



STUDY OF THE ECONOMICS OF MUSTARD (*BRASSICA CAMPESTRIS*) UNDER DIFFERENT FARM SIZE GROUPS

Ajit Verma¹, Sarita Srivastava² and Anil Kumar Singh³

¹Department of Farm Management, Krishi Gyan Kendra, Baribag, Ghazipur (U.P.), India.

²Department of Home Science, Krishi Gyan Kendra, Deoria (U.P.), India.

³Department of Agricultural Economics, College of Agriculture, Kotwa, Azamgarh (U.P.), India.

Abstract

The present study consisting the economics of mustard (*Brassica campestris*) in different farmers group during 2012-13 in Ghazipur district of U.P., Comparing with local check. It was found that yield was increasing more and more from smaller to large farmers on demonstrated field because they adopted advance package of practices thoroughly and properly, but the same farmer whenever of they fallow traditional practices their yield was goes down. There were a wide range of differences in Benefit Cost ration in demonstrated and local ones. There should be a chance to maximize the profit and minimize the cost in future to make a proper attention for this crop.

Key Words: Farmers, yield, increasing trends, groups.

Introduction

Mustard yield the most important edible oil. The content of the seeds or different farms ranges from 32 to 50 percent. The oil obtain 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 condiment in the preparation of pickles and for flavouring curries and vegetables. The leaves of young plants are used as a green Vegetable. This crop requires relatively cool temperatures for satisfactory growth. Mustard are grown normally in the *Rabi* Season from September to October in our country which requires light to heavy loan soils. Higher yield Indian mustard of higher rate of isoproturon as a pre planting might be due to efficient weed control at initial crop growth stage, reducing crop-weed competition for inputs and creating better atmosphere for good plant growth oil seed crops more bio fertilizer, Sulphur and Nitrogen for their oil and protein synthesis causing increase in the yield and quality of oil seeds. Chauhan *et al.*, 1994. More number of plants compensated the loss in seed yield due to less plant stand. The straw yield was significantly more under narrow spacing resulted large number of primary and secondary branches or plant under wider row spacing in brown

Sarson (*Brassica campestris*) affected the yield and quality Bali *et al.*, 2000.

Materials and methods

The present study was conducted in randomly selected Village Govindpur of Mardah Block in Ghazipur district of Uttar Pradesh during 2012-13 with the help of farmers Scientist collaborations. Two farmers from each small, medium and large size groups has been randomly selected. Suggested Kranti variety of mustard along with seed rate 5-00 Kg./ha, N:P:K application was @ 120:40:40 Kg./ha. The crop was taken on the farmers during first fort night of October, also suggested for better yield and good response apply Sulphur @ 15 to 20 Kg./ha. Emphasis has been given an intercultural operation to avoid dense plant populations. Higher seed yield obtained when the planting distance are maintained properly. The age of seedling is an important factor better growth and vigour of the plants, Momoh *et al.*, 2000. 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 the crop, expenditure and incomes etc. A comparative study has also been made through their local check along with their traditional

Table 1: Percentage increase in yield in Demo with local check of Mustard (*Brassica campestris*) under different farm sizes groups during 2012–13.

Farm Size Groups	No. of Farms	Area of Farms (ha.)	Seed Rate (Kg./ha.)	Fertilizer Application (Kg./ha.)			Yield(Qt./ha.)		Percentage increase in yield
				N	P	K	Demo	Local	
Small	2	1	5.00	120	40	40	14.50	11.20	29.46
Medium	2	1	5.00	120	40	40	15.00	12.60	19.05
Large	2	1	5.00	120	40	40	18.30	14.70	24.49

Table 2: Economic of Mustard (*Brassica campestris*) under different farm size groups during 2012-13.

Farm Size of groups	No. of Farms	Area of Farms (ha.)	Cost & Returns of Demo (Rs./ha.)			Cost & Returns of Local Check (Rs./ha.)			Benefit Cost Ratio	
			Gross Cost	Gross Return	Net Return	Gross Cost	Gross Return	Net Return	Demo	Local
Small	2	1	22,250	48,500	26,250	20,180	34,150	13,970	2.18	1.69
Medium	2	1	23,990	55,890	31,900	21,200	40,800	19,600	2.33	1.92
Large	2	1	24,880	65,250	40,370	22,600	47,450	24,850	2.62	2.10

farming system to look out the what will be difference between by adopting advance technology from earliest.

Results and Discussion

The table 1 Shows that yield was 15.50 Qt./ha., 15.00 Qt./ha. and 18.30 Qt./ha. in between small, medium and large size groups of the farmers. It was 11.20 Qt./ha., 12.60 Qt./ha. & 14.70 Qt./ha. obtained through local checks, exhibits increasing trends. The percentage increase in yield was 29.46, 19.05 and 24.49 in small, medium and large size ones, shows no any specific trends. It shows that there should be a chance to increase their yield by adopting seriously advance package of practices. table 2 show's that Gross cost Rs./ha was 22,250, Rs. 23,990, & Rs. 24,880, Gross income Rs/ha was Rs. 48,500, Rs. 55,890 and & Rs. 65,250 along with net income Rs./ha was Rs. 26,250, Rs. 31,900 and Rs. 40,370 in between small, medium and large farmers. Show increasing trends in demonstrated field where as from local check gross cost Rs./ha was Rs. 20,180, Rs. 21,200 and Rs. 22,600, while gross income was Rs/ha are Rs. 34,150, Rs. 40,800 & Rs. 47,450 along with net income Rs./ha was Rs. 13,970, Rs. 19,600 and 24,850 ranging in

small, medium and in large size groups revealing increasing trends. Benefit cost ratio was 2.18, 2.33 and 2.62 in demo while in local check it was 1.69, 1.92 and 2.10 varying increasing trends from smaller to larger ones. It was very much clear that there is wide difference in demo in comparison to local check in all respects. It has been seen that there shad be a greater chance to revise or minimize the cost of cultivation and income should be more whenever proper attention has been made.

References

- Chauhan, D.R., S. Paroda and M. Ram (1996). Response Indian Mustard to Biofertilizers, Sulphur and Nitrogen Fertilization. *Indian Journal of Agronomy*, **41(4)**: 600 – 603.
- Bali, A.S., M.H. Shah, Bali, S. Amarijit and B. Hasan (2000). Effect of plant density on brown Sarson under different levels of Nitrogen and Phosphorus. *Indian Journal of Agronomy*, **45(1)**: 174–178.
- Momoh, E.J.J. and W. Zhou (2000). Growth and yield responses to plant density and stage of transplanting in winter oil seed rape, *Journal of Agronomy and crop science*, **86(4)**: 253–259.