

Transforming tribal farming

from subsistence to sustainable

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The tribal regions in Telangana are endowed with land degradation, acute shortage of water for both agriculture and drinking, low income, subsistence farming and malnutrition covering almost 1,174 villages with a total population of 31.78 lakh accounting for 9.08% of the total state population. In these areas, rain dependent agriculture is extensively followed by the tribal farmers with productivity levels far less than state average of 0.8-1.0 t/ha. The weather aberration in terms of increased dry spells immediately after germination of the crops during rainy season, changed pattern of rainfall with high intensity for short durations, shift in the occurrence of monsoon rainfall, decrease in rainy days etc. are very common due to the climate change impacts in the region.

Key words: Dry spells, Integrated farming system, Net income, On farm reservoir, Water productivity

THE resource base including soil is very poor in the tribal regions. The tribal farmers have the land holding varying from 1 to 5 acres with both patta and assigned lands distributed by the government. The soil depth is limited to 20 cm, below which stones are predominant in the sub-surface layers with sandy loam texture. The infiltration capacity of soils in the region ranges from 50 to 70 mm/hr with low organic matter.

Institutional mechanism

A systematic approach was followed to improve the water resources and its management through capacity building measures (CBMs) and FFS for awareness among 60 local households of Chenchu primitive tribes in the watershed for adoption of technology. A village level institution, namely Integrated Rainwater Management Association (IRWMS) was formed for taking the decisions in the village towards planning water resources development and management of water in the Petrallachenu village. The association

included 15 members, and chaired by the head of the village. During initial stage of the project implementation (2016-17), the association decided to implement the construction of on farm reservoir (OFR) in the Chenchu farmer field, Shri M Pedda Yellaiah with 3 acres agricultural land having sandy loam red soil with 20 cm soil depth. Before the project, the farmer

used to grow sorghum and cotton alternatively, under rainfed conditions with debt in his hands for agriculture and education of children. Three training-cum-meeting of tribal farmers on the advice of IRWMS were organized for providing know how on rainwater harvesting and management.



OFR with capacity of 600 m³