

## **IN FOCUS**

### **"Building Resilient Rural Water Commons: Decentralized Approaches from India's Mission Amrit Sarovar"**

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Water scarcity and declining groundwater levels are critical challenges across the Global South, particularly in rural and semi-arid regions. In response to these concerns, the Government of India launched Mission Amrit Sarovar in 2022 a nationwide initiative to restore and develop at least 75,000 traditional and small water bodies. The mission represents a major step toward sustainable water management by placing communities at the heart of implementation and leveraging decentralized governance and convergence of public programs.

At the core of Mission Amrit Sarovar lies a unique convergence model that brings together financial and technical support from multiple schemes. These include the rural employment guarantee program for labor-intensive water conservation works, national watershed development initiatives, rural infrastructure funds, and untied grants provided to local governments. The mission is operationalized through collaborative planning among district administrations, technical experts, and local governing bodies, ensuring that restored water bodies are both ecologically viable and locally owned.

Technically, the mission employs an integrated watershed approach to rejuvenate traditional water harvesting systems such as ponds, tanks, and stepwells. Hydrological assessments, topographic analysis, and remote sensing tools are used for scientific site selection and design. States utilize national and regional geo-spatial platforms to identify suitable catchments, assess soil and moisture regimes, and prioritize areas for intervention. Soil and moisture conservation measures such as

bunding, vegetative barriers, and silt control structures are included to enhance infiltration and reduce erosion. Many districts also implement decentralized rainwater harvesting techniques such as check dams, recharge shafts, and percolation tanks to improve groundwater recharge.

A key innovation in the mission is the emphasis on participatory water budgeting. In several regions, communities engaged in seasonal water planning using basic hydrological tools to allocate water resources across different cropping seasons. These local water management practices are helping smallholders adapt to climate variability and optimize agricultural use of available water. In addition, aquaculture, tree plantation, and other peripheral uses have been encouraged to diversify livelihoods and ensure sustained engagement of communities in maintaining the water bodies.

Monitoring is central to the mission's accountability and learning framework. Each water body is geo-tagged, photographed before and after intervention, and tracked using digital dashboards. Progress is measured not only in terms of the number of structures built but also through indicators such as increased surface water storage, groundwater level improvement, and enhanced irrigation potential. In some areas, pilot initiatives have introduced Internet-of-Things-based water level sensors and drone-based assessments to improve technical precision. Mission Amrit Sarovar has demonstrated that restoring water heritage through locally led and technically informed action can yield substantial ecological and socio-economic outcomes. These include improved irrigation access, reduced agricultural risk, enhanced groundwater security, and restoration of biodiversity. More importantly, the initiative has strengthened local governance and revived community participation in managing shared natural resources.

For countries across the Global South, the experience of Mission Amrit Sarovar offers valuable insights. Its integrated approach combining inter-scheme convergence, scientific planning, and community stewardship demonstrates how decentralized water governance can effectively regenerate rural water systems. By leveraging spatial data, Remote sensing & GIS, hydrological assessments, and local knowledge, the initiative ensures context-specific and cost-effective interventions. Community participation through local governance structures fosters ownership and long-term sustainability, while performance-based monitoring enhances transparency. As many regions across global south face intensifying climate risks and depleting water resources, adapting such community-led water conservation frameworks can provide a pathway for building rural resilience and ecological sustainability.