Research Paper

Input management in cotton production – a production function analysis

■ M.M. KADAM, H.J. WAGH AND J.A. LAMTULE

See end of the paper for authors' affiliations

Correspondence to :

M.M. KADAM
Department of Agricultural Economics and Statistics, Post Graduate Institute, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, AKOLA (M.S.) INDIA
Email: mahesh kadam600@yahoo.com, mahesh1218@gmail.com

ABSTRACT : Vidarbha agricultural economy is based on cotton production. Cotton is the main cash crop grown in Vidarbha. The present area under cotton in the region is 14.93 lakh hectares. Akola is pre-dominantly known as cotton city of the region. The capital management in cotton production is mostly high labour input oriented and as such the productivity of cotton is below the state average. With this view, the present study has been conducted in Akola district to study the inputs used in cotton production, to study the share of each inputs and its contribution in cotton productivity and to study the input-output relationship in cotton production. The study is based on data for the year 2011-12, collected by cost accounting method under agricultural prices and cost scheme. The study concluded that the percent share of inputs to expenditure was 44.33 per cent of human labour, 19.55 per cent of bullock labour and 15.51 per cent of seed. The contribution of the selected variables in determining productivity was 47.34 per cent of human labour, 13.67 per cent of bullock labour and 32.16 per cent of seed. The relationship between human labour, bullock labour, machine power, seed and manure with productivity was found to be significant. Production function analysis reveals that, decreasing returns to scale (0.78) was observed in cotton production with the value of R^2 (0.79), indicating variables under study have explained 79 per cent contribution in cotton production.