



STUDY THE ECONOMIC ANALYSIS AND BENEFIT-COST RATIO OF GREEN PEA (*PISUM SATIVUM*) AT DIFFERENT LEVEL OF FARM SIZE GROUPS

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Abstract

The moto of the present study, which was conducted in Ghazipur district of Uttar Pradesh during 2009-10 with farmers – Scientist Collaboration to analyze the economic and benefit cost ratio of green pea cultivation at different farm size groups. The study reveals that total cost, yield, gross and net returns along with benefit cost ratio was higher in large size groups in comparison to small and medium ones. This study concludes that there should be a chance to making a good farm plan for green pea cultivation in future with a optimum and balance use of all the package of practices in a good frame work of time to get better quality of higher yield with minimizing the costs.

Key words : Costs, yield, green pea, farmers, increasing trends.

Introduction

The major part of the area under this crop is in the plains of Uttar Pradesh, Punjab etc. It is a high-yielding pulse crop, unripe pods are used as a green vegetable and the broken parts are used as a cattle feed. This pulse is similar to gram and lentil in its requirements, except that it does better in loamy soils. It is grown as cold weather, irrigated crop. The sowing season extends from October to December. For better yield a finer seed bed is needed. The crop which receives irrigations remains protected against frost to a great extent. Improvement in growth and yield due to adequate supply of phosphorus in phosphorus-deficient soils helped increase the yield reported by Ingole and Deshmukh (1986). The optimum economic dose of phosphorus is better for good yield with great quality. Consumptive use of water did not vary with different doses of phosphorus reported by Kanwar *et al.* (1989). The irrigation at branching stage relatively higher yields with the use of lesser quantity of water than other irrigation practices. Sowing of pea beyond or before its optimum period causes reduction in grain yield. Proper spacing in crop causing a great increase in yield.

Materials and Methods

This study was conducted in the randomly selected village Lahurapur of Maradah block in Ghazipur district of Uttar Pradesh during 2009-2010 with farmers-scientist collaborations among the randomly selected one farmer from small, medium and large size groups. All information's has been collected through survey method and tabular analysis was used. Family schedule has been used to collect the data from the selected farmers to their size of holding, size of family, area of the crop pea production and net return of the crop etc. The Arcle variety for green pea has been suggested and allow to apply seed @ 120 to 125 Kg/ha. along with NPK @ 30:75:50 Kg/ha. and compost 20 Ton/ha. at the time of their requirements other agro economic requirements has been provided to the crop when they needed. The crop was taken on the field during first fort night of November.

Results and Discussion

Table 1 reveals that expenditure on variable costs Rs. 21,506/-, Rs. 20,560/-, and Rs. 20,748/- per hectare in between small, medium and large size farmer groups, variable costs consists the expenditure on a sum of rupees

Table 1 : Expenditure on pea at different level of farm size groups Rs/ha.

Sl. no.	Particulars	Farm Size Groups		
		Small	Medium	Large
1.	No. of farms	1	1	1
2.	Variable costs	21,506	20,560	20,748
3.	Fixed costs	12,644	15,397	15,929
4.	Total costs	34,150	35,957	36,677

Table 2 : Economic analysis of pea along with benefit cost ratio at different level of farm size groups.

Sl. no.	Particulars	Farm Size Groups		
		Small	Medium	Large
1.	No. of farms	1	1	1
2.	Yield (Qt/ha.)	70.30	74.50	80.20
3.	Price/Rate (Rs./Qt.)	905	940	995
4.	Gross returns (Rs./Qt.)	63622	70030	79799
5.	Total Costs (Rs./Qt)	34,150	35,957	36,677
6.	Net Returns (Rs./Qt.)	29,472	34,073	43,122
7.	Returns over variable costs (Rs./Qt.)	42,126	49,470	59,051
8.	Benefit cost ratio	1:1.86	1:1.95	1:2.18

in seeds, fertilizers, organic manures, plant protection measures, human labours, animal labours charges etc. whereas fixed costs consist of interest on fixed capital plus depreciations etc. There is no specific trends has been farmed from small to large size of the farmers. The table-1 also shows that the expenditure on fixed cost from smaller to larger one are obtain Rs/ha. was Rs. 12,644/-, Rs. 15,357/- & Rs. 15,929/- increasing trend was visible. Total cost *i.e.* some of variable and fixed costs was obtained Rs./ha. from smaller to larger one are Rs. 34,150/-, Rs. 35,957/- & Rs. 36,677/- shows increasing trends. The total cost incurred was maximum by the large farmers followed by medium and small farms. The price received

by small, medium and large farmers was Rs. 905/- Qt. and Rs. 995/- Qt. respectively shows increasing trends in table 2. The large farmers could get better price for their produce in comparison to medium and small farmers. The results reveal that, the yield would be 70.30 Qt/ha., 74.50 Qt/ha. and 80.20 Qt/ha. in small, medium and large size of the farmers shows increasing trends. Gross return Rs/Qt. was Rs. 63,622/-, Rs. 70,030/- and Rs. 79,799 along with net return formed Rs/Qt. was Rs. 29,472/-, Rs. 34,073/- and Rs. 43,122/- in between small to large size groups, shows increasing trends. The benefit cost ratio was 1:1.86, 1:1.95 and 1:2.8 from small to large size groups. This shows that in total costs were hired labour, accounted for a major chunk of the total expenditure reported by Khunt *et al.* (1996). Green pea are main cash crops grown by the farmers in this area because the farmers formed that this crop are to more profitable than other crops. The gross and net returns have been found higher in large forms due to realization of higher prices.

Fertilizers irrigation and other operations has been made the impact variables, influencing the increase in the yield of green peas positively. The study concludes that there should be a chance of minimizing the costs. Hired human labour charge and applications irrigations fertilizer and plant protection measures would be minimize upto a optimum levels all in future. All package of practices should be apply thoroughly and properly in a good frame of time work casting a greater yield with better quality.

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