

# REJUVENATING TRADITIONAL TANKS:

A quest for stabilising agriculture and water security in Bundelkhand



## Bundelkhand Initiative for Water, Agriculture and Livelihoods (BIWAL)



Hindustan Unilever Foundation



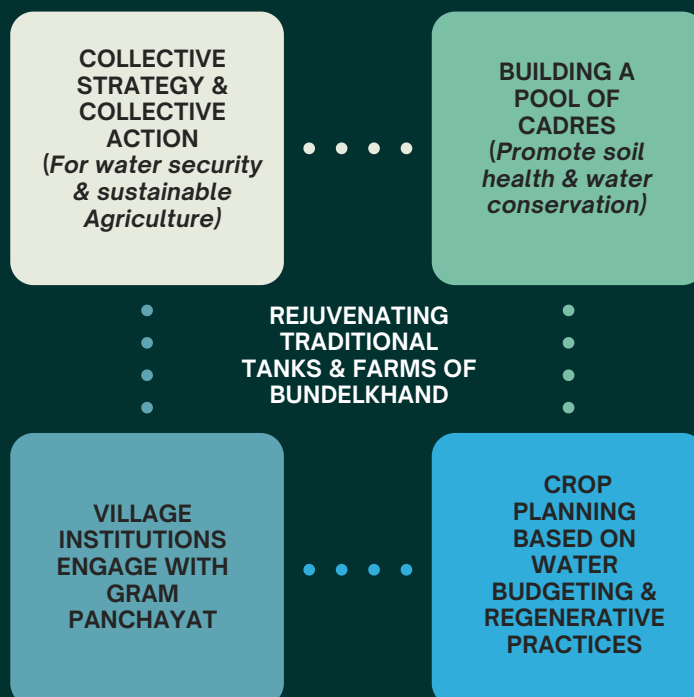
Self-Reliant Initiatives through Joint Action

# HOLISTIC APPROACH TO STABILISING AGRICULTURE AND REJUVENATION OF TRADITIONAL TANKS



## Programme Strategy

Rejuvenation is more than restoration. While restoration is a short-term return to the status, rejuvenation calls for action to sustain ecosystem health to help it function well for tanks, restoration implies de-siltation. For traditional tanks, rejuvenation requires an all-round sustainable management — catchment and channel management, regular upkeep, and regulated use. The following approach has been co-created and evolved during the programme implementation. The tank rejuvenation work by SRIJAN has addressed the critical challenges of water, agriculture, and livelihoods in Bundelkhand. This involved community action collectively addressing the challenges through community institutions and dedicated water champions. These institutions learn and promote climate-smart agriculture, alternate farm-based livelihoods and water-efficient crop management.



## Approach



- Collective action
- Capacity building of TMC member
- Liaising with gram panchayat

- Tank de-siltation
- Silt use in farmland
- TMC formation

- Bio-resource Centre
- Seed Banks, agri-tools
- Knowledge extension

- Multi-layer farming (3-5 vegetables)
- Fruit orchards
- TMCs linked to Farmer Producer Organisation



## Step 1: Constituting and operationalising Tank Management Committees (TMCs)

Beneficiary villages constitute the Tank Management Committee (TMC). Depending upon the tank command area, a TMC general body may consist of 100-150 households. Among the beneficiary households, 10-15 members are selected as executive committee members. These members meet regularly to monitor, plan and act on water security and climate-resilient agriculture. Local governments back the TMC. Women have been their key drivers. With support from the program staff and water champions, the TMC have brought about the transformation in stabilising agriculture livelihoods in the region.

### Working Strategy of Tank Management Committees



## TMC Meeting Calendar

SEASON	KEY ACTIVITIES
KHARIF	Conducting general body meetings to finalise the agenda and action plan for the kharif season.
	Tank site visit before the monsoon to identify breaches and undertake repair work before the onset of monsoons.
	Groundwater monitoring every month.
	Develop a proposal for water resource management, including repair of tanks under MGNREGA, well repairs, drinking water, etc., and submit the proposal to the Gram Sabha.
	Developing plans and extending support to bio-resource centres, seed banks, mobilising farmers to adopt climate-smart agricultural practices.
SEASON	KEY ACTIVITIES
RABI	Conducting general body meetings and finalising the agenda and action plan for Rabi season and water management.
	Rabi planning – conducting exercise in water budgeting with support from gram panchayat.
	Developing a plan and extending support to the use of bio-resource centres and seed banks by farmers to encourage climate-smart agricultural practices.
	Giving advisory on crop and variety selection and facilitating Rabi procurement.
	Monitoring village water structures and planning their repair, if needed.
	Collection of tank maintenance charge from beneficiary households in-cash/in-kind.
	Groundwater monitoring on monthly basis.
SEASON	KEY ACTIVITIES
ZAID	Conducting general body meeting and finalising agenda and action plan for Zaid season and water management.
	Zaid planning – conducting exercise in water budgeting with support from local panchayat.
	Developing plan and extending support to use of bio-resource centres and seed banks by farmers to encourage climate-smart agricultural practices.
	Groundwater monitoring on monthly basis.
	Developing the proposals for the Gram Sabha – convergence opportunity with the line departments.
	Formulating norms on maintaining dead storage level in tank and other water harvesting structures.
	Mobilising gram panchayat for taking up soil and water conservation work in the villages as per submitted proposal.



## Step 2: De-silting tanks and rejuvenating farms

Tank rejuvenation should be approached considering both technical and social aspects. As a first step, tank silt is removed. The excavated silt is transported to the farms (it costs the community almost three times it costs in excavation). Therefore, active participation of community is the key. Silt removal from tanks and its use in farms, in addition to increasing water harvesting capacity of the tanks, results in

- (a) better crop productivity and
- (b) increase in groundwater recharge.

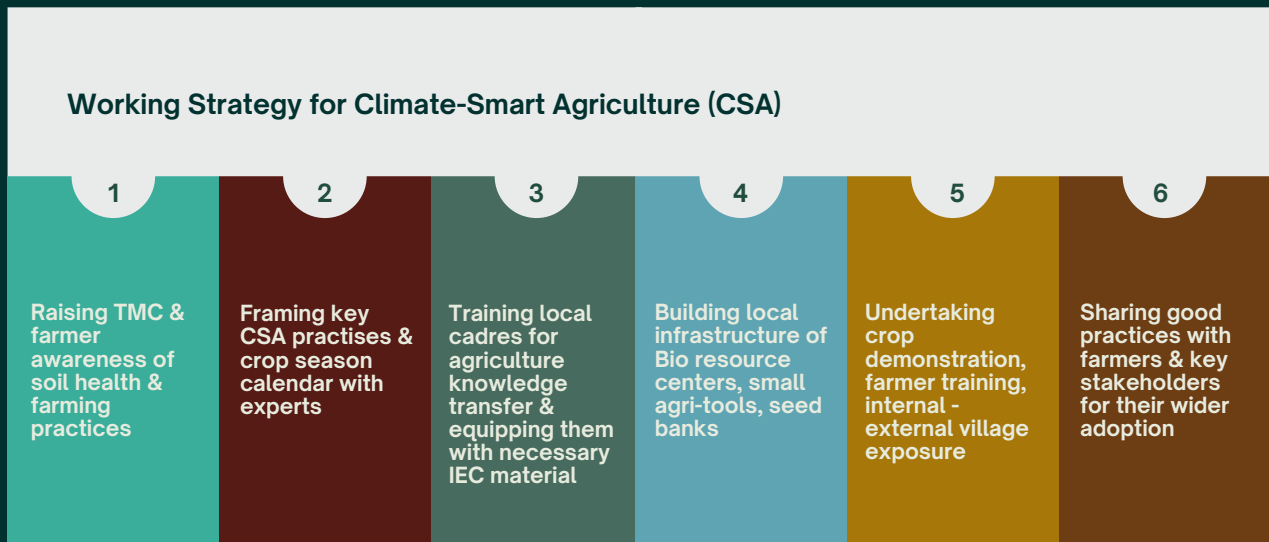
It is to be noted that if excavated silt is not removed, it again reaches the tank.

### Tank de-siltation process



### Step 3: Promoting Climate-Smart Agriculture for Better Soil Health and Climate Resilience

However, silt application alone will not maintain the soil health. After three to four years, its nutrients deplete. To maintain soil fertility, organic compost application is a must. In this, Water Champions (local Community cadres) helped orient the community to switch to natural farming methods and use of local seeds. Women played a key role in this transformation by promoting a network of bio-resource centres and seed banks, while a group of progressive farmers adopted climate-smart agricultural practices (Fig 1.3).



### Step 4: Farm Based Livelihoods

The region witnesses seasonal migration. Year-round livelihood engagement of the farmers is therefore essential for creating ownership of water availability.

Communities planned interventions such as developing small orchards and initiating vegetable cultivation. As stakes for water increased, so did the ownership and concern to manage the tank well for the benefit of all.

