



ECONOMICS OF PRODUCTION AND MARKETING OF OKRA IN DISTRICT BIJNOR (U.P.)

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ABSTRACT: Bhindi (Okra) is an important vegetable crop of district Bijnor. It provides a net income of Rs. 7794.78 with a gross output value of Rs. 21000.00 with a total input of Rs. 13205.22. The cost : benefit ratio was calculated at 1:1.59. In the marketing of Bhindi(okra) the producer's share in the price paid by the consumer was very low being only 56.41 per cent due to inefficient marketing. A sound production and marketing system of vegetables in general and that of *Bhindi* (okra) in particular are needed.

Keywords : Okra, production, marketing, economics, cost : benefit ratio.

Vegetable growing has assumed increased interest by the farmers during the last few decades with the commercialization of agriculture. *Bhindi* is cultivated throughout India for its immature fruits which are generally cooked as vegetable. *Bhindi* soups and stews are also popular dishes. When ripe, the black or brown white eyed seeds are sometimes roasted and used as substitute for coffee. The crop is used for the extraction of the fiber. The fruits also have some medicinal value.

Now a days, India is one of the main vegetable growing countries of the world. *Bhindi* crop is grown all over India. Among the most important states only four U.P., Maharashtra, M.P. and Tamil Nadu account three fourth of total area (Schweers and Sims, 3).

An attempt was made here to collect primary data and analyze it to find out certain special features which would reveal a broad picture of production and marketing of *Bhindi* in Bijnor district of U.P. with the special objectives viz. To study the economics of production of *Bhindi*, economics of the existing arrangement for marketing, and to examine the problems of production and marketing of *Bhindi* and put forth suggestion to overcome them

MATERIALS AND METHODS

The present study was confined to Kotwali block of Bijnor district. The data were collected

from 5 villages of the Kotwali block by contacting 50 *Bhindi* growers who were randomly selected for the purpose. The block was selected most suited for *Bhindi* cultivation. The data were collected by survey method through personal interview with the respondents during 2009-10. The data on marketing were collected from the Bijnor vegetable Mandi which is a secondary market and regulated one.

RESULTS AND DISCUSSION

For the sake of convenience, the present study has been divided into three parts : 1. Economics of production of *Bhindi*, 2. Marketing of *Bhindi*, and 3. Problems and Suggestions.

1. Economics of Production of *Bhindi*:

The farmers of the Kotwali block of district Bijnor generally grow Pusa Makhamali and Pusa Sawani varieties of *Bhindi* which are high yielding varieties. The *Bhindi* growers in the study area generally apply, 3-4 ploughings, 1 to 2 weedings and 2-3 irrigations for its production. They generally use 300 to 400 quintals of F.Y.M along with chemical fertilizers in the form of N.P.K.

Cost and Returns : The cost structure in production of *Bhindi* included the cost on production inputs like seed, irrigation, plant protection, manures and fertilizers, human labour and tractor power, rental value of land at the prevailing market rate and overhead costs, comprising of interest on working and fixed capital, repairs and depreciation etc. The average cost on

inputs and returns on the cultivation of *Bhindi* per hectare on the sample holdings have been worked out (Table 1).

Table 1 reveals that the cost of production per hectare of *Bhindi* (cost of cultivation and marketing charges per hectare) came to Rs. 16040.22. The cost of production per quintal was worked out to Rs. 229.15. As regards returns, *Bhindi* yielded a net return of Rs. 4959.78, with a total value of output of Rs. 21000.00. The average yield came to 70.00 quintals per hectare. As regards expenditure on different items, human labour accounted for the highest percentage expenditure being 19.81 to the total cost followed by cost on manures and fertilizers (19.07%), marketing cost (17.70%), seed (14.40%), tractor power (7.20%), irrigation (3.41) and plant protection (3.41%).

(2) Marketing of *Bhindi* :

Method of Sale : Marketing of *Bhindi* plays a very vital role in the production process of this crop. In Kotwali market both wholesale and retail sale are followed. Wholesalers and retailers, in fact, purchase the *Bhindi* from producers and sale it to retailers or consumers. *Bhindi* is offered for sale in the market directly by producers themselves also.

Market Charge : The marketing charges paid by the producers per quintal of *Bhindi* in Bijnor vegetable mandi has been shown in Table 2.

Table 2 shows that the marketing cost per quintal of *Bhindi* in Bijnor vegetable mandi, which is under regulation, came to Rs. 40.50 per quintal. As regard marketing charges of different items, commission accounted for the highest percentage expenditure being 37.04 to the total marketing charges followed by packing charges 20.99%, transportation 23.46%, *mandi* charge and other 12.34% and loading and unloading charges 6.17%.

During the course of investigation, it was observed that the prices were the highest in the month of October to January and the lowest from March to September. The position of prices become worst during the period when the trucks are not free

available. The findings of present study are in line of Maurya *et al.* (1).

Producer's Share in Consumer's Price : It would be interesting to know the difference between price received by the producer and price paid by the ultimate consumer and its spread over in the marketing of *Bhindi* in Bijnor. Several factors are governing the fraction or percentage of price obtained by the producer. Thus, whole spectrum of such factors are rural roads, market distance from production centres, marketing news, economic condition of farmers and marketing facilities etc. The producer's share in consumer's price in Bijnor vegetable *Mandi* for the year 2009-10 has been worked out in Table 3.

Table 3 reveals that the producer's share in consumer's price in Bijnor vegetable *Mandi* came to 56.41%. This low level of producer's share in consumer's price may be attributed towards inefficient marketing. The marketing costs and margins accounted for 43.59%. The marketing cost borne by the producer came to 8.80% and those of wholesaler and retailers 16.54%. The middle men's margin came to 18.25% of the price paid by the consumers. The per quintal expenditure borne by the producers of the wholesaler and the retailer come to Rs. 40.50, Rs. 42.50 and Rs. 33.50, respectively. The middlemen's share came to Rs. 84.00 per quintal.

(3) Problems and Suggestions : The main problems related to *Bhindi* production, transportation, marketing etc. and suggestions (Loranz and Maynard, 2) thereof are summarised in the following lines. By and large, the problems of *Bhindi* centre round the fact that the margin of profit in this commodity has been decreasing and to not in consistent with the quantum of investment.

(i) Supply of inputs and quality seed : There are only two improved varieties of *Bhindi* i.e. Pusa Makhamali and Pusa Sawani which are grown in the study area. It is suggested that new improved, hybrid, high yielding varieties of *Bhindi* and the supply of other farm inputs at reasonable price and

Table 1 : The average cost and returns on *Bhindi* crop (year 2009-10).

S. No.	Particulars	Value in Rs/ ha	Percentage
1	Human labour	3176.59	19.81
2	Traction power	1155.00	7.20
3	Seed	2309.99	14.40
4	Manures and fertilizers	3063.14	19.07
5.	Irrigation	498.81	3.11
6	Plant protection	498.81	3.11
7	Rental value of land	1500.00	9.35
8	Overhead charges	1002.10	6.25
9	Total cost of cultivation	13205.22	
10	Average yield in quintal	70.00	
11	Average marketing rate per quintal	300.00	
12	Total value of produce	21000.00	
13	Net profit	7794.78	
14	Cost benefit ratio	1:1.59	
15	Cost of production/qtl. of <i>Bhindi</i>	108.65	
16	Marketing cost per quintal	40.50	
17	Total marketing cost of the product of one quintal	2835.00	
18	Cost of production/q of <i>Bhindi</i> including marketing charges	229.15	
19	Total input cost/ha including market charges	16040.22	
20	Net return per hectare	4959.78	

Table 2 : Marketing charges per quintal of *Bhindi* paid by producer during 2009-10.

S. No.	Particulars	Marketing charges per quintal in Rs.	Percentage
1	Packing charges	8.50	20.99
2	Transportation	9.50	23.46
3	Commission	15.00	37.04
4	Loading and unloading	2.50	6.17
5	<i>Mandi</i> charges & others	5.00	12.34
	Total	40.50	100.00

Table 3 : Producer's share in consumer's price (2009-10).

S. No.	Particulars	Amount in Rs. per quintal	Percentage of consumer's price
A	1. Charges paid by producer	40.50	8.80
	2. Sale price of producer	300.00	
	3. Net amount received by producer	259.50	
B	1. Charges paid by wholesaler	42.50	9.24
	2. Sale price of wholesaler	380.50	
	3. Wholesaler's margin	37.50	8.15
C	1. Charges paid by retailer	33.50	7.30
	2. Sale price of retailer	460.00	
	3. Retailer margin	46.50	10.10
D.	Producers share in consumer's price	259.50	56.41

at proper time will help in increasing the productivity of the produce to a large extent.

(ii) Development of varieties : The development of varieties with better culinary quality and superior nutritive value, exploring possibilities of increasing processing and industrial use of bhindi is needed, improving the existing techniques for producing disease free seed, pollen storage pollination, flower production and fruiting studies aimed at helping in breeding programme.

(iii) Diseases, insects and pests : Bhindi is attracted by a number of diseases caused by fungi and viruses. The fungus can live in the soil for several years; so the control measures consist on soil treatment or use of fungus resistant varieties. spraying with some copper fungicides also can prevent the spread of the disease.

The most important virus diseases is yellow vein mosaic. It is a vein clearing virus disease. There is no resistant commercial variety. Pusa Sawani is a variety tolerant to the disease. The disease infestation is greater in the rainy season than in summer.

There are a number of insects, which attack bhindi but only jassids are often serious, the other insects are shoot and fruit borer and cotton bollworms. The control measures for Jassids are timely spraying with a 0.02% Endrine or 0.04% monocrotophas. The treatment should not be given, when the crop is ready for harvest.

(iv) Low producer's share in consumer's price: The producer's share in consumer's price was very low in the study area and requires immediate remedial measures. The efficient transport and credit facilities may go a long way in raising the producer's share in consumer's price on one hand and reducing the marketing cost of the other.

(v) Distress sale of Bhindi : Immediate remedial measures are need to save the bhindi

growers from distress sale. Efficient transport and other facilities on one hand and increased export on the other hand would go a long way in solving this problem.

(vi) High transport cost : The transport cost forms a major part of the marketing cost to the producer as well as the traders. Steps may be taken at the government level to regularize the transport charges. For this purpose monopoly of the transport agencies will have to be broken and control rate be in forced.

(vii) Low price : It has been observed that during the year there has been a very wide fluctuation in the prices. No doubt, price fluctuation of bhindi is one of the various problems of marketing.

(viii) Large surpluses : In order to increase the profitability of the crop, it is suggested that the supply at a reasonable rate must be increased. For this purpose, news outside the country should be explored on priority basis. Export promotion council should take up the issue of supply of bhindi more seriously.

A multi-directional integrated approach to take up problem solving and purpose oriented research, which may enable growers to play a vital role in the agricultural economy of the state.

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