GOVERNMENT OF TELANGANA

Presentation on Mission Kakatiya

CAD DEPARTMENT

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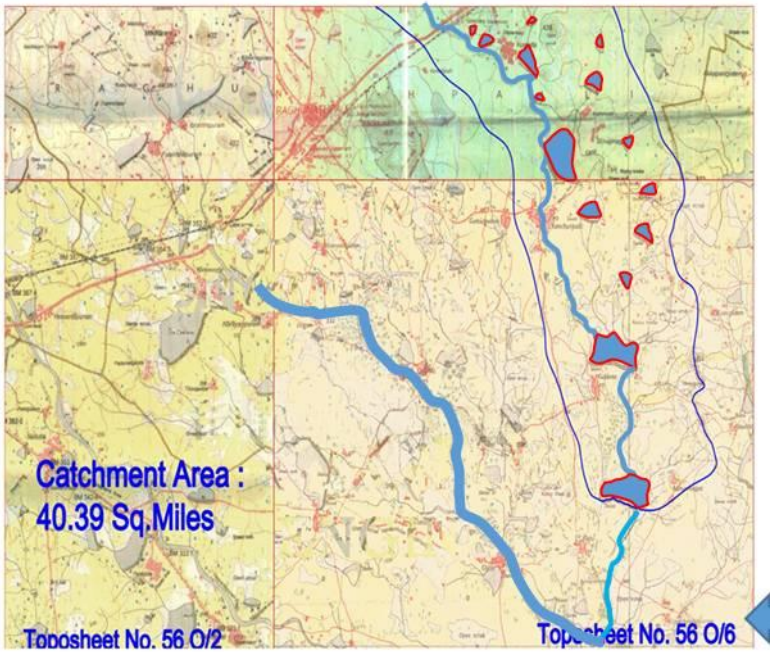
Importance of Tanks in Telangana State

- 65% of the state's population depends on Agriculture.
- Over 85% of the farmers in the state belong to the small and marginal category with an average land holding size of 1.11 ha.
- 63% of the farmers in Telangana depend on rain fed agriculture and more than 70% of cropped area is rain fed resulting in lower yields per unit area
- Telangana is undergoing a changed socio-economic situation, as a consequence of the drought conditions prevailing in the state. Nine of the ten districts of Telangana are drought-prone
- Telangana lies in Deccan Plateau which is at +110.00 m level above the Godavari river flow.

Chain of Tanks

- The chain of tank system is mainly existing in Telangana Region. The surplus water from upstream tank flows to downstream tank in the chain and every tank is having ayacut of its own.
- In the series of tanks every tank should be in good condition, if one tank is damaged it will effect total chain system of tanks in that chain.



Principal Components of Tank Systems

1. Bund of Main reservoir /water body.

2. Catchment area and feeder channels.

3. Sluices and surplus structures.

4. Canal network in the command area.

Present Condition of the Tanks

- **Tanks :** In Telangana state, there are 46,531 Minor Irrigation Sources with an irrigation potential of 25 lakh acres out of which only 37% is irrigated leaving a gap of 63% irrigation potential created.

- **Feeder Channels** : Carrying capacity reduced due to extensive jungle growth, erosion of banks, siltation, loss of profile and bed slopes.

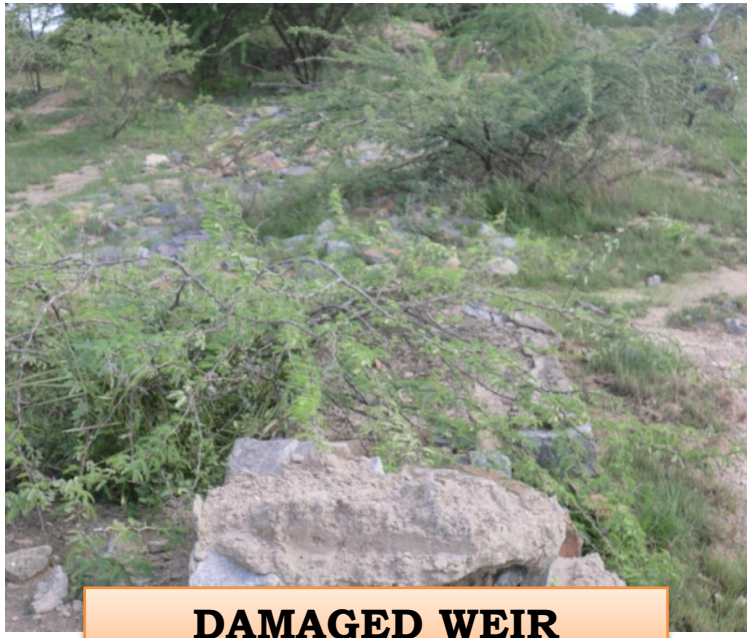
- **Tank Bund** : Jungle growth on slopes, reduction of top width through erosion/scouring of slopes, disturbed/damaged stone revetment ,seepages through bund.

- **Tank Sluices:** Damaged/collapsed sluices and appurtenant structures and silt deposits.

- **Surplus Weirs:** Damaged weir structures requires redesign and reconstruction, and repairs to downstream aprons

- **Canals and Distribution system;** Lost profile and water carrying capacity.

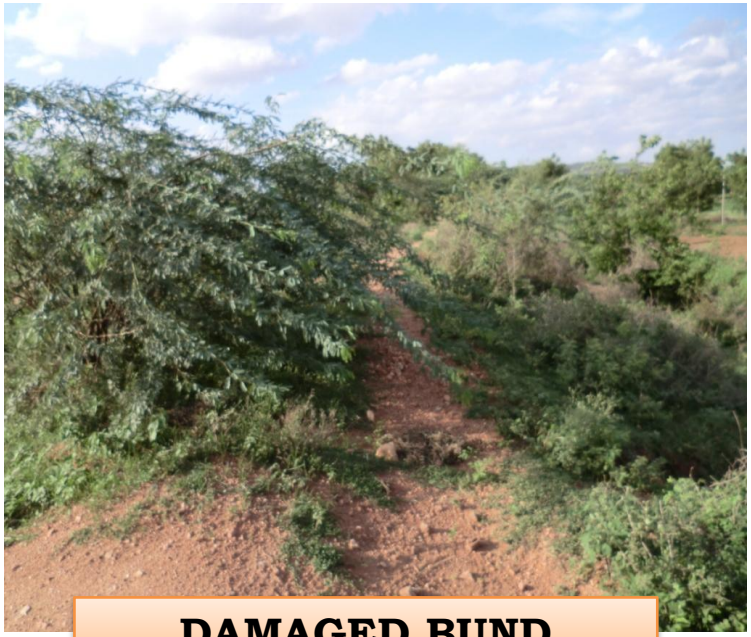
PRESENT CONDITION OF THE TANKS



DAMAGED WEIR

BREACHED BUND

DAMAGED SLUICE



DAMAGED BUND

NEED FOR RESTORATION OF TANKS

- To bridge the gap between IPC and IPU .
- Minor irrigation sources are well suited for decentralized water harvesting on a watershed approach.
- Important for climate proofing communities from future climate change challenges and reducing risks of various stakeholders dependent on natural resources.
- Contribute to poverty reduction and shifting the people from ill-being to well- being.
- Most of the food grains ,vegetables, fruits, milk, and fish are consumed locally and hence, the increased yield because of the project will help to improve the health status of rural people and helps to avoid malnutrition.

MISSION KAKATIYA

- **Objectives :** Government of Telangana has taken up its flagship program of MISSION KAKATIYA to restore all the Minor Irrigation sources to effectively utilize the 265 TMC of water allocated for Minor irrigation sector under Godavari & Krishna River basins for improving agriculture production and productivity,
- To reduce the vulnerability caused by the seasonality amidst the threats of climate change.
- It is planned to restore all the 46,531 MI Sources over a period of five years @ 20% per year.

Selection of Tanks and implementation arrangement

- Tanks are selected for desiltation by following a consultative process.
- Gram sabhas are conducted and proposed works under Mission Kakatiya are explained to the villagers.
- Farmers are motivated to lift the soil for field application.
- Dist level coordination committees are formed .
- Simplified procedures .
- Improvement in delivery time of services.
- Better beneficiaries feedback .

SCHEDULE OF THE PROJECT

Tentative cost of Rs.20000.00 Crores

Sl. No.	District	No of Sources	No of tanks Sanctioned during the year 2014-15	No of tanks proposed during the year 2015-16	No of tanks proposed during the year 2016-17	No of tanks proposed during the year 2017-18	No of tanks proposed during the year 2018-19
1	Karimnagar	5939	823	1461	1220	1200	1121
2	Adilabad	3951	606	924	800	800	761
3	Warangal	5839	1075	1215	1180	1200	1121
4	Khammam	4517	851	850	920	930	854
5	Nizamabad	3251	671	505	650	650	651
6	Medak	7941	1692	1909	1600	1610	1553
7	Ranga Reddy	2851	583	557	570	600	611
8	Mahaboobnagar	7480	1073	1885	1510	1510	1464
9	Nalgonda	4762	843	1061	980	980	872
	Total	**46531**	**8217**	**10367**	**9430**	**9480**	**9008**

Works Proposed Under Mission Kakatiya

- De-silting of Tanks
- Restoration of Feeder Channels
- Re-sectioning of Irrigation Channels
- Repairs to CM & CD works.
- Repairs to Bund , Weir & Sluices
- Raising of FTL, wherever possible

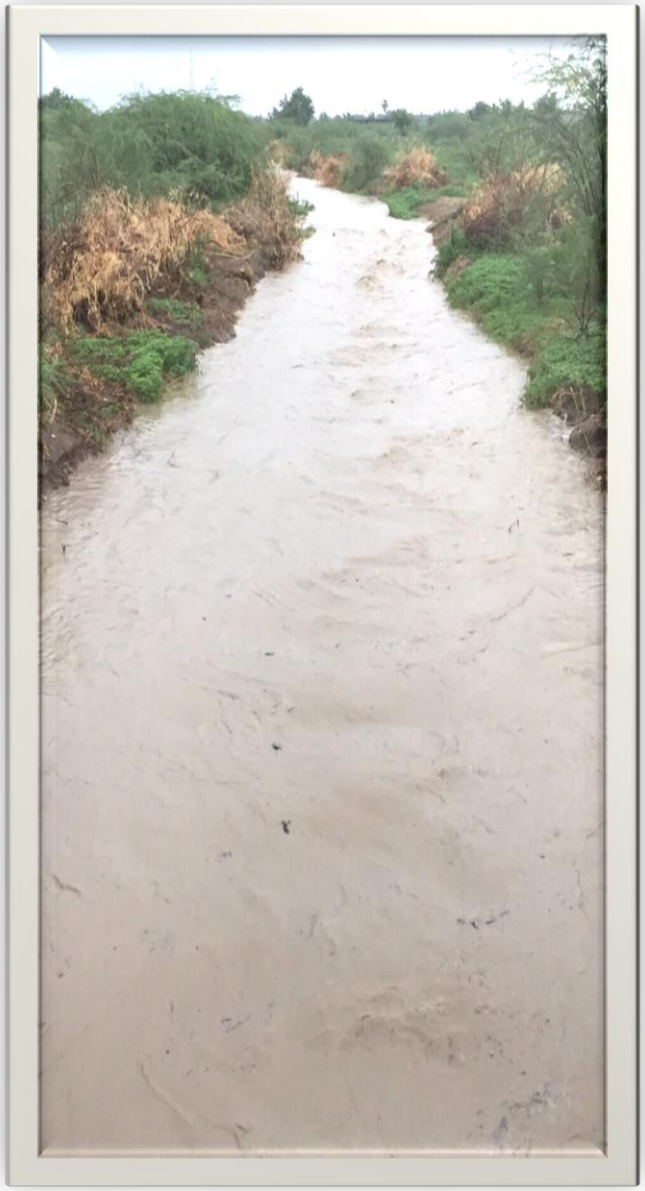
Bund After Restoration

After Silt Removal, Tank with water

Restoration of Weir

After Restoration of Weir

Feeder Channel After Restoration



Feeder Channel with water

Best Practices

- MISSION KAKATIYA is taken up with community participation, Farmers are motivated to lift the silt and apply in their fields .
- Application of silt results in
  - Reduction of Chemical fertilizers by 30%
  - Increased water retention capacity of the soil and decrease in requirement of number of wettings
  - Reduction in Carbon emission

- Adoption of Tanks by donors.
- Transparency: Administrative approvals, technical sanctions, tendering process , agreement details, progress monitoring and bill payment is monitored on-line. A web site is launched with public interface.

Main Benefits From Tank Restoration

- Bridging the 63% of existing gap ayacut and stabilization of ayacut under minor irrigation.
- Increase in the income of farmers in general and that of Small and Medium land holdings in particular.
- Application of silt in the fields reduces the use of chemical fertilizers and improves water retention capacity of the soil.
- Increased crop intensification and some diversification to high-value crops
- Fisheries and Livestock development
- Rise of Groundwater Levels in Tank influence zone which helps in aquifer recharge
- Adaptation / mitigation measure to Climate Change;
- Massive plantation of Toddy Trees on the bund slopes which strengthens the bund and also generates income to the rural poor.