

Water Conservation Activities in the Jurisdiction of Assistant Divisional Engineer, Ongole, South Central Railway

The work of water conservation and water resource management and development has been conducted under the Convergence Scheme of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) with Indian Railways. The work was conducted under the jurisdiction of Assistant Divisional Engineer, Ongole which extends from the railway station of Karavadi to Sri Venkateshwarpalem (89 kilometers) in the state of Andhra Pradesh.

The practices showcased have been found after much toil and repeated experimentation. The learnings via such experimentation were not only documented but also led to drafting and subsequently formulating a new Convergence Policy for the state of Andhra Pradesh with South Central Railway. The labour had to be repeatedly counseled and trained and the efforts have shown result after persistent efforts for close to one year.

A brief about the work is as follows - Initially jungle clearance was done i.e. removing unwanted vegetation from the railway bank upto the railway boundary. Thereafter, trenches were dug along the railway boundary and the excavated earth was utilized for repairing the railway embankment. The trenches served the purpose of rain water harvesting pits and also serve as natural barriers to encroachment of railway track. The farmers nearby have expressed tremendous happiness over this work as this has helped in enhancing ground water table and also during rainy season, these trenches serve as water collection ponds and farmers deploy submersible pumps and pipes in these water filled trenches to pump this water and irrigate their fields.

Currently 22 kilometers of trenches have been dug up along the track. The center of the track from the railway boundary averages approximately 20 meters which becomes the catchment area. Thus the catchment area stands at $22,000 * 20 = 4,40,000$ sq. meter (As of 22.08.20). This area is ever increasing as the trenches are being dug daily.

The annual average rainfall stands at 798.6 mm as per the data furnished by the website - http://cgwb.gov.in/District_Profile/AP/Prakasam.pdf

So in total, $4,40,000 * 0.7986 * 2$ (this is the second season of rainfall) = 7,02,768 cum of water (7,02,768,000 liters or 70.27 crore liters) has been harvested as of 22.08.20 and this volume will keep on increasing daily.

Photographs of the work are attached below –













