



STUDY THE COST OF CULTIVATION AND NET INCOME OF MUSTARD IN DIFFERENT FARM SIZE GROUPS ON THE FIELDS

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Abstract

The main objective of the present study was to find out the cost of cultivation and net income among the selected farmers of different from size groups in Ghazipur district of Uttar Pradesh during 2010-2011 of mustard crop. The yield of this crop was vary from smaller to larger size group of the farmers along with cost of cultivation also shown increasing trends. The net income Rs./ha. was higher in large size group than medium to small ones. All the package of practices tried to timely for better yield and better incomes. There should be a chance of better yield and net income, suggested all operations will be perform timely for this crop, because time is an very important factor and play great role for greater yield and its quality, before time or after time any operations in the field of agriculture production and quality will goes down.

Key words : Crop, yield, farm, increasing terms, size groups.

Introduction

The acreage under brown mustard is steadily on the increase at the expense of other Brassicae due to its higher production, greater tolerance to pests and diseases and moisture stress. Mustard yield the most important edible oil. The content of the seeds or different forms ranges from 30 to 48 per cent. The oil obtained is the main cooking medium in our country, which cannot be easily replaced by any other edible oil. The seed and oil are used as a condiment in the preparation of pickles and for flavouring curries and vegetables. The oil cake is mostly used as a cattle feed. The leaves of young plants are used a green vegetable. The use of mustard oil for industrial purposes is rather limited on account of its high cost. This crop requires relatively cool temperatures for satisfactory growth. In India, mustard are grown in the Rabi season from September to October, successfully grown in light to heavy loam soils, light soil area also good for this. A fine seed bed is required to ensure good germination. Nitrogen application in this crop in to three equal splits increase the seed, Stover and biological yield (Mahapatra, 1993). Water and fertilizers are scare and costly commodities and their judicious application is a

must to achieve higher benefits under limited resource condition. Oil seed crops require more of sulphur for their oil and protein synthesis, which indicated considerable increase in the yield and its quality (Chauhan *et al.*, 2002). Sowing of the crop at adequate time is an important non-cash input for boosting crop productivity. Use of all advanced package of practices property and timely resulted optimum cost with better quality of yield.

Materials and Methods

The present study was carried out in randomly selected village namely Gaura of Ritwatipur block in Ghazipur distinct of Uttar Pradesh during 2010-2011 in *Rabi* season with farmers scientist collaborations at farmers field. One farmer each from small, medium and large size group has been selected randomly. Suggest Varuna variety for good response with the seed rate 5.00 kg/ha. along with timely application of N:P:K: @ 120:40:40 kg/ha. The crop was taken on the farmers field during first fort night of October, also suggested to apply the sulphur 15 to 20 kg./ha. Increase the yield with better quality. Jat *et al.* (2003) also reported an increase in yield of mustard with increasing level of sulphur. Emphasis has been given more and more on thinning, irrigation and

Table 1 : Yield (Qt./ha.) of mustard in different farm size of groups on the fields.

Farm size of groups	No. of farms	Seed rate (kg./ha)	N.P.K. (kg./ha)	Yield (Qt./ha)	Sale rate of grain yield (Rs./Kg.)
Small	1	5.00	120:40:40	15.00	30.00
Medium	1	5.00	120:40:40	16.50	32.50
Large	1	5.00	120:40:40	18.30	34.50
Average	1	5.00	120:40:40	16.60	32.33

Table 2 : Cost of and net Income (Rs./ha.) of mustard in different farm size groups on the fields.

Farm size groups	No. of farms	Cost of cultivation (Rs./ha.)	Gross Income (Rs./ha.)	Net Income (Rs./ha.)	Benefit cost ratio
Small	1	18,950	45,000	26,050	1:2.37
Medium	1	19,644	53,625	33,981	1:2.73
Large	1	20,135	63,135	43,000	1:3.14
Average	1	19,576	53,920	34,344	1:2.75

other cultural practices for better yield. All information's has been collected through survey method and tabular analysis is being used. Family schedule has been used to collect the data regarding family size, area of this crop, expenditure and net income etc.

Results and Discussion

Table 1 show that the 15.00 qt./ha., 16.50 qt./ha. and 18.30 qt./ha yield has been obtained by small, medium and large size groups of the farmers, which resulted increasing trends from smaller to larger ones. It is very clear that if the farmers were aware about the application of all the package of practices in a good frame of time work, yield will be more and more in all size groups. Nitrogen application in a equal dose of three times then there were a chances of more yield with take to more active part in thinning. Table 2 shows that the cost of cultivation was in small farm to large size of the farm Rs./ha. was obtained Rs. 18,950, Rs. 19,644 and Rs. 20,135, whereas gross income Rs./ha. was Rs. 45,000, Rs. 53,625 and Rs. 63,135 which shows increasing trends. Net income Rs./ha in small farmers was formed Rs.26,050, Rs. 33,981 in medium and Rs.43,000/- ha. In large size of groups has been formed, which also reveals increasing trends. Benefit cost ratio was 1:2.37 in small, 1:2.73 in medium and 1:2.75 was in larger size groups was obtained in mustard crop. Table 1 shows that large size groups of farmer got better price for their produce in

comparison to medium and small size groups. This crop are the more profitable from other crops because cost of cultivation is low in comparison to other crop and gets more net income from others. Fertilizers and irrigation application patiently time to time resulted high yield and more income in all size group than other crops. Sulphur application according to need of the crop is better for its goods germination. Selection of variety on area basis has produced more responsiveness in heavy yield and better quality. Finally, the study concludes that in future all size groups of the farmers has to provides all the package of practices properly and timely to insure better yield with good quality with appropriate cost of cultivations etc.

References

- Chauhan, D. R., M. Ram and I. Singh (2002). Response of Indian mustard to irrigation and fertilization with various sources and levels of Sulphur. *Indian Journal of Agronomy*, **47(3)** : 422-426.
- Jat, B. L., R. P. Jangir and S. S. Khangorot (2003). Response of mustard varieties to different level of sulphurs in loamy sand soil. *Journal of Farming systems research and development*, **8(1)** : 108-109.
- Mahapatra, A.K. (1993). Response of Late sown irrigated mustard to Levels of nitrogen and time of application in Coastal Orissa. *Indian Journal of Agronomy*, **38(3)** : 496-497.