

## Enhancing water storage capacity through community-based tank desiltation works: Mission Kakatiya, Telangana

**Problem statement:** While agriculture in Telangana has traditionally been dependent on tanks; most of these ran dry by 2014 owing to continued negligence and reducing tank storage capacity. Hence, dependency on groundwater increased and water table in the vicinity depleted.

**Intervention:** “Mission Kakatiya” was launched by the Government of Telangana in 2014 to prioritise restoration of 46, 531 minor irrigation tanks to their original capacity towards effective utilisation of water allocated for minor irrigation sector (255 TMC).

The strategy adopted is as follows:

- Identification and prioritisation of tanks:
  - Reconciliation survey was conducted to ascertain number of different types of minor irrigation sources viz. percolation tanks, private kuntas and small tanks for restoration.
  - The tanks for which repair works had already been undertaken under programs like RRR/ state plan were identified.
  - The tanks with greater ayacut and those which had not been covered under any other program were given priority. The order of prioritisation was decided in consultation with district minister/ local MLA/ public representatives.
- Civil works:
  - Tanks were desilted, dilapidated sluices/ weirs were repaired and bunds were strengthened.
  - Irrigation channels were re-sectioned to ensure smooth distribution of water to fields.
- The importance of the program was publicised and end-users were motivated to participate.
- Interdepartmental coordination was ensured by constitution of District Level Implementation, Monitoring and Evaluation Committee; which constituted members from irrigation and CAD, agriculture, fishery, rural development, forest, fishery, revenue, groundwater and public relation department.

**Impact:** By March 2018, the program was successful in restoration of 22,500 tanks, leading to outcomes like increased water storage capacity and enhanced on-farm moisture retention. It resulted in reduction of gap ayacut by 63%, agricultural diversification, reduced use of chemical fertilisers, enhanced on-farm water retention, improved soil nutritive value and water accessibility to small and medium farmers. Additionally, it also led to development of fisheries and livestock, increase in groundwater levels and income augmentation of farmers.

*(References: Composite Water Management Index by NITI Aayog, August 2019. Selected best practices in Water Management, prepared by NITI Aayog with the support of Teri University, August 2017. Mission Kakatiya, Irrigation and CAD Department, Government of Telangana)*