Energy Utilization Pattern in Maize Production under Dryland Systems

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ABSTRACT

The study examined the energy use pattern in maize crop production under dryland systems. The study revealed that fertilizer was found to be the dominant source of energy contributing 6841 to 10415 MJ ha^{-1} which accounted for 47.8 to 61.3% of the total energy utilized in maize production in both clusters. The total energy utilized for maize production by medium farmers 16973 and 16455 MJ ha^{-1} in MC1 and MC2, respectively was higher than that of large and small farmers. The operation wise energy use pattern in maize production showed that among all the operations, land preparation consumed highest amount of energy across all category of farmers. The output-input energy ratio was highest in large farmers 5.12 and 4.53 for MC1 and MC2, respectively. Small farmers observed as lowest in machinery energy ratio (MER) and mechanization index (MI) values were found at value of 0.19 and 0.22, respectively for MC1 and 0.17 and 0.23, respectively for MC2. The lowest total cost of energy was observed in medium farmers Rs. 2.10 and 2.06 per MJ in MC1 and MC2 respectively.

Key words : Garland chrysanthemum, Gibberellic acid, Paclobutrazol and Salicylic acid.