

Performance Study of Nagulapadu Lift Irrigation Scheme of Nallamada Drain in Krishna Western Delta

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ABSTRACT

In the present day context, the human right to water is indispensable for leading a healthy life. Only 0.016% water is available in lakes and only 0.0001% water is flowing in streams, rivers and drains. A study was conducted to quantify the irrigation needs and the availability of drain water and the evaluation of performance of a Lift Irrigation (LI) scheme namely Nagulapadu LI Scheme, Pedanandipadu on Nallamada drain in Krishna Western Delta. Drain flows were observed that during September to December month i.e. in the tune of 3 - 4.5 TMC. During January to April and August months the outflows were in the tune of 0.5 to 1.5 TMC. It was found that the total quantity of water flow in Nallamada command on average in a year was 43.84 TMC. Out of which only 6 TMC of water had been used for all the LI schemes and for all the crops under Nallamada command in Krishna Western Delta, the remaining 37.84 TMC of quantity of water flowing as environmental flows. Under the Nallamada command, it is estimated that the maximum water was utilized by Cotton crop and the minimum water was utilized by Bengal gram. It was observed that Nagulapadu LI Scheme pumps out 0.1507 TMC annually and crop water requirement is 0.135 TMC and was hence found in safe with an efficiency of 90 per cent.

Key words : Flow quantities, Lift Irrigation Scheme, Nallamada drain, TMC.