Tank Irrigation in Telangana State: Insights on Mission Kakatiya

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Introduction:

If we turn the history of Telangana, we can understand and appreciate the heritage of cultivation and irrigation dating back to several centuries. In the past, ancient Kings and rulers built lakes and reservoirs by constructing bunds and anicuts across rivers for creating irrigation potential as well as drinking water for the people. Several big lakes like Ramappa, Pakhal, Laknavaram and many other irrigation works of Kakatiya period have gained a great popularity and are functioning till date. The instance of Mir Alam Tank can be stated as the finest example in arched dam constructed across Musi River.

The new State of Telangana came into existence on 2nd June 2014, Telangana, situated in the central stretch of the Indian Peninsula on the Deccan Plateau, is the 29th state of India and twelfth-largest state in the country with an extent of 114,840 square kilometres and a population of 35,286,757 (2011 census). Telangana state is bordered by the states of Andhra Pradesh to the south and east, Maharashtra to the north and north-west, Karnataka to the west and Chhattisgarh to the north-east.

Telangana has the advantage of having most of the east flowing rivers in the heart of the state bringing in the abundance supplies from the Western and Eastern Ghats and the Deccan Plateau up to Bay of Bengal. However most of the flows occur only in 3 to 4 months of South West monsoon i.e., June to September. Generally the annual rainfall is between 900 to 1500 mm in northern Telangana and 700 to 900 mm.

Telangana is a state with major, medium and minor rivers. Of these two are major interstate rivers i.e., Godavari and Krishna. Godavari River and Krishna River flows through the heart of the state. Total water allocated to Projects in Telangana in Krishna basin is 299 TMC and Godavari basin is 954.23 TMC. Apart from the two major rivers, there are other nine small rivers such as Bhima, Dindi, Kinnerasani, Manjeera, Manair, Penganga, Pranahita, Peddavagu and Taliperu.

Importance Of The Tanks In The State

Tanks have been the life line of Telangana owing to the its geographical existence. The people of the Telangana state are highly dependent on the tanks which are spread across all the 10 districts. The topography and rainfall pattern in Telangana have made tank irrigation as the most ideal type of irrigation since it is used for agriculture by storing and regulating water flow.

Construction of tanks in Telangana has been an age old activity since pre Satavahana era. During the Kakatiya era, the construction of tanks was carried out with utmost technical expertise. Tanks such as Ramappa, Pakhala, Laknavaram, Ghanapuram, Bayyaram which were built by Kakatiyas resemble seas and they greatly helped agriculture and overall development and prosperity of the Kakatiya kingdom.

This vision and legacy of Kakatiyas were carried forward by Qutubshahis and Asafjahis who ruled this region for centuries. Hundreds of big and small tanks were built in Telangana region during their rule. Government desires to uphold the vision of Kakatiyas which envisages revival and restoration of Minor Irrigation Sources in Telangana State.

Tank irrigation has huge bearing on generation of rural employment, poverty reduction and agricultural growth. The size of command area under tank irrigation makes it a large center of agricultural production and provides a critical opportunity for commercial agriculture through market linkages.

Irrigation Policy Of The Combined State Of Andhra Pradesh

Infact, the A.P. irrigation policy, at the instance of Andhra leadership coming from Coastal Andhra, has given rise to uneven development. It emphasized on the major irrigation, whereas the alluvial plains irrigated by the tanks have remained largely insignificant. This irrigation policy resulted in the destruction of age-old water conservation systems with chains of tank networks. The successive Governments successfully ignored the maintenance and development of tanks and allowed them to face extinction by way of siltation, breaches, encroachments etc. With the extinction of tank system, the self-sufficient villages of Telangana have become drought prone areas.

Today the drought is manifested in every facet of human life and it is particularly so with the rural poor. The exodus of people from rural areas of Telangana to Hyderabad and other far off places has made their lives vulnerable. This has also proliferated the squatter settlements and slums in the urban areas. The Krishna, Godavari, Musi and Manjira rivers traverse through the semi-arid lands of Telangana districts especially Nizamabad, Karimnagar, Medak, Ranga Reddy, Nalgonda and Mahabubnagar. But large quantities of water from these rivers are diverted to cater the industrial, drinking and other needs of Hyderabad and irrigation needs of Andhra. Otherwise, these rivers would have sufficed and satiated the water needs of these districts. Irrigation policies of A.P. exposed the true colours of regional bias and machinations to promote their interests.

History has witness that self-sustained villages of Telangana have become drought prone villages. Majority of the farmer suicides that occurred in AP state were from Telangana region and millions of people from 10 Telangana districts migrated to far off places like Mumbai, Bhivandi, Surat, Ahmedabad and Gulf countries as laborers in search of livelihood. 16 lakh population from Mahaboobnagar district alone migrated to far off places. Hence, exploitation of water resources has been one of the major concerns of Telangana movement and people strongly felt that creation of a new state of Telangana, that is, state power alone would fetch them water.

Emphasising the importance of reclamation of tanks for growth in the state, the Government of Telangana State has initiated the activity of restoring the minor irrigation sources under the title Mission Kakatiya (Mana Ooru Mana Cheruvu). The significant aim of the mission is to retrieve the lost glory of minor irrigation in the state with community participation for ensuring sustainable water security.

In July 2014 Irrigation Department, Govt of Telangana has carried out for the first time, the census of Minor Irrigation sources in Telangana, which include M.I tanks constructed and maintained by Irrigation Dept., M.I Tanks constructed by Panchayat Raj Dept. and later transferred to Irrigation Dept., Percolation Tanks, Forest Tanks, Private Kuntas, Anicuts and Check dams. As per the enumeration, the total number of tanks is found to be around 46,531. The irrigation department has planned to restore all the 46,531 minor irrigation sources in the state in next five years, taking up 20% of the tanks each year.

Mission Kakatiya

The objective of Mission Kakatiya is to enhance the development of agriculture based income for small and marginal farmers, by accelerating the development of minor irrigation infrastructure, strengthening community based irrigation management and adopting a comprehensive programme for restoration of tanks.

The Government has prioritized to take the restoration of minor irrigation tanks to restore them to store their original capacity and to effectively utilize 255 TMC of water allocated for Minor irrigation sector under Godavari & Krishna River basins.

- The minimum ayacut that can be irrigated with the above allocated water is about 20 lakh acres.
- But as per the statistics the ayacut now being irrigated is only about 9 to 10 lakh acres under Minor Irrigation tanks. Thus, there is a gap ayacut of about 10 lakh acres.

The reasons for this gap ayacut under Minor Irrigation tanks are due to.

- Loss of water storage capacity of tanks due to accumulation of silt in tank beds over a long period.
- Due to dilapidated sluices, weirs and weak bunds
- Due to defunct of feeder channels.
- Due to dilapidated condition of Irrigation canals.

A reconciliation survey was conducted to identify the exact number of all types of Minor irrigation sources in Telangana State. As persurvey 46,531 No of M.I, Small tanks, Percolation tanks, Private Kuntas and Small tanks (constructed by Forest Department) were identified for restoration.

The massive programme for Restoration of tanks is named as "Chinna Neeti Vanarula Punaruddarana" and it is renamed as "Mission Kakatiya".

The present programme of "MISSION KAKATIYA" is to bring this gap ayauct of 10 lakh acres in to command which requires no further allocation of water and also land acquisition.

This gap ayacut of 10 lakh acres under Minor Irrigation tanks can be brought to Irrigation.

- By de-silting the tank beds to restore original water storage capacity of tanks.
- By repairing dilapidated sluices, weirs etc.,
- By strengthening the tank bunds to its original standards.
- By repairing the feeder channels to standards for getting water freely into tanks.(Part of chain of tanks)
- By taking up necessary works to supplement/filling Minor Irrigation tanks through canal networks of Major, medium and lift irrigation projects taken up on both Krishna and Godavari Rivers.
- By re-sectioning of irrigation channels to standards & Repairs to CM & CD works for smooth distribution of water to fields according to their requirement.

Identification Of Tanks

- The District Minister/ local MLA/MLC/Public representatives will be approached to identify priority order for restoration of local tanks.
- Mandal Assistant Executive Engineer will submit the list of tanks under his Jurisdiction (along with their ayacut) to concerned officials / public representatives.
- Identify tanks for which repair works have already been taken up under programme like CBTMP, RRR & Normal State Plan, along with type of the repairs taken up.
- Preference will be given to tanks which have greater ayacut and good source of water.
- Tanks which have not been covered under any programme will be given priority.
- The chain of tanks in Mandal will be identified in the 1stphase. Repairs/ Re-sectioning of Feeder channel and Silt removal in the tanks will be taken up as priority basis.
- One urban tank at constituency Head Quarters will be taken up and developed as Mini Tank Bund.

Advantages of Silt removal& Silt Application

1. The water retention capacity of the soil will increase thereby decreasing the number of wettings.
2. De-silting will improve ground water recharging capacity and increase the capacity of the tank there by increasing the availability of water even during the summer for irrigation & drinking water purposes.
3. As per studies conducted, it is observed that due to de-silting the fluoride content in the ground water will be reduced considerably.
4. Silt can be used as nutrient / fertilizer to the plant which generally reduces the usage of fertilizer.
5. The yield of the crops like cotton and chillies is increased by 20 to 30%.

Steps have been taken by the government to spread the need and the importance of Chinna Neeti Vanarula Punaruddharana in the public through wide publicity. Several studies have shown that there is a positive restoration of water due to the initiatives under Mission Kakatiya. Programmes were initiated to make the people aware and participate in the massive programme designed by the Government. Thus participation of the people is the need of the hour for reaping the benefits to the large extent.

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