RESEARCH ARTICLE

Resource and efficiency in rose flower production in Nanded district of Maharashtra

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ABSTRACT

Investigation was carried out for the year 1999-2000 in order to study the marginal productivity, economic efficiency and optimum resource use in rose production in Nanded district of Maharashtra. Linear and Cobb-Douglas type of production functions were used for present study. Regression coefficient of human labour (1.04) was found positive and highly significant at 1 per cent level of significance. Regression coefficients of area of rose garden and manure were positively non-significant while regression coefficients of phosphorus and potash were negatively non-significant. Intercept of production was 3.31. The value of R^2 was 0.74 and 'F'- value was highly significant (10.9). The sum of regression coefficients was found to be 0.66 which was indicating as decreasing return to scale.

INTRODUCTION

In India, flowers are used for adornment by women, offered in religious ceremonies and used for making garland on religions and social occasions. They are also used for decoration of houses, temples and other venues during social and religions festivities. Completely opened flowers with a strong fragrance are preferred under traditional use. The most widely cultivated flowers for these purposes are jasmine, chrysanthemum, crossandra, rose, marigold, tuberose, gladiolus. In India, domestic markets for flowers are namely, Delhi for rose, jasmine and marigold, Banglore for rose and jasmine, Srinagar for gladiolus. In Maharashtra, flowers are commonly used for beauty in women and to worship in temples. They are also used in all festival occasions in marriage, religious, ceremonies and social function. These days flower cultivation occupies an important position in India particularly in the big cities. The major flower growing states in India are Tamilnadu, Karnataka, Maharashtra, West Bengal, Uttar Pradesh, Rajasthan and Haryana. In these state rose is mainly grown as traditional flower.

METHODOLOGY

Multistage sampling technique was used to select district, tehsil and villages. In the first stage, Nanded district was selected purposively. In the second stage, on the basis of the higher area under rose flower, Mudkhed tehsil was selected for present study. In the third stage, ten villages were selected from tehsil on the basis of their highest area under rose flower crop. In the fourth stage, from each village list of rose flower growers with area of rose flower crop was obtained. Obviously ten flower growers were selected from each of the villages. Thus, thirty rose growers were selected for the investigation. Cross sectional data were collected from thirty rose growers by personal interview method with the help of pretested schedule. Data pertained to production of rose from each flower grower and use of resources namely area under rose garden, labour, bullock labour, nitrogen, phosphorus, potash, manure, pesticide and irrigation for the year 1999-2000 with the help of correlation matrix of the above variables, independent variables which were significant with respect to dependent variables were taken into consideration. Thus, these independent variables were included in both the linear and Cobb-Douglas functions. On the basis of goodness of fit (R^2). Cobb-Douglas production function was found to be the best fit to the data to estimate the resource productivity, resource use efficiency and optimum resource allocation (Ahuja, 1995). The fitted equation was in the following manner: