

Resource use efficiency in blackgram in Lalitpur district of Uttar Pradesh

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ABSTRACT : A study, on Resource Use Efficiency in Blackghram in Lalitpur District of Uttar Pradesh, was conducted in different development blocks (Birdha, Mahrauni, Bar and Jakhaura) of Lalitpur district during the agricultural year 2014-15. Five villages from each block were selected randomly. Further, from each village 15 farmers were selected randomly so as to constitute a total sample size of 300. Primary data for estimating resource use efficiency in blackgram were collected by interviewing the farmers with the help of specially structured and pre-tested schedule. A multiple regression analysis was attempted taking five independent variables and one dependent variable such as return. The independent variables were human labour, machine labour, seed, fertilizers and plant protection chemicals. The value of regression coefficients of blackgram for human labour, fertilizer and plant protection chemicals are 0.250, 0.553 and 0.221, respectively, which were found to be statistically significant. The positive sign of human labour, fertilizers and plant protection chemicals indicated that one per cent increase in expenditure on the use of these inputs could increase the return from this crop to the extent of 0.250, 0.553 and 0.221 per cent, respectively. The regression coefficients of machine labour and seed were negatively non-significant and their values were -0.007 and -0.031, respectively. The negative sign of the regression coefficients of machine labour and seed showed that one per cent additional expenditure on these inputs would reduce the return of blackgram by 0.007 per cent and 0.031 per cent, respectively. The Marginal Value Products (MVPs) of human labour, fertilizers and plant protection chemicals were positive with their values at 1.80, 12.74 and 7.69, respectively and the marginal value products estimated for machine labour and seeds were negative with their values at -0.08 and -1.20, respectively. There was a scope of further use of human labour, fertilizers and plant protection chemicals for increasing productivity and returns from blackgram.

Key Words: Marginal value product, regression coefficient and resource use efficiency.