

## **Scope of Work**

### **Impact Study on Rejuvenation of Water Bodies (RWB) Project by NITI Aayog across Phase 1 and Phase 2**

#### **1. Objectives of the Study**

The impact study aims to:

1. Assess the short-term and long-term quantitative and qualitative outcomes of the RWB program on:
  - o Water availability, storage capacity, and groundwater recharge
  - o Agricultural productivity, including fisheries, cropping intensity, and farmer income
  - o Ecosystem and biodiversity health
  - o Community ownership and sustainability of assets
2. Examine indirect and social outcomes, including:
  - o Reduction in water collection drudgery (especially for women and children)
  - o Community participation and local governance effectiveness
3. Compare and synthesize lessons from the NITI Aayog–ATECF pilot and related government programs (e.g., Amrit Sarovar), to develop a replicable and scalable model for waterbody rejuvenation across India.

#### **2. Scope of Work**

To conduct a comprehensive, mixed-method impact assessment that includes the following components:

##### **A. Environmental and Water Resource Outcomes**

- Quantify changes in surface water storage capacity, groundwater table levels, and seasonal well-depth variations.
- Assess an increase in groundwater recharge and surface water availability using field data, Avni dashboard, and satellite imagery.
- Evaluate improvements in crop coverage and soil quality around rejuvenated waterbodies.
- Assess improvements in fish yield in revived ponds.

##### **B. Economic and Livelihood Outcomes**

- Measure changes in farmer income levels, yield improvements, and cropping patterns.

- Assess the role of silt reuse in improving soil fertility, reducing input cost, and lowering chemical fertilizer usage.
- Improvement in community involvement, savings, and land value in rejuvenated areas.
- Conduct comparative analysis between intervention and control villages.
- Assess income growth from improved fish stocking, harvesting, and sales.

### C. Social and Gender Dimensions

- Assess community perceptions of water security and wellbeing improvements.
- Examine reduction in women’s and children’s drudgery in water collection and its impact on time-use, education, and livelihoods.
- Capture qualitative insights into empowerment, decision-making, and gender inclusion.

### D. Governance Outcomes

- Evaluate effectiveness of the PMU and technology-enabled monitoring tools (Avni, Dalgo Dashboard, WhatsApp chatbot).
- Identify best practices in convergence, planning, and accountability mechanisms.

### E. Sustainability and Policy Linkages

- Determine the longevity of outcomes (2–3 years post intervention).
- Document policy lessons and recommendations for scaling the RWB model nationally through government convergence.
- Availability of water for cattle.

## 3. Methodology

The study should adopt a robust mixed-method design, incorporating both quantitative and qualitative approaches, including a control group. It could also include scientific tools to determine the impact of hydrology of the area worked in.

The work with NITI Aayog was undertaken in two Phases and hence, the assessment should also build on the assessment conducted post Phase 1 (2022–24) and conduct a fresh assessment for work undertaken under Phase 2 (2025). For Phase 1, the questionnaires, analysis and assessment will be more nuanced given that a study was conducted by Deloitte and a basic baseline would be available. This approach could provide light on the long-term impact of RWB. For Phase 2, since the work has just taken place, the analysis would be short-term and more qualitative. Accordingly, the agency is requested to consider a mixed-method design for this study.

Phase	No. of States	No. of Districts	No. of Water Bodies
Phase 1	5	11	766
Phase 2	9	23	739

A list of all waterbodies with locations across both Phases can be provided, if needed by the Agency.

## **Quantitative Methods**

- Structured household surveys with statistically representative sampling across project geographies (Rajasthan, Madhya Pradesh, Maharashtra, Uttar Pradesh).
- Hydrological and agricultural data comparison using baseline and Avni data.
- Use of satellite imagery or GIS-based analysis to track waterbody and vegetation changes. Also include other scientific analysis such as well water level testing, soil tests etc. as needed.
- Control group sampling to measure counterfactual impacts.

## **Qualitative Methods**

- Focus Group Discussions (FGDs) with farmers (small, marginal, large), women, and Panchayat representatives.
- Key Informant Interviews (KIIs) with NGO partners, district officials, and PMU members.
- Narrative case studies to highlight community ownership, behavioural shifts, and sustainability practices.
- Participatory Rural Appraisal (PRA) tools for assessing community perceptions and collective outcomes.

## **Sampling Approach**

The agency shall propose a statistically valid sampling methodology covering:

- Assess the work undertaken during Phase 1 (2022–24) under the NITI Aayog initiative by conducting a deeper evaluation and building on the findings of the Deloitte report.
- Evaluate the work carried out during the current phase (2025–26) through a baseline assessment of the 739 water bodies taken up in this phase, spread across 23 Aspirational Districts in 9 States. (The detailed list of water bodies will be provided upon submission of the RFP).
- Ensure a geographically representative sample, ideally covering:
  - o One block/district per state where the highest intensity of work has taken place against the approved targets; and
  - o A randomly selected set of blocks where limited or no work has been undertaken against approved targets.
- Capture variations across multiple agro-ecological zones and diverse socioeconomic contexts.
- Include both beneficiaries and non-beneficiaries to enable a robust comparative analysis.

## **4. Study Duration: 4 months**

## **5. Expected Deliverables**

4. Inception Report – Detailing methodology, sampling plan, data collection tools, and timelines.
5. Interim Progress Reports – Summarizing field observations, early insights, and photographic documentation.

6. Final Impact Assessment Report – Comprehensive analysis (quantitative and qualitative), lessons learned, and recommendations for policy integration and scale-up.
7. Case Studies and Human Stories – Illustrative narratives demonstrating transformative change.
8. Cleaned Dataset and Metadata – All primary and secondary data to be shared with ATECF and NITI Aayog.

## **6. Expected Outcomes**

- Evidence-based insights on long-term sustainability and social return on investment (SROI) of RWB.
- Recommendations for embedding the RWB model within existing government programs and enabling advocacy with states.

*For any queries related to this Scope of Work, please contact:*

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