



Banana Farming as a Business: An Economics Study of Banana Growers in Fatehpur District of U.P.

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ABSTRACT

Keeping in view of the above mentioned fact the present study entitled "Economics of production and marketing of banana in district Fatehpur (U.P.)" was under taken with main following objectives: To workout the cost and returns of banana production under different size group of sample farmers and To workout the marketable surplus and producer's share in consumer's rupee under different channels of marketing.

Keywords: Banana Farming, production

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INTRODUCTION

India has been a predominantly agrarian economy since time immemorial. The developmental efforts over the last few decades have been doubtlessly strengthened our industrial base. However, agriculture continues to be the main stay of our economy even today as it contributes 14.1 per cent of national income and 67 per cent of the population still dependson it. The production of fruits and vegetables is of vital importance as it provides three to four times more cash income than cereals per unit of land. Fruits and vegetables are the prime sources of vitamins and minerals without which human body cannot maintain proper health.

India has made a fairly good progress in production and export of horticulture with a total production of 240532 metric tons and exported 45, 573.24 metric tons of bananas worth Rs.9154.22 Lac respectively in the year 2010-2011.

In India, Maharashtra is the leading producer of banana followed by Tamil Nadu, Gujarat, Karnataka, Andhra Pradesh and Uttar Pradesh. During 2010-11 the area and production of banana in Uttar Pradesh were 32.4 thousand hectare and 1346.1 thousand metric tons.

The area under banana in Fatehpur district in Uttar Pradesh is about 1080 hectare and the production is 529200 quintal during 2010-11. The present study was undertaken to work out the cost of production and also to know the marketing practices, Marketing channels, marketing costs, prices spread and problems in marketing of bananas, which will help to suggest remedial measures for improving the present production & marketing system of banana crop in the study area. Keeping in view of the above mentioned fact the present study entitled "Economics of production and marketing of banana in district Fatehpur (U.P.)" was under taken with main following objectives:

SPECIFIC OBJECTIVES

1. To workout the cost and returns of banana production under different size group of sample farmers.
2. To workout the marketable surplus and producer's share in consumer's rupee under different channels of marketing.

REVIEW OF LITERATURE

This chapter presents the review of literature on present study. Such a review world facilitates the research to develop a comprehensive knowledge on the objectives to enable him to draw a meaning conclusion. A brief account of previous work done on the present problem may be presented below.

Mishra, J. P.; Ram Chandra and Rawat, S. K.(2000) reported that data for the year 1996-97 on banana production and marketing were obtained through a survey of 60 farmers as well as wholesalers,

commission agents and retailers in Gorakhpur district, Uttar Pradesh, India. Production costs, marketing costs, and marketing margins are discussed. Constraints to banana production and marketing are identified, and some measures to overcome these problems are suggested.

More, S. S. and Thombre, R. F.(2006) conducted this study to estimate the costs and returns in marketing bananas in Nanded and Parbhani districts of Marathawada region of Maharashtra, India, during 1997-98. The data were gathered from 120 banana farmers in the selected villages of the districts. It was found that the prevailing marketing channel in the area is the commission agent-cum-wholesaler. In this channel, the agent obtains the bananas directly from the producer-seller. Based on the analysis, the maximum share of marketing costs was incurred by the retailer (49.70%), followed by the commission agent-cum-wholesaler (35.95%), and producer-seller (14.35%). The producer's share in consumers' rupee was very low (58.44%). This might be due to the high marketing costs and profit margin incurred by the retailer (23.81%) and commission agent-cum-wholesaler (14.3%).

Rohile, V. V.; Naik, V. G. and Talathi, J. M.(2006) conducted this study to determine the economics of banana (*Musa paradisiaca*) production in Sindhudurg district, Dapoli, Maharashtra, India. The banana growers (n=90) were classified into two groups based on the type of banana orchard, viz., mixed cropping and sole cropping. Out of the 90 growers, 67 growers practised mixed cropping and 23 employed sole cropping. The average area devoted to banana was 0.40 ha in mixed cropping and 1.08 ha in sole cropping. The per hectare cost of cultivation of banana was Rs. 61 592 and Rs. 57 352 in mixed cropping and sole cropping, respectively. The net returns in mixed cropping were Rs. 60 278 and Rs. 58 043 in sole cropping. The cost benefit ratio was 1.97 in mixed cropping and 2.01 in sole cropping. The farmers practising mixed cropping preferred Channel II (producer to commission agents) for marketing of banana, in contrast, farmers employing sole cropping preferred Channel I (producer to contractor) for distribution of banana.

Jagwe, J. N. and Machethe, C.(2011) reported that this article examines the effects of transaction costs on the choice of marketing channel by smallholder banana producers (i.e. travel to the market to sell their produce versus selling at the farmgate). A probit analysis is used to identify the factors which determine the choice of a selling point. Variables capturing transaction costs are used in the analysis and these relate to searching for a trading partner, gathering information about the transaction, contracting, negotiating, monitoring and enforcing of contracts. The findings reveal that collective action, gender of household head, degree of dependence on the crop, geographical location and access to price information significantly affect the choice of selling point.

RESEARCH METHODOLOGY

The methodology of the present study entitled "Economics of Production and Marketing of Banana in district Fatehpur of Uttar Pradesh", discussed under the following heads :-

1. Sampling Technique
2. Analytical tools used

1. SAMPLING TECHNIQUE:-

A multi stage purposive sampling technique was adopted to select the district, development block, villages and the cultivators.

Table :-Number of Selected villages and farmers in block Bhitaura in district Fatehpur

S.No.	Villages	Number of Selected Farmers			Total
		0-1 ha.	1-2 ha.	2 & above ha.	
1	Alampur Narhi	7	2	1	10
2	Shivpur	6	3	1	10
3	Chandlahi	7	2	1	10
4	Kisandaspur	5	3	2	10
5	Gaura	6	2	2	10
		31	12	7	50

One market namely Jwalaganj fruit mandi is selected where maximum banana crop sold & bought for the study. A list of all the market functionaries of the selected mandi was prepared out of which 10 per cent were interviewed for the purpose of present enquiry. 25 banana producers who brought their produce in the selected mandi for disposal were interviewed to find out the marketing cost marketing margin and producer's share in consumer's price.

2. Analytical Tools:-

The following statistical tools used in the analysis and interpretation of data.

- (a) **Tabular Analysis** :- Tabular analysis was done to compare different aspect of farm business and marketing costs on different categories of the selected banana growers and marketing mandi.
- (b) **Average** :- The simplest and the most important measure of average is weighted mean which is used to compare the data in thesis. The formula used to estimate these averages is given below:-

$$\text{Weighted Mean} = \frac{\sum wxi}{\sum w}$$

Where,

W = weight of x_i
 x_i = Value of an item

Producer's share in consumer's price:-

It is share of producer which he actually gets out of the amount paid by consumer for his produce. It has been calculated as:-

$$P = \frac{C - M}{C} \times 100$$

Where,

P = Producer's share in consumer's rupee
 C = Price paid by consumer
 M = Marketing Cost

Cost and return of the banana crop

Table 1: Total cost and its item-wise breakup in banana cultivation (in Rs/ha)

Factors of input	Size group of farms (in Rs.)			Average
	0-1	1-2	2 & above	
Human labour	18000 (6.51)	18600 (6.39)	19200 (6.19)	18600 (6.36)
(a) Family labour	12000 (4.34)	9000 (3.09)	7800 (2.51)	9600 (3.28)
(b) Hired labour	6000 (2.17)	9600 (3.30)	11400 (3.68)	9000 (3.08)
Bullock labour & Tractor power	14115 (5.10)	13255 (4.56)	12315 (3.97)	13228.33 (4.52)
Cost of plants	32410 (11.73)	34510 (11.87)	36750 (11.87)	34556 (11.82)
Pit digging & planting Rs.5/plant	16205 (5.87)	17255 (5.93)	18375 (5.93)	17278.33 (5.91)
Manure & fertilizers	44650 (16.16)	46250 (15.91)	49550 (16.00)	46816.67 (16.02)
Irrigation	51110 (18.50)	55240 (19.00)	61500 (19.86)	55950 (19.12)
Plant protection	12225 (4.42)	13885 (4.77)	14815 (4.78)	13641.67 (4.65)
Interest on working capital	22645.8 (8.19)	23879.4 (2.21)	25500.6 (8.23)	24008.6 (6.21)
Rental value of land	10000 (4.28)	10000 (4.08)	10000 (3.84)	10000 (4.07)
Interest on fixed capital	12050.5 (4.36)	12050.5 (4.14)	12050.5 (3.89)	12050.5 (4.13)
Total input cost	233411.3 (100)	244924.9 (100)	260056.1 (100)	246130.83 (100)

Cost of cultivation per hectare on cost concept

Table 2: Cost of cultivation on cost concept

Particulars	Size group of farms (in ha)			Average
	0-1	1-2	2 & above	
Cost A	199360.8	213874.4	214480.27	209238.22
Cost B	221411.3	235924.9	252256.1	236530.83
Cost C	233411.3	244924.9	260056.1	246130.83

Table reveals that on an average cost A, cost B and cost C on banana were worked out at Rs. 209238.22, Rs. 236530.83, Rs. 246130.83 per hectare respectively. These costs showed on increasing trend with the increasing in size group of holding. It was due to higher investment capacity of large farmers.

Table 3: Yield per hectare and cost of production per quintal

Particulars	Size group of farms (in ha)			Average
	0-1	1-2	2 & above	
Yield of banana in quintal/hectare				
Product	810.25	862.75	918.75	863.92
Rate/quintal (in Rs.)				
Product	600	600	600	600
Gross income	486150	517650	551250	518350
Total input cost	233411.3	244924.9	260056.1	246130.83
Cost of production per quintal (in Rs.)				
Total production cost per quintal	288.07	283.89	283.05	285.00

Table shows that the production of banana per hectare is highest of 2 and above hectare size group of the farms compare to the 0-1 and 1-2 hectare size group of the farms because of higher investment on hired labour, adopted new plant technology and optimum doses of fertilizer and manure. Similarly per hectare gross income is also higher on 2 ha & above size group of farms than 0-1 hectare and 1-2 hectare size group of the farms. Consequently, the cost of production per quintal is found lesser on 2 ha. & above size group being 283.05 per quintal followed by 1-2 hectare size group 283.89 per quintal whereas marginal farmers invested 288.07 to produce one quintal of banana crop.

Cost & Return from banana

Table 4: Cost and return in banana crop (in Rs.) per hectare

Particulars	Size group of farms (in ha)			Average
	0-1	1-2	2 & above	
Input	233411.3	244924.9	260056.1	246130.83
Gross income	486150	517650	551250	518350
Net income	252738.7	272725.1	291193.9	272291.17
Family labour income	264738.7	281725.1	298993.9	281819.17
Farm business income	286789.2	303775.6	336769.73	309111.51
Input output ratio	1:2.08	1:2.11	1:2.12	1:2.10

Table 4 reveals that banana crop gave an average net income of Rs. 272219.17 per hectare on an average investment of Rs. 246130.83 as input cost the average value of gross income, family labour income and farm business income came to Rs. 518350, Rs. 281819.17 and Rs. 309111.51 per hectare respectively. The input output ratio came to 1:2.10.

MARKETING OF BANANA

In this chapter an attempt has been made to study the different channels through which producer sales his marketable surplus. The producer's share in consumer's rupee, marketing cost of banana and the marketing margins of middle men like contractor, wholesalers and retailers have also been worked out. In the study area the following channels of banana were found under operation.

Channel -I : Producer – Consumer

Channel - II : Producer – Wholesaler – Retailer – Consumer

Channel - III : Producer – Contractor – Wholesaler – Retailer – Consumer

Channel - I : Producer – Consumer

This channel is better than all the marketing channels because, in this channel cultivator directly sales his produce to the consumers and get the maximum share of his produce, but this may be done on a very limited scale due to absence of large number of buyers in the village market.

Channel - II : Producer – Wholesaler – Retailer – Consumer

In this channel the producers directly sale their produce to wholesaler who sales to retailer in town and city and in last to consumers.

Channel - III : Producer – Contractor – Wholesaler – Retailer – Consumer

In this channel the producers directly sell their produce to contractor than who sales to wholesaler who sales to retailer in town and city and in last to consumers.

Producer's share in consumer's price

Table 5 Price spread and marketing charges for different channel of banana/quintal

S.No.	Particular	Channel I		Channel II		Channel III	
		Rs./qt.	Per cent	Rs./qt.	Per cent	Rs./qt.	Per cent
1.	Net amount received by producer	545	90.83	525	43.39	505	34.47
2.	Charges paid by producer	55	9.17	35	2.89	35	2.39
3.	Purchase price of contractor	-	-	-	-	540	36.86
4.	Marketing cost incurred by contractor	-	-	-	-	80	5.46
5.	Contractor's net margin	-	-	-	-	120	8.19
6.	Purchase price of wholesaler	-	-	560	46.28	740	50.51
7.	Marketing cost incurred by wholesaler	-	-	120	9.92	125	8.53
8.	Wholesaler's net margin	-	-	185	15.28	200	13.65
9.	Purchase price of retailer	-	-	865	71.49	1065	72.70
10.	Marketing cost incurred by retailer	-	-	120	9.92	110	7.50
11.	Retailer's net margin	-	-	225	18.59	290	19.79
12.	Purchase price of consumer	600	100	1210	100	1465	100
13.	Price spread	55	9.17	685	56.61	960	65.52
14.	Producer's share in consumer's rupee(in per cent)	-	90.83	-	43.39	-	34.48

RESULT AND DISCUSSION

On an average total investment in fixed capital worked to Rs. 240139.54 per hectare respectively. On an average per annum, per hectare total cost came to Rs.246130.83 which highest cost for 2 ha & above size group of farms Rs.260056.1. The overall net income came to Rs.272219.17 on the sample farms. The highest net income Rs.291193.9 per hectare was obtained through 2 ha & above size group of farms and lowest net income Rs.252738.7 per hectare was received by 0-1 hectare size group of farms. On an average the input output ratio came to 1:2.10.

To study the different channels through which producer sales his marketable surplus. The producer's share in consumer's rupee, marketing cost of banana and the marketing margins of middle man likes contractor, wholesalers and retailers have also been worked out. In the study area the following channels of banana were found under operation.

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Channel - III: Producer - Contractor - Wholesaler -Retailer - Consumer

Producer's share in consumer's rupee was lowest being 34.48 per cent in channel III, it was 43.39 per cent in channel II and 90.83 per cent in channel I in banana marketing on sample farms. The lower producer's share in the price paid by the consumer was due to higher marketing cost and marketing margins of profit charged by the middleman.

Marketing cost incurred by retailer per quintal came to Rs.120 (9.92%) in channel II and Rs.110 (7.50%) in channel III, respectively. Retailer's net margin came to Rs.225 (18.59%) and Rs.290 (19.79%) channel II and III, respectively. Total marketing cost incurred by wholesaler per quintal came to Rs.120 (9.92%) and Rs.125 (8.53%) in channel II and III, respectively. Total marketing margin of wholesaler came to Rs.180 (15.28%) and Rs.200 (13.65%) in channel II and III, respectively. Marketing cost incurred by contractor per quintal came to Rs.80 (5.46%) in channel III. Contractor's net margin came to Rs.120 (8.19%) in channel III. Price spread came to Rs.55 (9.17%), Rs.685 (56.61%), Rs.960 (65.52%) in channel I, II and III, respectively.

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