

BACKGROUND

Traditional irrigation tanks in Indian sub continent numbering approximately 500,000 (Source: Minor Irrigation census, 1986) constructed many centuries ago; even now remain as one of the major fresh water resources contributing to stabilize food security of rural India. The tanks, which had conferred benefits to humanity for over centuries and helped in coping up with various climate change effects since the beginning of history, are presently in a bad shape.

The major threats to tanks are mainly from the encroachers, inefficiency in the functioning of tank system and improper use by the government itself. A proper maintenance of the tanks will prevent famine, starvation and unemployment and bring in prosperity. Earlier these tanks were maintained under Kudimaramath system, under which village communities participated in renovation periodically. The centralization of ownership under the British rule resulted in poor maintenance and absence of local management. Traditional tanks are considered as flood moderators due to their equitable water distribution among hydrologically linked tank cascades. They are also seen as drought mitigators.

INTRODUCTION

Tank (lake) irrigation in Andhra Pradesh has played a vital role in the development of its agricultural economy. There are around 79,000 small and minor irrigation tanks providing water for irrigation and domestic use, supporting grazing land, fuel wood growth and ground water recharge. Many of these tanks are hydrologically linked in chains (called tank cascades) that cut across administrative boundaries.

Vizianagaram district is one of the coastal districts of Andhra Pradesh having total geographical area of 6,539 Sq.Kms. The main soils exist in this district are red soils, sandy loams and sandy clay, which constitute 96% of the total area. The forest covers 17.80% of the total geographical area of the district. The major rivers that drain in the district are Nagavali, Gosthani and Champavathi. The average annual rainfall of the district is 1,131 mm.

River Champavathi originates in the Eastern Ghats at an altitude of 1,200 m. above Mean Sea level (MSL) and flows eastwards and joins in the Bay of Bengal. Champavathi River is a rainfed river contains around 3,673 tanks in the entire catchment area of the basin. Champavathi River crosses around 11 Mandals with total drainage area of 1,436.45 Sq.Kms. These tanks are sub divided in to 124 tank cascades and the capacity of these tanks is 11,519 Mcft. Champavathi river has four main tributaries namely Eduvampula Gedda, Chitta Gedda, Gadi Gedda and Pothula Gedda. Paddy crop is cultivated mainly during Khariff season in Champavathi basin and 80% of its area under tank fed conditions depends on the seasonal rainfall.

THE SEMINAR

DHAN Vayalagam (Tank) Foundation is planned to organize a one day Seminar with stakeholders of Champavathi river basin on the interrelatedness of climate change adaptation by integrating the structural development of tanks in cascades. Small scale water bodies like tanks in cascades and ponds are created by traditional wisdom being decimated and dying without understanding their vast scope and potential to adapt to climate change. With this background, DHAN Foundation along with GIZ, New Delhi initiated pilot on rehabilitation of 78 tanks in two tank cascades with the financial funds leveraged through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in Gurla Mandal in Vizianagaram district of Andhra Pradesh, which is part of Champavathi river basin. The stakeholders will share the experience gained through renovation of traditional irrigation tanks in cascades for climate change adaptation. This seminar is organized as part of Madurai Symposium 2017 on 24th September 2017 at Thamukkam Grounds, Madurai.

OBJECTIVES

- To understand the impacts of Climate Change over tank cascades
- To analyse the scope for renovation of tanks in cascades and their potential to cope with the climate change adaptation.
- To showcase successful grassroots best practices by the community in adapting to climate change.

PARTICIPANTS

Users of the tanks and leading farmers from the farmers Associations

Various stakeholders like Grama Panchayat representatives

Academicians

Representatives from the Research Stations

Government officials from Line Departments

Others

EXPECTED OUTCOMES

- The Seminar would come up with strategies and Way Forward for the resilience to cope with climate change through rehabilitation of tanks in cascades.

PROGRAMME SCHEDULE

9.00 am : Registration

10.00 am : Prayer and lighting of lamp

10.15 am : welcome address – Purpose of Workshop

10.30 am : Inaugural address by the Chief Guest

10.45 am : Lead paper presentation

11.15 am : Discussions on lead paper findings

11.30 am : Sharing by the practitioners

1.30 pm : Lunch Break

2.30 pm : Group discussions among the stakeholders

4.30 pm : Synthesis of group discussions

5.00 pm : Conclusion and way forward

VENUE AND DATE OF THE SEMINAR

The Seminar is planned to be organised in Thamukkam Grounds, Madurai on 24th September 2017.

CONTACT

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DHAN VAYALAGAM (TANK) FOUNDATION



Tankfed Agriculture Development Programme was one of the Thematic Programmes of DHAN Foundation towards the purpose of reducing rural poverty. For scaling up the tank programme and for enriching the water related development interventions, DHAN Foundation promoted DHAN Vayalagam (Tank) Foundation (DVTF) which became operational with effect from October 2, 2006. The DV(T)F is striving for the conservation and development of small scale traditional water resources such as tanks, ponds, ooranis, supply channels, etc. in addition to the development of watersheds through people's participation. At present, DVTF is working in 6 states with the support of Government, National and International Corporate Philanthropies and other funding agencies.

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MADURAI SYMPOSIUM 2017



Thamukkam Ground, Madurai
September 24, 2017

IMPACT OF CLIMATE CHANGE ON TANK CASCADES IN CHAMPAVATHI RIVER BASIN -ADAPTATION FOR RESILIENCE

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