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A DETAILED INVESTIGATION ON SRI RAM SAGAR DAM/RESERVOIR AND DISTRIBUTARY CANAL EFFICIENCY

DR. JNANA RANJAN KHUNTIA*, **MOIZ UNJHAWALA****, **K. SRUJAN GOUD****, **S. MADHAN MOHAN REDDY****,

*Asst. Prof., Dept. of Civil Engineering, St. Martin’s Engineering College, Dhulapally, Secunderabad, India,

**Student, Dept. of Civil Engineering, St. Martin’s Engineering College, Dhulapally, Secunderabad, India

ABSTRACT

Water is a vital natural resource, a basic human need and a precious national asset. It is a key source for all activities right from agriculture to industry. In view of increasing water demand for various purposes namely irrigation, drinking, domestic, power (Thermal and Hydro), industrial and other uses, there is severe stress on water resources. Its scarcity is more pronounced with increasing population and needs. The performance of the existing irrigation systems (particularly, the major and medium irrigation schemes in the State) suffer from low water use efficiency, distribution losses, poor operational maintenance and management of soil salinity, water-logging and tail end problems. Canal system performance has been below its potential and significant problems need to be addressed to maintain its past contribution. The gap between the planned cropping intensity and area irrigated has widened and the economic returns to project investment has been disappointing. There is a weakness in most area of implementation and management. The water distribution is unreliable and often inequitable, maintenance is insufficient to sustain existing infrastructure. Keeping in view of the above scenario, the Central Water Commission, Ministry of Water Resources, Government of India, have initiated the study of water use efficiency of all the major and medium projects of India including Andhra Pradesh in a phased manner to enable to take necessary steps for improving the system. The study will focus on Dam/Reservoir efficiency, canal/conveyance efficiency, farm application efficiency, Drainage efficiency, Irrigation potential created and utilized, etc. The efficiency studies on 14 major and 6 medium Irrigation Projects of Andhra Pradesh have been taken up. Sri Ram Sagar Project in Nizamabad District is one of the above major irrigation projects for which water use efficiency studies are taken up.

Keywords— reservoir, distributary canal, dam/reservoir efficiency, canal/conveyance efficiency, farm application efficiency, drainage efficiency, irrigation potential