

Evaluation of Various Cropping Systems under Canal Irrigation of Sriram Sagar Project Command

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ABSTRACT

Demonstrations on different cropping systems were conducted during 1999 - 2004 under DBM - 26 of Kakathiya canal under Sriram Sagar Project in Warangal. Cultivation of mono crops of cotton, chilli, maize-maize was the usual farmers practice in the command. These systems have produced lower yield and net returns. In maize based systems, maize - chilli recorded significantly higher maize equivalent yield (17.4 t ha^{-1}) with net returns of Rs. 59,968/- per ha^{-1} followed by maize groundnut (10.1 t ha^{-1}) with net returns of Rs. 34,022 per ha. These systems were superior to maize - maize system. Similarly, in cotton based systems, cotton- ridge gourd recorded higher cotton equivalent yield (5.27 t ha^{-1}) with net returns of Rs. 52,023 /- per ha followed by cotton - cluster bean system (5.02 t ha^{-1}). In chilli based systems, chilli - bhendi recorded higher chilli equivalent yield (4.0 t ha^{-1}) followed by chilly - ridge gourd (3.87 t/ha) with higher net returns (Rs. 50,029/- per ha^{-1}) followed by chilli - bhendi (Rs. 42,775/- per ha^{-1}). Cultivation of vegetables in these systems increased net returns and utilized the irrigation water more efficiently.

Key words: Cropping systems, Equivalent yield, Net returns.