# STATE WATER REFORMS FRAMEWORK

*A Framework to Guide States and Union Territories*
*For Water Governance Reforms*


Ministry of Jal Shakti
Government of India

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Ministry of Jal Shakti
Government of India
May, 2026

सी आर पाटील
C R Paatil

सत्यमेव जयते

जल शक्ति मंत्री
भारत सरकार
Minister of Jal Shakti
Government of India

## FOREWORD

Water is the very pulse of our civilisation. From the Indus Valley to the Ganga plains, and from the Kaveri delta to the Godavari basin, India's millennia-old relationship with water has shaped our culture, agriculture, and our very identity as a nation. Yet today, this precious resource stands under unprecedented stress. Dwindling per capita availability, depleting aquifers, mounting pollution, and the intensifying fury of climate extremes demand that we act with urgency, unity, and unwavering resolve.

It was with this larger vision that the Ministry of Jal Shakti was created to bring together the diverse dimensions of water governance under a unified institutional framework. Through the Department of Water Resources, River Development & Ganga Rejuvenation, the Ministry is implementing major initiatives aimed at improving irrigation efficiency, strengthening river basin management, promoting groundwater sustainability, and enhancing national water security. Programmes such as the Pradhan Mantri Krishi Sinchayee Yojana are expanding irrigation potential and improving water-use efficiency across the country. The Namami Gange Programme has made significant progress in rejuvenating the Ganga and its tributaries through pollution abatement, riverfront development, biodiversity conservation, and improved sewage treatment infrastructure.

The Department has also consistently emphasised the importance of water conservation and people's participation through nationwide initiatives such as Catch the Rain and Jal Sanchay Jan Bhagidari(JSJB), which have mobilised communities, Gram Panchayats, Self-Help Groups, youth, and civil society towards rainwater harvesting, aquifer recharge, restoration of water bodies, and sustainable water management practices. These initiatives reaffirm the principle that water security cannot be achieved through government action alone. It requires active public participation and community ownership at every level.

Complementing these efforts, the Department of Drinking Water and Sanitation leads programmes that reach into every household and village. The Jal Jeevan Mission has connected millions of rural homes with functional tap water supply, fundamentally changing the daily lives of women and children across India. The Swachh Bharat Mission (Grameen) has transformed sanitation behaviour at scale, marking it as the largest behavioral change movement globally. Together, these programmes reflect the Ministry's commitment to water security across every dimension, from source to tap and from field to river.

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It is in this spirit that I am delighted to present the State Water Reforms Framework (SWRF), a landmark initiative that places States and Union Territories at the heart of India's water governance transformation. Designed as a structured, transparent, and participatory framework, it empowers every State and UT to evaluate its current progress, identify critical gaps, and undertake meaningful reforms for strengthening water governance and ensuring long-term water security.

The Framework is built on five critical pillars: Policy and Regulation, Project Monitoring, Digitalization and Research & Development, Infrastructure, and Community Engagement. Together, these dimensions capture the entire spectrum of water governance and management from policy formulation and infrastructure development to efficient service delivery, river and groundwater management, sanitation, and community participation at the grassroots level. By assessing 75 reform indicators across 27 sub dimensions, the SWRF provides a holistic and evidence based assessment of each State's progress towards sustainable, inclusive and resilient water resource management and water service delivery.

What sets this framework apart is its spirit of cooperative federalism. India's water challenges are diverse from the river-rich Himalayan States to the groundwater-stressed plains of the peninsula. The SWRF, through its three-category classification, recognises this diversity and enables meaningful, context-sensitive comparison. It is not about ranking States against each other in competition, but about inspiring each State to realise its own full potential.

I urge every Chief Minister, every Water Minister, and every district administration to treat this Framework as a governance partner. The reforms it encourages from notifying State Water Policies and groundwater regulations to achieving real-time STP/FSTPs monitoring and meaningful community participation. These reforms will deliver tangible benefits to millions of citizens.

Water reform today is not merely an administrative necessity. It is central to India's economic resilience, food security, climate adaptation and social equity. Every aquifer protected, every river rejuvenated, every village provided with safe water and every irrigation system made more efficient contributes directly to the vision of Viksit Bharat 2047. I am confident that the State Water Reforms Framework will serve as a catalyst for a new era of collaborative, accountable and future ready water governance in India.

C R Paatil

ವಿ. ಸೋಮಣ್ಣ
वी. सोमण्णा
V. Somanna

सत्यमेव जयते

ಕೇಂದ್ರ ರೈಲ್ವೆ ಮತ್ತು ಜಲ ಶಕ್ತಿ
ರಾಜ್ಯ ಖಾತೆ ಸಚಿವರು
ಭಾರತ ಸರ್ಕಾರ
रेल एवं जल शक्ति राज्य मंत्री
भारत सरकार
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Government of India

## FOREWORD

Access to safe drinking water and dignified sanitation is fundamental to human dignity and quality of life. Reliable water and sanitation services are closely linked with health, education, livelihood and social empowerment, particularly in rural India. The Department of Drinking Water and Sanitation remains committed to ensuring that every household has access to these essential services in a sustainable and equitable manner.

Over the past decade, the Department's flagship programmes have transformed the rural landscape of the country. The Jal Jeevan Mission (JJM) has provided functional household tap connections to crores of rural households, making it one of the world's largest rural drinking water initiatives. The Swachh Bharat Mission (Grameen) (SBM-G) has led to the elimination of open defecation across vast parts of the country, improving public health and restoring dignity to millions. Together, these initiatives are laying the foundation for healthier, cleaner and more water-secure rural communities.

At the same time, experience has shown that infrastructure alone cannot guarantee sustainable outcomes. Long-term success depends upon community ownership, regular operation and maintenance, source sustainability, water quality monitoring and local participation in water governance. In this context, the State Water Reforms Framework (SWRF) is both timely and significant. The Framework strongly resonates with the Department's emphasis on sustainable service delivery and participatory governance. Its indicators relating to Operation & Maintenance policies, annual functionality assessments through Jan Bhagidari, geo-tagging of rural water supply assets on the Sujalam Bharat platform, faecal sludge management compliance, greywater management and sewage treatment performance are not merely administrative metrics. They are essential building blocks for resilient and accountable water and sanitation systems.

I am particularly encouraged by the Framework's dedicated focus on IEC and Community Engagement. Awareness programmes in schools, curriculum integration through SCERTs, capacity building of Women Self-Help Groups and

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Farmer Producer Organizations and recognition of best-performing Gram Panchayats through water conservation awards are important measures that strengthen behavioural change and community stewardship. Such efforts are essential for transforming short-term achievements into enduring institutional practices.

The Framework's emphasis on treated water reuse, greywater management and sustainable water practices is equally important in the context of increasing water stress and climate variability. Every effort towards reuse, conservation and efficient management contributes to long-term water security and supports India's broader commitment towards achieving Sustainable Development Goal 6.

I urge all States and Union Territories to adopt the State Water Reforms Framework (SWRF) as a strategic guide for advancing sustainable and accountable water and sanitation governance. I am confident that the Framework will catalyse meaningful reforms, strengthen service delivery systems, and promote long-term water security in support of the vision of a watersecure, inclusive, and sustainable Viksit Bharat.

**(V. Somanna)**

डॉ. राज भूषण चौधरी
Dr. Raj Bhushan Choudhary

सत्यमेव जयते

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## FOREWORD

India's rivers, aquifers, and water bodies are not merely natural assets. They are the lifeline of our agriculture, our ecosystems and our communities. As Minister of State for Jal Shakti with charge of the Department of Water Resources, River Development & Ganga Rejuvenation, I have witnessed at first hand the immense complexity and an even greater opportunity that lie at the heart of India's water governance challenge.

Over the years, the Department has undertaken major initiatives across multiple dimensions of water management. Long pending irrigation projects are being accelerated under Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Aquifer mapping is being expanded through scientific studies, dam safety systems are being strengthened under the Dam Safety Act, 2021 and the Namami Gange Programme is restoring the ecological health of our rivers. These efforts, however, can achieve lasting impact only when supported by robust governance systems, effective regulation and active participation by States and local communities.

The State Water Reforms Framework (SWRF) provides a structured, evidence-based lens through which States can honestly assess the maturity of their water governance through their policies, their institutions, their data systems and their infrastructure. For the water resources sector, the Framework's focus on groundwater regulation, flood plain zoning, participatory irrigation management, river governance, dam safety and sediment management reflects the very priorities that the Department has been championing.

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I am particularly encouraged by the strong emphasis placed on participatory and community led governance within the Framework. Sustainable water management cannot be achieved through government action alone. The involvement of Water User Associations, Panchayati Raj Institutions, local communities and citizen groups is essential for improving irrigation efficiency, ensuring equitable water distribution, protecting local water bodies and promoting conservation practices at the grassroots level. Similarly, the Framework's attention to environmental flows and Urban River Management Plans sends a clear message that our rivers must be managed not just as supply sources, but as living ecosystems deserving of protection.

The Framework also recognises the growing importance of technology and scientific decision making in water governance. Real time monitoring systems, integrated water data platforms, and partnerships with research institutions can significantly improve planning, transparency and operational efficiency. In a climate stressed future, data driven governance will become indispensable for managing droughts, floods and competing water demands.

I call upon all States and Union Territories to embrace the State Water Reforms Framework as a guiding instrument for strengthening water governance and advancing long-term water security. The reforms encouraged under the Framework will help improve irrigation efficiency, promote groundwater sustainability, enhance dam safety, and support the rejuvenation of rivers and water bodies for future generations.

I am confident that with collective resolve and cooperative effort between the Centre and States, the SWRF will emerge as a transformative instrument for water governance reform across India.

(Dr. Raj Bhushan Choudhary)

व्ही. एल. कान्ता राव, भा.प्र.से.
सचिव
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जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
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MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
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## FOREWORD

India's water sector stands at a defining inflection point. Over the decades, substantial investment have been made to build extensive irrigation infrastructure, hundreds of major dams and an expanding network of groundwater monitoring stations. Yet the gap between potential and performance remains wide. Irrigation potential created far exceeds utilization, groundwater extraction continues to outpace recharge in critical blocks and data, though increasingly available, has not always translated into decisions.

The Department of Water Resources, River Development & Ganga Rejuvenation has long recognised that sustainable water security cannot be achieved through infrastructure alone. Effective governance through robust policies, strong institutions, sound regulatory frameworks and data driven decision making forms the foundation for ensuring long term and resilient management of the country's water resources.

The State Water Reforms Framework (SWRF) has been conceived as a forward looking and facilitative governance framework to support States and Union Territories in strengthening these institutional foundations. Developed through extensive consultations with Central Ministries, State Governments, domain experts and sectoral stakeholders, the Framework seeks to promote measurable, verifiable and outcome based reforms across the water sector.

One of the key strengths of the Framework lies in its emphasis on encouraging States and Union Territories to develop and institutionalize critical policy and regulatory frameworks that are inadequately developed in many State/UT. The SWRF seeks to promote progressive reforms such as State Water Policies, groundwater regulation frameworks, flood plain zoning regulations, Urban River Management Plans, wastewater reuse policies and participatory irrigation management systems. In a sector increasingly affected by climate variability, competing demands and resource stress, such policy interventions are essential for ensuring long term sustainability and resilience.

The Framework also aims to foster a culture of proactive and continuous reform within the water sector. The SWRF is intended to function as a facilitative governance instrument that enables States to identify policy gaps, strengthen institutional frameworks, adopt best practices and undertake structured reforms in a time bound and measurable manner.

I am grateful to all the officers in the Department who contributed their expertise to developing this Framework, and to our State/UT counterparts who engaged constructively in its formulation. I look forward to seeing the State Water Reforms Framework as incremental, measurable and verifiable reform across States and UTs and to jointly building a more resilient, equitable and sustainable water future for India.

**(V.L. Kantha Rao)**

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Secretary

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## FOREWORD

The expansion of rural drinking water and sanitation infrastructure has created a need for stronger governance systems to ensure sustainability and accountability. As India moves towards sustained service delivery, the focus must shift to operation and maintenance, source sustainability, monitoring, community participation and evidence-based governance. This transition also requires strengthening local drinking water service delivery through local governments, particularly Gram Panchayats, as the closest institutions to rural communities.

The Department of Drinking Water and Sanitation has emphasised that durable outcomes depend on both infrastructure and strong institutions and governance processes. In this context, Gram Panchayats have a central role as owners and managers of drinking water and sanitation services at the village level, including greywater management, through Village Water and Sanitation Committees (VWSCs), with both GPs and VWSCs accountable to their Gram Sabhas. The Jal Jeevan Mission and the Swachh Bharat Mission (Grameen) have transformed rural service delivery. These gains must remain functional, inclusive and sustainable.

The Framework emphasizes water-use efficiency, source sustainability and water quality testing for strengthening long-term drinking water security. Indicators relating to rainwater harvesting and groundwater recharge structures linked with rural piped water supply sources at the Gram Panchayat level, promotion of efficient water use practices and the availability of at least one water quality testing laboratory in every district represent critical interventions for improving the sustainability, reliability and safety of drinking water services. Such measures will strengthen local water security, resilience and management of rural water supply systems across States and Union Territories. It will also reinforce the capacity of Gram Panchayats and VWSCs to plan, implement, monitor and manage village-level water and sanitation services in a participatory and accountable manner.

Urbanisation, climate variability, groundwater stress and rising demand underline the importance of treated water reuse, greywater management and sustainable resource utilisation. Strengthening these areas is critical for long-term water security and advancing India's commitments under Sustainable Development Goal 6.

I place on record my appreciation for all officials of the Ministry for their contributions in shaping this Framework. I am confident that the State Water Reforms Framework will serve as an important instrument for driving evidence-based reforms, strengthening local institutional systems keeping Gram Panchayats at the center, and fostering continuous improvement in water and sanitation governance across the country. I encourage all States and Union Territories to utilise this Framework for advancing resilient, accountable and sustainable water governance systems in alignment with the vision of Viksit Bharat.

Ashok

**(Ashok K.K. Meena)**

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# ABBREVIATIONS

| Abbreviation | Full Form |
|---|---|
| AMRUT | Atal Mission for Rejuvenation and Urban Transformation |
| AWDO | Asian Water Development Outlook |
| BE/RE | Budget Estimates / Revised Estimates |
| CGWB | Central Ground Water Board |
| CWC | Central Water Commission |
| CWMI | Composite Water Management Index |
| D&D | Daman & Diu |
| DNH | Dadar & Nagar Haveli |
| DoDWS | Department of Drinking Water and Sanitation |
| DoWR, RD&GR | Department of Water Resources, River Development & Ganga Rejuvenation |
| EAP | Emergency Action Plans |
| FPOs | Farmer Producer Organisations |
| FSM | Faecal Sludge Management |
| FSTP | Faecal Sludge Treatment Plant |
| IEC | Information, Education and Communication |
| IISc | Indian Institute of Science |
| IIT | Indian Institute of Technology |
| IPC | Irrigation Potential Created |
| IPU | Irrigation Potential Utilisation |
| JJM | Jal Jeevan Mission |
| JSJB | Jal Sanchay Jan Bhagidari |
| MoEF&CC | Ministry of Environment, Forest & Climate Change |
| NA | Not Applicable |
| NABL | National Accreditation Board for Testing and Calibration Laboratories |
| NAQUIM | National Aquifer Mapping and Management Programme |

| Abbreviation | Full Form |
|---|---|
| NFSM | National Framework on Sediment Management |
| NWIC | National Water Informatics Centre |
| O&M | Operation and Maintenance |
| PIM | Participatory Irrigation Management |
| PMKSY | Pradhan Mantri Krishi Sinchayee Yojana |
| SBM | Swachh Bharat Mission |
| SDG | Sustainable Development Goal |
| SDSO | State Dam Safety Organisation |
| SHGs | Self-Help Groups |
| SOP | Standard Operating Procedure |
| SRTW | Safe Reuse of Treated Water |
| STPs | Sewage Treatment Plants |
| SWIC | State Water Informatics Centre |
| SWRF | State Water Reforms Framework |
| URMP | Urban River Management Plan |
| UTs | Union Territories |
| WRI | World Resources Institute |
| WRIS | Water Resources Information System |
| WRRA | Water Resources Regulatory Authority |
| WUA | Water User Associations |
| WUS | Water User Societies |

# 1. Background

Water is the foundation of life and a critical driver of India's economic growth, agriculture, energy security, and human development. India holds only 4% of the world's freshwater resources while supporting 17% of the world's population. It faces acute challenges of declining per capita availability, over-extraction of groundwater, increasing water pollution, and climate-induced extremes such as floods and droughts.

The water sector is central to achieving Sustainable Development Goal (SDG) 6 — "Ensure availability and sustainable management of water and sanitation for all" — and is closely linked with the SDGs on health, food security, gender equity, urban resilience, and environmental sustainability.

The Ministry of Jal Shakti is the nodal ministry responsible for the holistic management of India's water resources. Within the Ministry, the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD&GR) leads policy formulation, planning, and implementation of key initiatives related to irrigation, dam safety, groundwater management, river basin planning, and rejuvenation of rivers, including the Ganga.

The Department of Drinking Water and Sanitation (DoDWS) complements these efforts by focusing on rural drinking water supply and sanitation, including the implementation of flagship programmes such as the Jal Jeevan Mission (JJM) and Swachh Bharat Mission (SBM), thereby ensuring convergence across water resources management and service delivery.

Accordingly, the State Water Reform Framework (SWRF) has been conceptualised as a reform-oriented and facilitative tool to support States/UTs in undertaking progressive reforms, enable comparative assessment, and promote sustainable and efficient water resources management across the country.

# 2. Objectives

The State Water Reform Framework (SWRF) is designed as a facilitative and reform-oriented tool to nudge States/UTs towards improved water governance and sustainable resource management. The framework integrates the policy, regulatory, governance, infrastructure, technological, and community engagement dimensions to provide a holistic evaluation of the performance of States/UTs.

The key objectives are as follows:

- To encourage States/UTs towards adoption of key water sector reforms by highlighting gaps in policy, regulation, institutional capacity, and governance frameworks.
- To encourage incremental and continuous improvement in water resources management through simple, transparent, and comparable benchmarking across States/UTs.
- To encourage States towards strengthening regulatory and institutional mechanisms, particularly in areas such as groundwater management, dam safety, river governance, and participatory irrigation.
- To promote the sustainable and efficient management of water infrastructure and resources by encouraging the adoption of best practices in irrigation, wastewater reuse, water-use efficiency, and asset maintenance.
- To encourage States towards adoption of digitalisation and data-driven governance, including integration with national platforms and development of water informatics systems.
- To foster community participation and behavioural change by encouraging States to strengthen Information, Education and Communication (IEC) activities, capacity building, and citizen-led water conservation initiatives.

# 3. Ranking of States

To support meaningful benchmarking and guide reform progress, the SWRF uses a graded performance classification system, aligned with global practices such as the Asian Development Bank's Asian Water Development Outlook (AWDO). Under this approach, States and Union Territories (UTs) are categorised into five progressive performance bands based on their composite scores.

These bands are designed not only to rank performance but also to provide a clear reform trajectory, enabling States/UTs to assess their current position and identify pathways for advancement.

Table 1: Performance Bands

| Band | Score | Terminology | Interpretation |
|---|---|---|---|
| Band I | 0–40 | Foundational | Basic reform building blocks being established |
| Band II | 41–55 | Developing | Reforms under formulation and early execution |
| Band III | 56–70 | Progressive | Multiple reforms underway with measurable traction |
| Band IV | 71–85 | Developed | Reforms institutionalized and functioning well |
| Band V | 86–100 | Advanced | Mature, integrated, and adaptive reform systems |

# 4. Classification of States

Under the SWRF framework, States have been classified into three categories based on NITI Aayog's Composite Water Management Index (CWMI). The framework enables the implementation of a more cooperative and supportive approach to water management, the efficient use of water resources, water quality, and River basin management.

| Category | Classification | States / UTs |
|---|---|---|
| Category I | Non-Himalayan States (18) | Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, and West Bengal |
| Category II | North-Eastern & Himalayan States (10) | Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, Tripura, and Uttarakhand |
| Category III | Union Territories (8) | Andaman and Nicobar Islands, Chandigarh, Delhi, Dadar and Nagar Haveli (DNH) and Daman and Diu (D&D), Lakshadweep, Puducherry, Jammu and Kashmir, and Ladakh |

# 5. Framework

The framework is for assessing the performance of States/UTs in water-sector governance and management. It is structured around five key dimensions – policy and regulation, project monitoring, digitalisation and research, infrastructure, and community engagement – and twenty-seven sub-dimensions, each containing a set of specific indicators measured primarily through **binary (Yes/No) responses**.

The framework also outlines a standardised scoring methodology, in which performance is assessed based on reforms completed by a fixed cut-off date, with provisions for adjusting scores when certain indicators are not applicable.

Overall, the document serves as a structured benchmarking tool for comparing and ranking states/UTs on their progress in sustainable and integrated water resource management. The reform indicators pertaining to these 27 sub-dimensions are enclosed at **Annexure-I.**

**The five assessment dimensions are:**

| # | Dimension | Description |
|---|---|---|
| A | Policy and Regulation | Water policy, Groundwater regulation, Flood management, Participatory Irrigation Management, River governance, Interstate River Dispute Compliance, Sludge Management, Treated water reuse, Sediment management |
| B | Project Monitoring | Online dashboards, Third-party monitoring of Projects, O&M policy |
| C | Digitalisation and R&D | State Water Informatics Centre, NWIC integration, R&D cells and MoUs with Institutions |
| D | Infrastructure | Dam, Water as a Service, Water quality labs, STPs/FSTPs, Rainwater harvesting Structure, Spring-shed Management, Water use efficiency, Water Tourism |
| E | IEC and Community Engagement | Water Awards, Educational outreach, Best practices & Capacity building |

# 6. Methodology

## 6.1 Cut-off Date

For the purposes of the SWRF, the cut-off date for reporting and assessment shall be **31st December 2026**. Evaluation shall be based solely on reforms undertaken by States/UTs against the specified indicators and completed on or before this date. The States/UTs are required to submit response as per the format enclosed in **Annexure-I** by 31st January 2027.

## 6.2 Scoring Framework

The indicators have been designed primarily in binary form (Yes/No) with clearly defined thresholds to minimise subjectivity, ensure clarity of interpretation, and promote uniform reporting across States/UTs. The framework shall be assessed using a composite score of 100 points.

Under this binary scoring system, a response of **"Yes"** shall attract the full score assigned to the indicator, while a response of **"No"** shall attract zero score. No partial marks shall ordinarily be awarded.

Given that the framework comprises 75 indicators and the total score is 100, equal weight is assigned to each indicator. Under the equal weightage approach:

**Weight per indicator = 100 ÷ 75 = 1.33 marks**

## 6.3 Dimension-wise Performance Analysis

In addition to the overall composite score, the framework enables dimension-wise performance assessment to support diagnostic analysis. This will help identify dimensions where a State/UT is relatively strong or weak.

**Dimension Score (%) = (Number of "Yes" indicators in dimension ÷ Number of applicable indicators in dimension) × 100**

## 6.4 Treatment of "Not Applicable" Indicators

Some indicators may not be applicable to all States/UTs due to geographical, institutional, or sectoral differences. In such cases, indicators may be marked as "Not Applicable (NA)", subject to justification and verification. When an indicator is treated as NA, the score is not counted as zero. Instead, the denominator is adjusted by excluding NA indicators so that the State/UT is assessed only on the applicable indicators.

**Composite Score = (Number of "Yes" indicators × 100) ÷ Number of applicable indicators**

## 6.5 Data Submission and Validation

Each State/UT shall submit responses for each indicator, along with supporting documents wherever required. These may include:

- Notified Acts, policies, or guidelines
- Government orders/notifications
- Administrative records
- Dashboard screenshots
- Budget documents
- Accreditation certificates
- Monitoring reports
- Data portal extracts

The submitted documents shall be examined and validated, and the final score shall be awarded based on the verified responses.

# 7. Assessment and Timelines

There is a series of key activities involved in this entire process of assessment. The key milestones are outlined below:

| S.No. | Description | Timeline |
|---|---|---|
| 1. | Reforms Implemented by the States/UTs | 31st December 2026 |
| 2. | Submission of Response by States/UTs | 31st January 2027 |
| 3. | Validation of Response by Ministry | February – March 2027 |
| 4. | Release of States/UTs Ranking and Related Data | April 2027 |

# ANNEXURE I

## State Water Reforms Framework — Response Format for States/UTs

### General Instructions

- All indicators are to be answered in binary format (Yes/No).
- Responses must be supported with documentary evidence.
- Evidence should pertain to reforms implemented by **31 December 2026**.
- Provide web-links/document references wherever applicable.
- States/UTs are responsible to coordinate with their internal departments for response.
- States/UTs are required to nominate nodal officer for communication with Ministry of Jal Shakti.

### Section A: General Information

| S.No. | Field | Details |
|---|---|---|
| 1 | Name of State/UT | |
| 2 | Nodal Department | |
| 3 | Nodal Officer Name & Designation | |
| 4 | Contact Details (Email/Mobile) | |
| 5 | Date of Submission | |

### Section B: Indicator-wise Response Format

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| A. Policy and Regulation | Water Policy | 1 | Does the State/UT have a formally notified State Water Policy? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | 2 | If yes to question 1, does the State Water Policy prioritise allocation to rural drinking water supply needs? | | | |
| | | 3 | Has the State/UT constituted a State Water Resources Regulatory Authority (WRRA)? | | | |
| | Groundwater Regulation | 4 | Does the State/UT have a legal framework for groundwater regulation (Act/notification)? | | | |
| | | 5 | Whether the State/UT is conducting periodic census of groundwater extraction structures? | | | |
| | | 6 | Does the State/UT enforce Well Head Protection measures for gross polluting industries to prevent aquifer contamination? | | | |
| | Participatory Irrigation Management (PIM) | 7 | Has the State/UT notified a PIM Act/Policy providing for WUA/WUS? | | | |
| | | 8 | Has more than 50% of irrigation command area in the State/UT been covered under functioning WUA/WUS? | | | |
| | | 9 | Are WUA/WUS in the State/UT managing more than 30% of | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | O&M expenditure of irrigation systems? | | | |
| | | 10 | Are WUA/WUS working in consultation with Gram Panchayats? | | | |
| | Flood Management | 11 | Has the State/UT enacted Flood Plain Zoning Policy/Guidelines? | | | |
| | | 12 | Has the State/UT completed ground truthing and demarcation of flood plain zones on ground? | | | |
| | | 13 | Does State/UT have its own Flood Forecasting Services? | | | |
| | | 14 | Is the State/UT flood forecasting system integrated with the CWC Flood Forecasting System? | | | |
| | Interstate River Dispute Compliance | 15 | Does the State/UT capture interstate basin level data with concerned authorities on regular basis? | | | |
| | | 16 | Has the State/UT filled 75% posts in all the institutional mechanisms (authorities, committees, or Board) required for implementation and coordination under the award? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | State Budget for Water Sector | 17 | Is more than 90% of allocated water sector budget including drinking water and greywater (BE/RE whichever is more) utilized (average of last 2 FYs) in the State/UT? | | | |
| | | 18 | Is more than 10% of water sector budget allocated to river rejuvenation in the State/UT? | | | |
| | River Policy and Governance | 19 | Does the State/UT have nodal department identified /responsible for river rejuvenation? | | | |
| | | 20 | Has the State/UT notified & implemented E-flow for rivers? | | | |
| | | 21 | Has the State/UT established a roadmap for improving health of springs/wetlands/small rivers? | | | |
| | | 22 | Does the governance framework ensure public participation through Panchayati Raj Institutions in the State/UT? | | | |
| | | 23 | Has the State/UT notified or formally approved an Urban River Management Plan | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | (URMP) for at least one town/city? | | | |
| | Treated Water Reuse | 24 | Does the State/UT have a specific Treated Water Reuse Policy aligned to the National Framework for SRTW (Safe Reuse of Treated Water)? | | | |
| | | 25 | Whether 50% of Class-I cities in the State/UT are meeting the targets of treated water reuse as per state policy or AMRUT Guidelines, if State/UT is not having reuse policy? | | | |
| | | 26 | Does the State/UT have specific policy covering greywater/ wastewater management and promoting reuse of treated water/ greywater in agriculture/ horticulture/ other domestic purposes? | | | |
| | Sludge Management | 27 | Does the State/UT have Sludge Management Guidelines? | | | |
| | Sediment Management | 28 | Has the State/UT formulated a dedicated silt/sediment management policy aligned with the National Framework for Sediment Management? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| B. Project Monitoring | | 29 | Whether the State/UT has identified priority river sub-basins / watersheds /reaches for target silt management interventions? | | | |
| | | 30 | Has the State/UT executed sediment management works in selected river reaches? | | | |
| | | 31 | Have these sediment management works resulted in demonstrable/tangible outcomes or success? | | | |
| | Project Monitoring | 32 | Whether online project dashboards exist in the State/UT for tracking physical and financial progress of the Irrigation Projects? | | | |
| | | 33 | Whether third-party monitoring or independent review of projects exists in the State/UT? | | | |
| | | 34 | Whether more than 50% of the villages in the State/UT have their rural water supply assets mapped & geo-tagged on Sujalam Bharat platform? | | | |
| | Operation and Maintenance | 35 | Does the State/UT have a formally notified functional O&M Policy or SOP for water | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | infrastructure and schemes including drinking water? | | | |
| | | 36 | Whether the State/UT has allocated budget as per its O&M Policy including rural drinking water supply? | | | |
| | | 37 | Does the State/UT carry out functionality assessment of water supply schemes through Jan Bhagidari every year? | | | |
| | Digitalization | 38 | Whether the entire water data in the State/UT is collected and ingested into SWIC? | | | |
| | | 39 | Is State Water Data, including groundwater data, integrated with NWIC / WRIS /PM GatiShakti Portal ? | | | |
| C. Digitalization and R&D | | 40 | Is the water data accessible to District Magistrate/District Collector at district level? | | | |
| | R&D | 41 | Does State/UT have a Water R&D Cell? | | | |
| | | 42 | Has the State/UT signed MoUs with reputed research / academic institutions (IITs, IISc, NITs, universities, international institutes) and industry collaboration linked to applied | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | water sector outcomes (flood modelling, dam safety, groundwater, climate adaptation, River Conservation, Reuse of Treated Water, Water Use Efficiency, Improving drinking water service delivery, etc) | | | |
| | | 43 | Has the State/UT ensured preparation of SoPs/Operational manual/guidelines based on research findings for O&M/Scaling up/By-Product Management etc? | | | |
| D. Infrastructure | Dam | 44 | Whether SDSO in the State/UT is legally constituted, staffed, funded, and functioning as required under Dam Safety Act, 2021 ? | | | |
| | | 45 | Do more than 15% specified dams have approved Emergency Action Plans (EAP) in the State/UT? | | | |
| | Water as a Service | 46 | Whether the Irrigation Potential Utilisation (IPU) is at least 80% of Irrigation Potential Created (IPC) in the State/UT? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | 47 | Is more than 20% command area covered under micro-irrigation in the State/UT? | | | |
| | | 48 | Does the State/UT monitor delivery of drinking water services in rural and urban areas? | | | |
| | Ground Water | 49 | Whether each district in the State/UT have at least one water quality testing lab? | | | |
| | | 50 | Whether at least 50% of the State/UT's water quality testing labs are accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL)? | | | |
| | STP / FSTP | 51 | Do more than 60% STPs in the State/UT have real-time online monitoring systems? | | | |
| | | 52 | Is installed STP capacity in the State/UT more than 70% of sewage generated? | | | |
| | | 53 | Are more than 60% of the villages of State/UT Faecal Sludge Management (FSM) complaint? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | 54 | Are more than 75% STPs/FSTPs in the State/UT compliant with MoEF&CC discharge norms? | | | |
| | | 55 | Has any city/town in the State/UT achieved full sewage treatment capacity (through STPs) such that no untreated sewage is discharged into rivers? | | | |
| | Waterbodies (Ponds, Tanks, Lakes & Reservoirs) | 56 | Are public water bodies in the State/UT identified in the Water Bodies Census being monitored for water quality? | | | |
| | | 57 | Whether Rooftop Rainwater Harvesting Structures have been mandated as per building bye-laws in the State/UT? | | | |
| | Rainwater Harvesting Structures | 58 | Are the Rainwater Harvesting Structures/ ground water recharge structures linked with the rural piped supply water sources in the Gram Panchayat, mandated through Gram Panchayat Development Plan process? | | | |
| | | 59 | Has State/UT ensured construction of Rainwater Harvesting Structures (RWH) | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | for source sustainability of rural water supply? | | | |
| | | 60 | Whether 70% of the Over-Exploited assessment units in the State/UT show reduction in Stage of groundwater extraction/ improvement in groundwater level vis-à-vis last year ? | | | |
| | | 61 | Whether 70% of the Critical assessment units in the State/UT show reduction in Stage of groundwater extraction/ improvement in groundwater level vis-à-vis last year ? | | | |
| | | 62 | Whether 70% of the Semi-critical assessment units in the State/UT show reduction in Stage of groundwater extraction/ improvement in groundwater level vis-à-vis last year ? | | | |
| | Water Tourism | 63 | Whether Dam tourism policy/guidelines notified in the State/UT? | | | |
| | Spring-shed Management | 64 | Whether State/UT is managing Spring inventories? | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| E. IEC and Community Engagement | Water Use Efficiency | 65 | Has the State/UT conducted benchmarking studies for water use efficiency for all its existing irrigation projects (Major/Medium)? | | | |
| | | 66 | Does the State/UT industrial policy include Water Use Efficiency in its provisions ? | | | |
| | | 67 | Whether the State/UT implemented any supply side water-saving measures in rural drinking water supply systems? | | | |
| | | 68 | Whether the State/UT carried out assessments of water losses (Non-Revenue Water) in rural water supply schemes? | | | |
| | Recognition and Incentivization (Water Awards) | 69 | Does the State/UT organise annual Water Awards for best-performing districts/Gram Panchayats/schools/industries? | | | |
| | | 70 | Has the State/UT adopted any incentive mechanism (financial or non-financial) for citizen-led water conservation practices? | | | |
| | Educational Outreach | 71 | Whether awareness programmes for water conservation are organized | | | |

| Dimension | Sub-Dimension | S.No. | Indicator | Response (Yes/No) | Supporting Evidence | Remarks |
|---|---|---|---|---|---|---|
| | | | annually in all Government schools in the State/UT? | | | |
| | | 72 | Has the State/UT initiated institutional partnership with SCERT to include water in its curriculum, particularly in elementary classes? | | | |
| | Best Practice Identification & Cross-State Learning | 73 | Has the State/UT documented and published best practices or case studies on community-led water conservation and management? | | | |
| | Capacity Building | 74 | Whether the State/UT has devised an annual training calendar specific to the water sector for capacity building of stakeholders ? | | | |
| | | 75 | Whether the State/UT has conducted at least one 3-day training programme in the water sector for the stakeholders including farmers, Water User Associations (WUAs), Water User Societies (WUS), Women Self-Help Groups (SHGs), and Farmer Producer Organizations (FPOs) in the last one year? | | | |

# GLOSSARY

| Term | Definition |
|---|---|
| **Accreditation** | Certification that a laboratory meets prescribed national standards for testing and calibration quality |
| **Aquifer** | Underground geological formation capable of storing and transmitting groundwater |
| **Aquifer Mapping (NAQUIM)** | Scientific mapping of groundwater resources to assess availability, recharge, and quality |
| **Budget Utilization Ratio** | Percentage of allocated funds actually spent, indicating financial efficiency |
| **Command Area** | Area served by an irrigation system where water is supplied for agriculture |
| **Composite Indicator Framework** | Structured system combining multiple indicators into a unified scoring mechanism |
| **Composite Score** | Total score (out of 100) based on performance across all applicable indicators |
| **Critical/Semi-Critical/Overexploited Blocks** | Classification of groundwater units based on the extent of extraction relative to recharge |
| **Data Validation** | Process of verifying submitted data and documents for accuracy and reliability |
| **Digital Water Governance** | Use of digital platforms and data systems for water resource planning and monitoring |
| **District Collector / Magistrate** | District-level administrative authority responsible for governance and implementation |
| **E-flow (Environmental Flow)** | Minimum water flow required to sustain river ecosystems and livelihoods |

| | |
|---|---|
| **Emergency Action Plan (EAP)** | Plan outlining actions to mitigate risks during dam-related emergencies |
| **Equal Weightage Method** | Scoring approach where each indicator carries equal importance in the total score |
| **Faecal Sludge Management (FSM)** | Management of sludge from sanitation systems including collection, treatment, and disposal |
| **Flood Plain Zoning** | Regulation of land use in flood-prone areas to reduce risks and damages |
| **Flood Management Measures** | Structural and non-structural interventions to manage and mitigate flood risks. |
| **Gram Panchayat Development Plan (GPDP)** | Village-level plan including water resource management and infrastructure priorities. |
| **Greywater** | Domestic wastewater excluding sewage, typically from kitchens, bathrooms, etc. |
| **Ground Truthing** | Field verification of mapped or reported data |
| **Groundwater Recharge** | Process by which water infiltrates into aquifers replenishing groundwater reserves |
| **Indicator Threshold** | Defined benchmark that determines whether an indicator qualifies as a "Yes" |
| **Irrigation Potential Created (IPC)** | Total irrigation capacity developed through infrastructure |
| **Irrigation Potential Utilisation (IPU)** | Actual area irrigated using the created irrigation infrastructure |
| **Jan Bhagidari** | Citizen participation in planning, monitoring, and implementation of schemes. |
| **Micro-Irrigation** | Efficient irrigation methods such as drip and sprinkler systems |

| | |
|---|---|
| **Monitoring and Evaluation (M&E)** | Systematic tracking and assessment of policy/programme performance |
| **Non-revenue Water (NRW)** | Water lost due to leakage, theft, or inefficiencies before reaching users |
| **Non-Functional Assets** | Infrastructure that is not operational due to technical or administrative issues. |
| **Not Applicable (NA)** | Indicator classification used when a parameter is irrelevant to a State/UT. |
| **Online Monitoring System** | Real-time digital system for tracking infrastructure or project performance. |
| **Operation & Maintenance (O&M)** | Activities required for upkeep and functioning of water infrastructure |
| **Participatory Irrigation Management (PIM)** | Involvement of farmers and stakeholders in irrigation management |
| **Performance Bands** | Categorisation of States/UTs based on score ranges (Foundational to Advanced). |
| **Policy Notification** | Official issuance of a policy making it legally valid and enforceable. |
| **Project Dashboard** | Digital interface displaying real-time physical and financial progress of projects |
| **Rainwater Harvesting** | Collection and storage of rainwater for reuse |
| **Real-Time Monitoring** | Continuous tracking of systems using sensors and digital tools |
| **River Basin Management** | Integrated management of water resources within a river basin |
| **River Rejuvenation** | Restoration of river health, flow, and ecological balance |
| **State Council of Educational Research and Training (SCERT)** | State-level body responsible for curriculum development and educational initiatives |
| **Sewerage Coverage** | Extent of population connected to sewerage systems |

| | |
|---|---|
| **Sludge Management** | Treatment and disposal of sludge generated from wastewater systems |
| **Spring-shed Management** | Conservation of recharge areas of springs for sustained water flow |
| **Stakeholders (Water Sector)** | Entities involved in water management, including communities, institutions, and industries |
| **State Water Policy** | Official policy guiding water resources management at the State level |
| **Third-Party Monitoring** | Independent assessment of projects for transparency and accountability. |
| **Treated Water Reuse** | Use of treated wastewater for non-potable purposes |
| **Urban Water Management** | Planning and management of water supply and wastewater in urban areas |
| **Water Budgeting** | Estimation and allocation of water availability and demand |
| **Water Data Integration** | Linking of multiple water databases across platforms and systems |
| **Water Governance Framework** | Institutional and policy structure governing water resource management |
| **Water Infrastructure Lifecycle Management** | Planning, construction, operation, and maintenance of water assets |
| **Water Quality Testing Laboratory** | Facility for testing water against quality standards |
| **Water Security** | Reliable availability of adequate quantity and quality of water |
| **Water Use Efficiency (WUE)** | Ratio of useful water output to total water input |
| **Water User Associations (WUA)** | Community groups managing irrigation systems at the local level |
| **Water User Societies (WUS)** | Institutional bodies similar to WUAs involved in water management |

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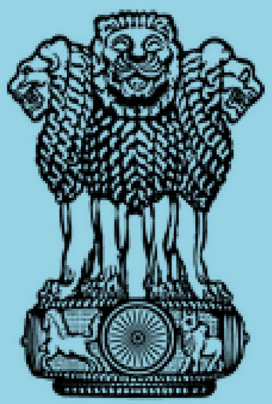

सत्यमेव जयते

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