneously
9.	Reframing water bodies as neighbourhood commons
10.	These pilots functioned as governance proof-of-concept sites.

6.2.5 Reframing Water Bodies as Climate-Responsive Urban Commons

A significant cross-cutting outcome was conceptual transformation.
Stakeholders increasingly recognised traditional water bodies as:

1.	Groundwater recharge systems
2.	Flood mitigation buffers
3.	Micro-climate regulators
4.	Biodiversity nodes
5.	Cultural and spiritual anchors
6.	Shared public ecological spaces

7.	This reframing aligns with SDGs 6.6, 11.3, 11.b, 13.1, 15.1, and 17, and supports integration of water body rejuvenation within broader urban resilience strategies.

6.3 Conclusion — Leveraging Participatory and GESI-Responsive Governance for Scaling Under AMRUT 2.0 and Beyond

The Ajmer and Jodhpur initiative demonstrates that traditional water bodies are complex socio-ecological systems embedded in hydrology, culture, spirituality, and institutional arrangements. Their degradation reflects governance fragmentation and declining collective stewardship as much as physical deterioration.

This action-research process tested a structured methodology for strengthening multi-value, multi-actor governance of urban water commons. By integrating participatory socio-cultural profiling, GESI-responsive capacity building, institutional convergence mechanisms, and demonstration pilots, the initiative advanced a governance reform pathway rather than a site-specific restoration model.

Three systemic transitions are evident:

From Physical Assets to Living Commons	Profiling captured ecological, cultural, spiritual, and gendered associations, restoring relational bonds between communities and water bodies.
From Consultation to Structured, GESI-Responsive Co-Ownership	Women, youth, and marginalised groups were positioned as knowledge holders and facilitators, strengthening accountability and legitimacy.
From Fragmented Management to Coordinated Governance	CLAC platforms enabled cross-department dialogue and alignment with national urban missions, embedding participatory approaches within formal systems.

6.3.1 Leveraging the Process Manual for AMRUT 2.0 and Other Interventions

This process manual provides a structured framework that can be directly leveraged under:

Figure 27: Potential use cases for this process manual

Under AMRUT 2.0, the manual supports:

Figure 28: Potential use cases under AMRUT 2.0

For civil society organisations, the manual provides:

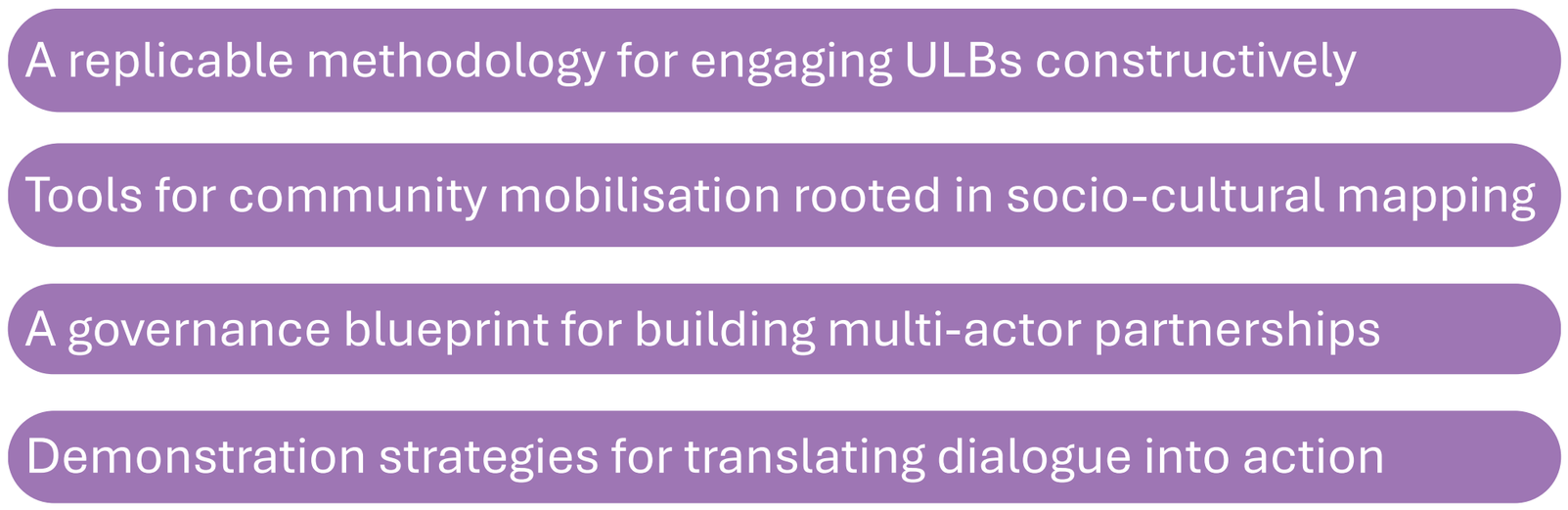

Figure 29: Potential use cases for CSOs

Urban water resilience will not be achieved through infrastructure investments alone. It requires restoring the social, cultural, and institutional relationships that sustain ecological systems. By embedding participation, GESI, traditional knowledge, and convergence within formal planning systems, cities can move from episodic restoration to sustained co-ownership of urban water commons.

The Ajmer and Jodhpur experience demonstrates that when profiling captures memory and meaning, when GESI principles shape participation, and when convergence platforms institutionalise dialogue, water bodies transition from neglected spaces to shared commons.

This manual is therefore both:

A technical guide for participatory water body rejuvenation

And a governance framework for institutionalising inclusive, climate-responsive urban water management under AMRUT 2.0 and related programmes

Figure 30: The process manual acts as a technical guide and a governance framework

Picture 4: The rejuvenated Mir Shah Ali Bawdi in Ajmer

Annexure 1

Resource mapping, actors and strategic alignment

Resource Type / Specific Resource	Description / Objective	Gatekeeper(s)	Formal Influencers	Informal Influencers	Current Availability & Accessibility	Potential to Support Objective	Current Mobilisation Status	Mobilisation Process / Access Procedure	Cluster of Actors to Align / Low-Hanging Fruit	Funding Cycles / Considerations
Government funds / AMRUT 2.0	Water security via water body rejuvenation & community involvement	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	Allocated annually	High	Accessed via Municipal Corporation	Via City Level Nodal Agency; proposals through ULBs	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes
Government funds / SBM 2.0	Water security via water body rejuvenation & community involvement Scientific municipal waste management	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	Allotted annually	Medium	Under-utilised in current planning	Link via ULB sanitation action plan; engage city sanitation committee	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Potentially	Annual SBM city-level action plan; outcome-based
Government funds / Mukhyamantri Jal Swavlamban Abhiyan 2.0	Water conservation, RWH, groundwater recharge	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	State-supported	High	Not yet mobilised	Proposal via District Collector and ULB	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes – for technical pilots	State-level planning & fund disbursement
Government funds / 6th State Finance Commission	State resource distribution to municipalities	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	Allotted annually	High	Indirectly mobilised	Funds allocated to ULBs; general pool	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes	State budget cycle; formula-based allocation
Government funds / 15th/ 16th Central Finance Commission	Tax revenue distribution recommendations	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	Allotted annually	High	Part of ULB general budget	Access via state finance department	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes	Five-year recommendations; funds passed by state govt
Private finance / CSR, philanthropic funds	CSR, philanthropic funding for social initiatives	CSR depts, Industry Associations, Foundations	CSR Heads, consultants	Local NGOs, SHG Federations, social entrepreneurs	Variable	Medium	Partially mobilised	Proposal via CSR departments, foundations	CSR wings, Foundations, SHG federations, NGO platforms	Dependent on CSR calendar & priorities
Land / space / Public water bodies	Government water bodies near informal settlements	Municipal Corporation, Garden Dept, Water Resources, Development Authority	ULB engineers, Town Planning Officers	RWAs, community leaders, temple trusts	Available but poorly maintained	High	Not yet mobilised	Mapping, validation, proposal to PHED/AMRUT	Municipal Corporation, Development Authority, Garden Dept, PHED, RWAs / Yes	Can be tagged under AMRUT / Jal Swavlamban

Resource Type / Specific Resource	Description / Objective	Gatekeeper(s)	Formal Influencers	Informal Influencers	Current Availability & Accessibility	Potential to Support Objective	Current Mobilisation Status	Mobilisation Process / Access Procedure	Cluster of Actors to Align / Low-Hanging Fruit	Funding Cycles / Considerations
Land / space / Public land	Government land for green spaces	Municipal Corporation, Garden Dept, Water Resources, Development Authority	ULB engineers, Town Planning Officers	RWAs, community leaders, temple trusts	Available (ownership verification needed)	High	Not yet mobilised	Engage ULB land dept; seek NOC	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes	MoHUA, Municipal Corporation, NULM, PHED, State Urban Development / Yes
Government funds / SBM 2.0	Water security via water body rejuvenation & community involvement Scientific municipal waste management	MoHUA, State Urban Dept, AMC/JMC	Municipal Commissioner, State Urban Dev Secretary	Local CSOs, community representatives	Allotted annually	High	Not yet mobilised	Engage ULB land dept; seek NOC	Municipal Corporation, Development Authority, Garden Dept, PHED, RWAs / Yes – pilot green zones	Minimal investment required
Information & data / Budget documents, water maps, planning docs	Municipal budgets, water infrastructure planning	AMC Planning Cell, AMRUT Cell, State Data Repositories	Nodal Officers (Smart City, AMRUT), ULB IT teams	Journalists, RTI activists, research institutions	Accessible via ULBs	High	Partially mobilised	Coordination with AMC Planning Cell & GIS Cell	AMC Planning Cell, GIS Cell, Universities, CBOs / Yes	Linked with city planning cycles
Institutional access / SHGs, Ward Committees	SHGs, Ward committees, local governance structures	NULM, Ward Councillors, SHG Cluster Heads n Dept, AMC/JMC	DPO (NULM), Ward-level officers	DPO (NULM), Ward-level officers	Ongoing	High	Partially mobilised	Proposals via ULB NULM cell	NULM, SHG Federations, Ward Committees, NGOs / Yes	Annual planning & fund allocation via ULBs
Technical capacity / Labs, environmental engineers	Technical support for water & sanitation	MDSU, IIT-J, AMC Engineering Division, PHED	Academic institutions, Urban Mission experts	Retired engineers, grassroots innovators	Variable	Medium	Limited involvement	Engage via PHED for design & implementation	MDSU, AMC Technical Team, PHED, NGOs, local innovators	Project-based cycles; infrastructure schedules
Social capital / Community networks, SHGs, women's groups	Mobilisation via local community networks	NULM, NGOs, Community Organisers	SHG leaders, NGO facilitators	Elders, teachers, faith leaders	Ongoing	High	Not formalised	Activate via ward committees, SHG federations	SHG Federations, NGO field teams, youth collectives / Yes	Not linked to funding; crucial for ownership
Digital infrastructure / Smart City apps, GIS tools, grievance portals	Smart city monitoring & citizen engagement	Smart City SPV, ULB IT Dept	Technical officers, GIS consultants	Digital volunteers	Select cities	Medium	Dependent on inclusion in SPV plans	Proposal via Smart City SPV	Technical officers, GIS consultants, volunteers / Possibly	Project-based cycles; convergence with AMRUT possible
Institutional access / RUDISCO	Executes water & sanitation projects, AMRUT schemes	PHED	AMC / PHED engineers	Local contractors	Variable	Medium	Limited involvement	Engage via PHED for design & implementation	PHED, Municipal Corporation / Not yet	State infrastructure project schedules
Participatory Governance Platforms / Ward meetings & collaborative platforms	Local governance & citizen participation	Ward Councillors, Ward Committees	SHG leaders, NGOs	Community volunteers	Ongoing but irregular	High	Not formalised	Activate via ward committees, SHG federations	Ward committees, SHG federations, local leaders / Yes	Not linked to funding; crucial for ownership

Annexure 2

Detailed Participatory Methods for Water Body Rejuvenation

The following participatory methods are widely used in Participatory Rural Appraisal (PRA), Participatory Learning and Action (PLA), urban governance research, and community-based natural resource management. When systematically adapted for urban water body rejuvenation, they generate socially grounded, technically relevant, and institutionally actionable insights.

a. Stakeholder Mapping	**Research Basis:** Stakeholder mapping draws from participatory governance theory and institutional analysis frameworks (e.g., power–interest grids, actor-network mapping). It is commonly used in watershed management and urban infrastructure planning. **Purpose in Water Body Rejuvenation:** • Identify all actors influencing or dependent on the water body (residents, religious institutions, vendors, municipal departments, line agencies, informal users). • Understand power dynamics, conflicts, and collaboration opportunities. • Clarify roles in maintenance, enforcement, and stewardship. **How to Conduct:** • Facilitate a brainstorming session to list all stakeholders. • Categorise by role (regulator, user, influencer, beneficiary). • Assess influence and interest levels. • Map relationships (conflict, cooperation, overlap of mandates). **Outputs**: • Stakeholder matrix • Engagement strategy • Identification of potential WBNC members • Conflict anticipation and mitigation plan

Picture 1: Mapping with SHG members and interaction with the elders

b. Focused Group Discussions (FGDs)	**Research Basis:** Rooted in qualitative research and participatory appraisal methods; enables exploration of lived experiences and context-specific knowledge. **Purpose in Water Body Rejuvenation:** • Understand water usage patterns (domestic, ritual, irrigation). • Capture gendered dimensions of water access. • Identify perceived problems (pollution, access restrictions, safety). • Document community priorities. **How to Conduct:** • Form homogeneous groups (women, elders, youth, temple caretakers) and mixed groups. • Use guiding themes rather than rigid questionnaires. • Encourage storytelling and collective reflection. **Outputs**: • Problem ranking • Community priority list • Insight into behavioural drivers of pollution or conservation

c. Transect Walks	**Research Basis:** Core PRA tool used in watershed development and urban slum upgrading; combines observation with participatory dialogue. **Purpose in Water Body Rejuvenation:** • Assess structural integrity and environmental condition. • Identify inflow/outflow channels. • Map encroachments and waste dumping hotspots. • Understand catchment dynamics. **How to Conduct:** • Walk across different zones (inlet, embankment, surrounding land use). • Record GPS coordinates and take geo-tagged photographs. • Measure dimensions and slopes. • Note ecological indicators (vegetation, bird life, algae presence). **Outputs:** • Annotated site sketch • Risk map • Technical observation notes for engineering intervention
d. Timeline Mapping	**Research Basis:** Used in environmental history and community-based disaster risk reduction to track change over time. **Purpose in Water Body Rejuvenation:** • Understand phases of construction, decline, and restoration. • Identify drivers of degradation (urbanisation, tree loss, governance neglect). • Recognise past management systems. **How to Conduct:** • Ask elders to mark major events on a timeline. • Note changes in water level, quality, biodiversity, and access. • Link with city growth phases or policy shifts. **Outputs:** • Historical transformation narrative • Identification of root causes of decline • Basis for culturally sensitive restoration

e. Oral History and Memory Mapping	**Research Basis:** Used in heritage conservation, environmental anthropology, and urban memory studies. Purpose in Water Body Rejuvenation: • Capture intangible heritage value. • Document cultural practices (festivals, rituals, fairs). • Understand traditional water management systems. **How to Conduct:** • Conduct semi-structured interviews with elders and caretakers. • Record stories, quotes, and personal memories. • Map remembered landscape features (forests, old pathways, lost streams). **Outputs**: • Cultural profile • Strengthened heritage-based conservation narrative • Community pride and ownership reinforcement
f. Community Visioning	**Research Basis:** Participatory planning and collaborative urban design methodologies. **Purpose in Water Body Rejuvenation:** • Build consensus around future improvements. • Align technical interventions with community aspirations. • Prevent top-down project imposition. **How to Conduct:** • Ask participants: “What should this water body look like in 5–10 years?” • Encourage drawing, listing, or group articulation. • Prioritise feasible and locally supported actions. **Outputs**: • Vision statement • Short-, medium-, and long-term priorities • Inputs for municipal planning

g. Validation and Reflection	**Research Basis:** Participatory monitoring and evaluation frameworks. **Purpose in Water Body Rejuvenation:** • Ensure accuracy of findings. • Build transparency and trust. • Create shared accountability between community and municipality. **How to Conduct:** • Present draft findings in a public meeting. • Invite corrections and additions. • Document consensus decisions. **Outputs**: • Validated site report • Agreed action points • Strengthened legitimacy of interventions

When applied sequentially, these methods create a comprehensive socio-technical assessment:

1.	Stakeholder mapping clarifies governance landscape.
2.	Small group discussions and oral histories reveal lived realities.
3.	Transect walks provide technical-grounded evidence.
4.	Timeline mapping situates degradation historically.
5.	Visioning aligns restoration with community aspirations.
6.	Validation ensures shared ownership and accountability.

Together, these tools move water body rejuvenation beyond engineering solutions toward integrated ecological restoration, cultural revitalisation, and participatory urban governance.

Annexure 3

Capacity Building and Training Programme for Participatory Water Body Profiling and Rejuvenation

1. Purpose and Institutional Context

As part of the multi-site water body profiling and demonstration pilots in Ajmer and Jodhpur, a structured capacity-building programme was conducted to prepare Self-Help Groups (SHGs), students, and community representatives to engage in participatory water body assessment and rejuvenation planning.

The training was designed as a foundational intervention to:

1.	Build shared conceptual understanding of community-led planning
2.	Introduce participatory research tools
3.	Develop technical competencies in spatial mapping and documentation
4.	Enable structured reporting aligned with municipal processes
5.	While Gender Equality and Social Inclusion (GESI) considerations were integrated within the approach, the primary orientation of the programme was toward participatory urban environmental governance.

2. Training Objectives

The programme was structured around two complementary objectives:

2.1 Conceptual and Process Orientation

1.	To familiarise participants with the ecological and socio-spatial dimensions of urban water bodies.
2.	To introduce participatory tools for community engagement and knowledge documentation.
3.	To build clarity on ethical protocols in participatory field engagement.

2.2 Applied Technical Skill Development

1.	To train participants in GPS-based mapping and geo-tagged documentation.
2.	To practice measurement and spatial tracing techniques.
3.	To guide structured reporting using standardised templates.
4.	To enable integration of community knowledge with technical observations.
5.	The programme combined classroom-based sessions with field immersion and analytical consolidation.

3. Guiding Principles

3.1 Participatory Planning as a Core Methodology

Water bodies were framed as socio-ecological systems embedded within settlement dynamics, cultural practices, drainage networks, and everyday livelihoods. Planning was therefore approached as a collaborative exercise rather than a technical survey.

3.2 Integration of Social and Technical Knowledge

Equal importance was given to:

1.	Community narratives
2.	Ecological condition assessment
3.	Hydrological observations

4.	Spatial measurements
5	Documentation standards

This prevented the isolation of technical mapping from lived experience.

3.3 Knowledge Co-Production

Participants were organised into mixed groups, typically including SHG women and students. This structure:

1.	Facilitated cross-learning
2.	Bridged academic and community perspectives
3.	Strengthened mutual respect in field interactions

3.4 Embedded Inclusion

GESI was integrated within training content through:

1.	Discussions on differential exposure to flooding and degradation
2.	Ethical engagement norms
3.	Attention to women’s mobility, safety, and access concerns
4.	Ensuring SHG participation in both social and technical components

However, inclusion was not treated as a separate module; it was embedded within participatory practice.

4. Training Architecture

The programme was conducted over two days in both cities and followed a sequenced structure.

Day 1: Conceptual and Tool Orientation

Key Sessions Included:

1.	Introduction to the concept of “community”
2.	Group reflection exercises comparing perceptions of community
3.	Participatory tools for data collection
4.	Ethics of participatory research
5.	Technical mapping techniques
6.	Template familiarisation

Participants worked in groups with designated SHG members to ensure active engagement.

Participatory Tools Introduced

Tool	Purpose
Transect Walk	On-site ecological and settlement observation
Group Discussion	Eliciting collective perspectives
Historical Timeline Mapping	Tracing environmental and social change
Vision Mapping	Co-developing future improvement scenarios
Structured Templates	Standardised documentation across sites

The emphasis was on using tools as dialogue mechanisms rather than survey instruments.

Technical Mapping Components

Participants were trained in:

1.	GPS-enabled photography
2.	Voice-recorded documentation
3.	Measurement using measuring tape or laser devices
4.	Tracing water body boundaries on Google Earth Pro
5.	Basic spatial validation techniques

This strengthened technical credibility and improved the reliability of profiling outputs.

Day 1 (Afternoon): Field Application

Field visits to selected water bodies enabled participants to apply tools in real settings.Mixed groups were tasked with collecting:

1.	Community narratives
2.	Usage patterns
3.	Visible degradation indicators
4.	Physical measurements
5.	Geo-tagged evidence

The exercise reinforced experiential learning.

Day 2: Reflection, Reporting, and Consolidation

The second day focused on:

1.	Group presentations of field findings
2.	Identification of methodological challenges
3.	Sample report walkthrough
4.	Guidance on analytical structuring of findings

This stage emphasised disciplined documentation and translation of field insights into planning-relevant outputs.

5. Resource Framework

Participant Resources

1.	Notebook, pen
2.	Smartphone with GPS camera and voice recorder
3.	Measuring tape
4.	Laptop with Google Earth Pro

Organiser Resources

1.	Charts and sketch materials
2.	Laser measurement device
3.	Printed data collection templates
4.	Projector and presentation materials
5.	The structured resource framework ensured methodological consistency across Ajmer and Jodhpur.

6. Institutional Interface

In Jodhpur, the programme inauguration involved municipal leadership, academic representatives, and administrative authorities. This provided:

1.	Institutional legitimacy to participatory approaches
2.	Recognition of community–university collaboration
3.	Policy alignment with urban environmental priorities
4.	Comparable institutional engagement was facilitated in Ajmer, reinforcing cross-city standardisation.

7. Operational Outcomes

Across Ajmer and Jodhpur, the training programme:

1.	Strengthened the quality and consistency of multi-site water body profiling
2.	Enabled SHGs to engage substantively in both technical and social documentation
3.	Enhanced facilitative capacities during demonstration pilots
4.	Improved comparability of data across sites
5.	Supported the formation of ward-level stewardship structures

The intervention contributed to both technical rigour and participatory legitimacy.

8. Embedded GESI Dimension

While not designed as a standalone GESI training, the programme contributed to inclusion by:

1.	Positioning SHG women as co-producers of technical knowledge
2.	Recording gendered and livelihood-based vulnerabilities
3.	Strengthening women's public engagement in ward-level planning processes
4.	GESI therefore functioned as a cross-cutting lens within a broader participatory planning framework.

The capacity-building initiative in Ajmer and Jodhpur served as a foundational technical and participatory intervention underpinning profiling and pilot demonstrations. By integrating community engagement tools with spatial mapping competencies, the programme established a replicable model for community-led urban water body rejuvenation grounded in evidence, participation, and institutional alignment.

Annexure 4

Mapping and Profiling of Water Body – an example from Ajmer

CHAND BAODI

- Type of water body: Baodi
- Coordinates: 26.448819, 74.633991
- Ward no: 15
- Landmark: Chandreshwar Mata Temple

The Chand Baodi

Introduction and Geographical Context

The Chand Baodi sits in the serene surroundings of the Chandresa Mata Temple. The approach to the baodi is through the temple premises, which has helped preserve its form and function over time.

Historical Evolution & Community Memory

The story of the Chand Baodi is closely tied to the temple itself. Local oral histories speak of its name being linked to Chandravardai or Chandragupta, adding layers of legend and memory to the place. For generations, people here have seen this baodi not simply as a water structure but as a sacred presence woven into the spiritual life of the temple. Historically, Chand Baodi served as the main drinking water source for nearby households. Families would draw water from it for their daily needs, and the same water was used in rituals, pujas, and for preparing prasad. It was a living part of both sustenance and devotion.

Physical and Structural Characteristics

Feature	Details
Dimensions	8 x 8 m.
Area	64 sqm.
Approximate Depth	18 m.

Present Condition and Visible Transformations

It is rock-based, and natural seepage keeps the water level steady. The water does not dry; in fact, at times it even overflows. The surroundings are well maintained, with gated access to prevent misuse and to protect the sanctity of the space.

Current Use and Cultural Practices

Even today, the baodi continues to hold ritual importance. The temple uses its water for offerings, and the community still describes the water as sweet and clean. Care is taken to maintain its purity, and the baodi has been protected thoughtfully over the years.

Ecological Profile and Natural Life

- Aquatic life: Fish
- Bird species: Pigeons
- Vegetation: None

Community Knowledge & Lived Experiences

Community members speak of Chand Baodi with a sense of quiet pride and emotional attachment. Many recall childhood memories of accompanying elders to fetch water for drinking, cooking, or temple rituals. They describe the water as “meetha” (sweet) and consistently cool – an indication of its natural seepage and underground connectivity. Several residents also remember times when the baodi overflowed during particularly strong monsoons, which reinforced their belief in the stepwell’s strength and natural recharge capacity.

Older residents share stories of how the baodi once served as a dependable water source even in harsh summers when nearby wells dried up. They emphasise that the water level rarely dipped low – a rarity in a region known for its arid climate and water scarcity. According to them, the rock-based construction helps stabilise water levels, making the baodi more resilient than other structures in the area.

The importance of the baodi in everyday temple life is also a recurring theme in community memories. People remember how water from the baodi was used for preparing prasad, cleaning the sanctum, and performing abhishek rituals. These practices created a sense of shared responsibility. Families living around the temple ensured that no waste was thrown near the baodi, and visitors were reminded to maintain its sanctity.

Local residents also speak about the sense of trust they place in the baodi’s water quality. Even though piped water has largely replaced its practical use, many still prefer the baodi water during festivals and rituals, believing it to be spiritually charged and naturally pure. This lived connection – cultural, emotional, and environmental – illustrates how the baodi remains more than a structure of stone, it continues to be a living part of community identity.

Community Vision

The community’s hopes for Chand Baodi are gentle and thoughtful. They want its purity and heritage value to be respected and preserved. Some suggest connecting it as a supplementary water source that can be used whenever piped supply becomes scarce. A few improvements, like modest beautification and carefully regulated access, could help more people appreciate its significance without disturbing its sacred character.

Chand Baodi carries the quiet grace of a place that has always been close to both daily living and devotion. It stands as a reminder of how water, faith, and community once came together naturally, and how that bond can still be cared for today.

References

- *Agarwal, Anil, and Sunita Narain. 1997. Dying Wisdom: Rise, Fall and Potential of India's Traditional Water Harvesting Systems. New Delhi: Centre for Science and Environment.*
- *Ansell, Chris, and Alison Gash. 2008. "Collaborative Governance in Theory and Practice."*
- *ARUP. 2023. Advisory on Urban Waterbody Rejuvenation. https://mohua.gov.in/pdf/659b7be5e21b3Advisory-on-Urban-Waterbody-Rejuvenation.pdf*
- *Central Ground Water Board (CGWB). 2022. Dynamic Ground Water Resources of India. Ministry of Jal Shakti, Government of India.*
- *Conservation of Traditional Water Bodies: A Study of Gopal Sagar and Roop Sagar, Deeg, Rajasthan. 2022. Research Square, October 17.*
- *Dass, Persis Latika. 2024. "Shooting and Fishing Prohibitions in the Water Bodies of Ajmer–Pushkar During Colonial Period: The Case of Marginalised Communities." Studies in People's History, April 4.*
- *Disaster Management, Relief and Civil Defence. 2024. Rajasthan State Flood Action Plan 2024. https://dmrelief.rajasthan.gov.in/documents/Flood_plan_2024_12092024.pdf*
- *Everard, Mark. 2015. "Community-Based Groundwater and Ecosystem Restoration in Semi-Arid North Rajasthan (1): Socio-Economic Progress and Lessons for Groundwater-Dependent Areas." Ecosystem Services 16: 125–135.*
- *Everard, Mark. 2016. "Community-Based Groundwater and Ecosystem Restoration in Semi-Arid North Rajasthan (2): Reviving Cultural Meaning and Value." Ecosystem Services 18: 33–44.*
- *Folke, Carl, et al. 2005. "Adaptive Governance of Social-Ecological Systems."*
- *Government of Rajasthan. 2022. Rajasthan State Action Plan on Climate Change (SAPCC) 2022. Jaipur: Department of Environment and Climate Change.*
- *Hussain, Madhumita. 2014. "A Step Towards the Social Well-Being in Alwar and Sikar Districts of Rajasthan Through Revival and Revitalization of Johads/Checkdams." IOSR Journal of Humanities and Social Science 19 (10): 1–4.*
- *Jodhpur Development Authority. n.d. Masterplan-2031 Jodhpur Region. https://lsg.urban.rajasthan.gov.in/content/dam/raj/udh/development-authority/jda-jodhpur/pdf/Jodhpur%20MDP%20Report%202031.pdf*
- *Mamta, T., and Ranga M. M. 2012. "Assessment of Diurnal Variation of Physico-Chemical Status of Khanpura Lake, Ajmer, India." Research Journal of Chemical Sciences 2 (7): 69–71.*
- *Meena, Dinesh. 2018. "Current Status of Fresh Water Avifaunal Diversity of Tehsil Kekri and Nearby Area of Ajmer District, Rajasthan India." International Journal for Research in Applied Science and Engineering Technology (IJRASET) 6 (1): 1998–2004.*

- *Merei, Muhammad. 2024. "Empowering Communities for Sustainable Water Management: Insights from Justdiggit and the Paani Foundation." E3S Web of Conferences 550: 01042.*
- *Mosse, David. 2003. The Rule of Water: Statecraft, Ecology and Collective Action in South India. New Delhi: Oxford University Press.*
- *Ministry of Environment, Forest and Climate Change (MoEFCC). 2016. State Action Plans on Climate Change (SAPCCs) Status Update. Government of India.*
- *Ministry of Housing and Urban Affairs. 2021. AMRUT 2.0 Operational Guidelines. https://amrut.mohua.gov.in/uploads/AMRUT_2.0_Operational_Guidelines.pdf*
- *MoHUA. 2021. AMRUT 2.0 Guidelines. Ministry of Housing and Urban Affairs, Government of India.*
- *MSME-Development Institute. n.d. Brief Industrial Profile of Jodhpur District. https://dcmsme.gov.in/dips/DIPR_Jodhpur.pdf*
- *Municipal Corporation of Jodhpur North. n.d. https://nnjnorth.in/*
- *National Institute of Urban Affairs (NIUA). 2021. Urban Water Body Management: A Practitioner's Manual. National Institute of Urban Affairs, New Delhi.*
- *National Institute of Urban Affairs (NIUA). 2022. Gender Inclusive Water Governance in Urban India: Good Practices and Learnings from AMRUT Cities. Ministry of Housing and Urban Affairs.*
- *NIUA. 2021. Water Sensitive Urban Design Compendium.*
- *Ostrom, Elinor. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press.*
- *Pahl-Wostl, Claudia. 2009. "A Conceptual Framework for Analysing Adaptive Capacity and Multi-Level Learning Processes in Resource Governance Regimes." Global Environmental Change 19 (3): 354–365.*
- *Pandey, Rama Umesh, et al. 2021. "Green Infrastructure as a Tool for Improving Livability of Area Based Development Projects Under Smart City Mission." Springer, Cham, 447–468.*
- *PRIA. n.d. Secure Framework for Participatory Governance and Democratic Decentralisation.*
- *Regeneration and Rejuvenation of Water Bodies in the City of Bhawanipatna. 2023. International Journal for Science Technology & Management 11 (5): 7514–7522.*
- *Shah, Tushaar. 2009. Taming the Anarchy: Groundwater Governance in South Asia. Washington, DC: Resources for the Future Press.*
- *Sharma, D., and S. Tomar. 2010. "Mainstreaming Climate Change Adaptation in Indian Cities." Environment and Urbanization 22 (2): 451–465.*
- *Sharma, K. C., and Maharshi Dayanand. 2008. "Ecology and Restoration of Lake Budha Pushkar - A Threatened Water Body of Ajmer, Rajasthan."*
- *Singh, Prakash, and Pradeep Kumar Sharma. 2024. "Contested Urban Green Spaces in India: Complex Dynamics of Environmental Development." International Journal for Multidisciplinary Research (IJFMR) 6 (5), October 30.*

- *Sudha, M. Chaithanya, S. Ravichandran, and R. Sakthivadivel. 2013. "Water Bodies Protection Index for Assessing the Sustainability Status of Lakes under the Influence of Urbanization: A Case Study of South Chennai, India." Environment, Development and Sustainability 15, January 18.*
- *Sugam, Rudresh, Bhawna Gupta, and Diticha Deka. 2018. "Dying Traditional Water Bodies in India Struggling to Survive Against Unplanned Development." Journal of Water Resource and Protection 10 (6): 539–558.*
- *Town Planning Department, Rajasthan. n.d. Jodhpur Masterplan 2001–2023. https://www.lsg.urban.rajasthan.gov.in/content/dam/raj/udh/organizations/ctp/pdf/Jodhpur%20report.pdf*
- *UNEP. 2021. Nature-Based Solutions for Climate Adaptation.*
- *World Bank. 2017. Problem-Driven Iterative Adaptation (PDIA).*
- *Yadav, Shweta, and V. C. Goyal. 2022. "Current Status of Ponds in India: A Framework for Restoration, Policies and Circular Economy." Wetlands 42 (8): November 4.*

About the Process Manual

This process manual presents a practical, field-tested approach for building and sustaining multi-stakeholder partnerships for community-led urban water governance. Based on action-research in Ajmer and Jodhpur, it outlines clear steps for engaging communities, aligning institutions, and integrating local knowledge with technical planning to rejuvenate traditional urban water bodies. Grounded in participatory governance, climate resilience, and social inclusion, the manual serves as a concise guide for Urban Local Bodies, state agencies, civil society, academic institutions, and community groups seeking to embed collaborative, scalable, and sustainable water governance within existing urban planning frameworks.

This work was undertaken under the ‘Community-Led Water Body Rejuvenation and Green Space Development’ project, supported by the International Institute for Environment and Development (IIED). The project aims to enhance climate resilience in the cities of Ajmer and Jodhpur by preparing plans for rejuvenating traditional water bodies and developing green spaces through community-led participatory planning.

About PRIA

Established in 1982, PRIA is a global centre for participatory research and training. Our mission is to build capacities of citizens, communities and institutions, to enable vibrant, gender-equal societies. For over four decades our efforts have been focused towards empowering citizens through information and mobilisation, and at the same time, sensitising government agencies towards citizens’ needs. We work towards creating a bridge between the two to ensure that the right kind of government efforts reach the right people, at the right time.

Knowledge. Voice. Democracy.
PRIA
Since 1982

This project is implemented by PRIA

iied International Institute for Environment and Development

This project is funded by IIED