



Research Paper

## Resource elasticity, marginal productivity, resource use efficiency and optimum resource use in groundnut production

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**ABSTRACT :** Investigation was carried out during the year 2011-12. About 96 groundnut growers were randomly selected from eight villages of Sengaon tehsil of Hingoli district of Maharashtra. Cross sectional data were collected from groundnut growers with the help of pre-tested schedule by personal interview method. Data were related to TAG-24 groundnut output and inputs like hired human labour, family human labour, bullock labour, machine labour, fertilizer, plant protection and irrigation as resources. Cobb-Douglas production function was fitted to the data. The results revealed that, regression co-efficient of area under groundnut was 0.382 followed by that of hired human labour (0.229), nitrogen (0.041), irrigation (0.220) which were positively significant at five per cent level. Regression co-efficient of phosphorus was found significant at one per cent level. On the contrary, the regression co-efficient of family human labour, bullock labour, machine labour, potash and plant protection were negative and non-significant. Marginal product of area under groundnut was 11.20 quintals followed by that of hired human labour (0.063 q), nitrogen (0.023 q) and phosphorus (0.28 q) and so on. MVP to price ratio with respect to area under groundnut was 2.34 followed by that of phosphorus (6.71), nitrogen (5.28) and hired human labour (2.63). Hence, preference might be given to increase the area on priority basis in groundnut production. Optimum use of area under groundnut was found to be 2.18 hectares.

**KEY WORDS :** Groundnut, Estimates, Geometric mean, Marginal product, Input price

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