Determination of market participation and price spread of Chickpea in Bemetara district of Chhattisgarh

Abstract

The present study was conducted for assess the Economics of Marketing of Chickpea in Bemetara District of Chhattisgarh. The multistage sampling design was used for selection of district, block, villages and chickpea growers. In all 225 chickpea growers were selected to collect the data. These farmers were further classified into different categories based on their land holding i.e., marginal, small, medium and large farmers for the present study The data were collected for the year 2018-19 and analyzed marketing cost, margin and price spread in marketing of chickpea was achieved through tabular analysis. There are 3 channels of marketing, in channel-I the product was directly sold to the consumers in field. The most used channel of marketing by all sample farms was channel-II and channel-III. In channel II the produce reached to the consumer by wholesaler to retailer and in the third marketing channel the produce reached to the consumer by village trader. Producers share in consumer rupee was 98.51%, 86.53% and 90.00% in channel-I, channel-II and channel-III respectively

Keywords: Marketable surplus, commission agent, market participation.

Introduction:

Chickpea (Cicer arietinum L.) is the largest produced food legume in South Asia and the third largest produced food legume globally, after common bean (Phaseolus vulgaris L.) and field pea (Pisum sativum L.). Chickpea is grown in more than 50 countries (89.7% area in Asia, 4.3% in Africa, 2.6% in Oceania, 2.9% in Americas and 0.4% in Europe). India is the largest chickpea producing country accounting for 64% of the global chickpea production. The other major chickpea producing countries include Pakistan, Turkey, Iran, Myanmar, Australia, Ethiopia, Canada, Mexico and Iraq.

Chickpea is an important source of protein for millions of people in the developing countries, particularly in South Asia, who are largely vegetarian either by choice or because of economic reasons. In addition to having high protein content (20-22%), chickpea is rich in fibre, minerals (phosphorus, calcium, magnesium, iron and zinc) and β-carotene. Its lipid fraction is high in unsaturated fatty acids. Chickpea plays a significant role in improving soil fertility by fixing the atmospheric nitrogen. Chickpea meets 80% of its nitrogen (N) requirement from symbiotic nitrogen fixation and can fix up to 140 kg N ha-1 from air. It

leaves substantial amount of residual nitrogen for subsequent crops and adds plenty of organic matter to maintain and improve soil health and fertility. Because of its deep tap root system, chickpea can withstand drought conditions by extracting water from deeper layers in the soil profile.

Chickpea production in the district is mainly for consumption and market. The production is much uncoordinated especially where all growers produce similar type of crop. Chickpea production is increasing in the state but producers are not selling their produce in profitably, and they are not benefited. So there are needed to be further investigation. Hence this study was aimed to analyse chickpea market chain is the district.

Methodology

A multi-stage sampling design has been adopted for the ultimate selection of chickpea growing farmers. Chhattisgarh state consists of 33 districts, out of these 33 districts Bemetara district cover largest area in production of Chickpea in state and hence Bemetara district was selected purposely for the study.

For the selection of the chickpea respondents 15 farmers were selected randomly from each village. A total 225 farmers were selected for the study. These farmers were further classified into different categories based on their land holding i.e., marginal (up to 1.00 ha), small (1.01 ha to 2.00 ha), medium (2.01 ha to 4.00 ha) and large (above 4.00 ha) farmers for the present study.

Results and Discussions:

Marketing of chickpea

Production activity never completed until and unless the product reaches in the hands of final consumer. The product can be reach to the consumer by various routs which are known as marketing channel in agricultural marketing. Attempt was made in the present study to identify various marketing channels involved in marketing of chickpea. Accordingly, following marketing channel were identified.

Disposal pattern and marketable surplus of chick-pea

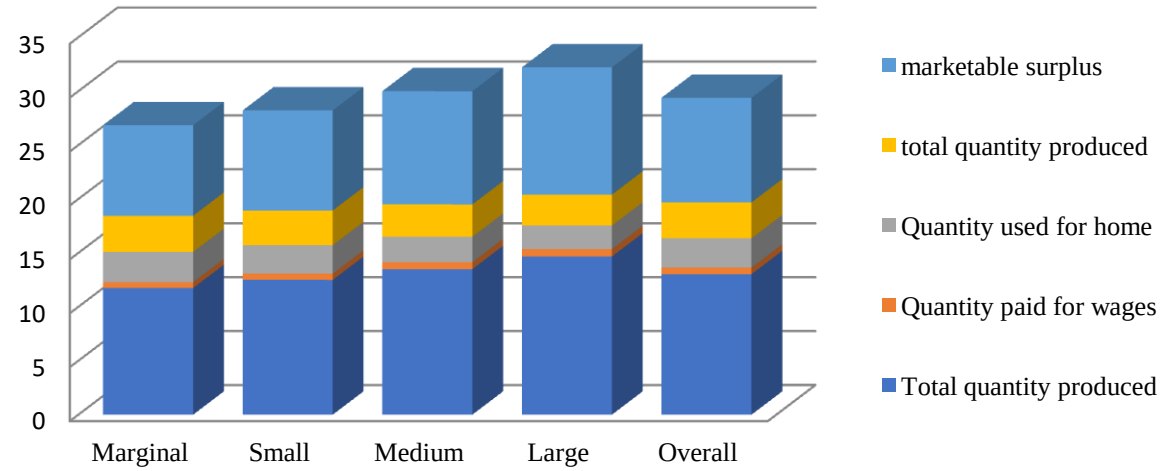
The disposal pattern of chickpea from different sample farms was also worked out, presented in table 1. The total production per farm was maximum in large farms (14.67) followed by medium farms (13.50), small farms (12.50), marginalfarms (11.75) and overall production per farm was observed as 13.03 qt. Marginal farms have more home consumption

(2.81) as compared to small, medium and large farms. Marketable surplus was highest in large farms 11.80 qt/farm followed by medium 10.50 qt/farm again followed by small farms 9.28 qt/farm and lowest in marginal farms as 8.4 qt/farm.

Table 1: Disposal pattern and Marketable surplus of chickpea of sampled households

S. No	Particular	Marginal	Small	Medium	Large	Overall
1	Total produced quantity	11.75 (100)	12.50 (100)	13.50 (100)	14.67 (100)	13.03 (100)
2	Quantity paid for wages	0.54 (4.59)	0.58 (4.64)	0.64 (4.74)	0.69 (4.70)	0.61 (4.68)
3	Quantity used for home	2.81 (23.93)	2.64 (21.12)	2.36 (17.49)	2.18 (14.86)	2.72 (20.88)
4	Total quantity utilized	3.35 (28.52)	3.22 (25.76)	3 (22.23)	2.87 (19.56)	3.33 (25.56)
5	Marketable surplus	8.4 (71.48)	9.28 (74.24)	10.5 (77.77)	11.8 (80.43)	9.7 (74.44)

Fig 1:Marketable surplus of chick-pea



Marketing Channels of Chickpea growers

Sample farmers sell their produce through three channels such as

Channel-I: Producer →Consumer.

Channel-II: Producer →Wholesaler →Retailer →Consumer.

Channel- III: Producer → Village trader

Marketing cost and marketing margin of various agencies in the marketing of chick-pea/qt. in channel-I

It is simplest marketing channel in which no market intermediaries are involved in the producer sell directly their produce to consumer in field condition or sell their produce in nearly market like as retailer all cost like loading, unloading, weighting, transportation fees etc beard by producer and the producer's share in consumer rupees was relatively high (98.51%) as compare to other marketing channels. We can see from the table 2 in which various marketing cost per quintal of channel-I is shown in the table and total marketing cost 74.30 rupees per quintal was find out. Findings are in consonance with studies conducted by Vanraj (2008).

Table 2: Marketing cost and marketing margin of various agencies in the marketing of chick-pea/qt. in channel- I

S. No.	Particulars/ Market functionaries	Amount (Rs. /qt.)
1.	Loading	4.00
2.	Weighing	1.40
3.	Transportation	10.40
4.	Market fee	5.00
5.	Gunny bag	50.00
6.	Miscellaneous expenditure	3.50
	Sub-total	74.30
6	Producer sale price	5000
7	Marketing cost	74.30
8	Net price received	4925.70
9	Producer share in consumer rupees (%)	98.51
10	Price spread (Rs.)	74.30

Marketing cost and marketing margin of various agencies in the marketing of chick-pea/qt. in channel-II

In the second marketing channel producer sent their produce to wholesaler to sold out, wholesaler sell their produce to retailer and take their commission from producer at the rate of 234.80. Retailer takes produce to nearby market and sold to consumer and earn their margin and various cost which are shown in the table 3. In this type of marketing channel wholesaler incurred lowest cost in terms of shop rent maintenance etc. we can see from the table that total cost incurred by producer, wholesaler, and retailer was 67.40, 65.20 and 40.50 rupees per quintal respectively and net margin received by wholesaler and retailer was 234.80 and 359.50 rupees per quintal respectively.

Table 3: Costs and margins of various agencies in the marketing of Chickpea/qt. in channel- II

S. No.	Particulars	Amount (Rs. /qt.)
Marketing cost incurred by producer		
1.	Loading	4.00
2.	Weighing	1.40
3.	Transportation	12.00
4.	Gunny bag	50.00
Sub-Total		**67.40**
5.	Producer sale price	4500
6.	Marketing cost	67.40
7.	Net price received	4432.60
Marketing cost incurred by wholesaler		
1.	Loading	4.00
2.	Weighing charges	1.40
3.	Commission	30.00
4.	Transportation	20.00
5.	Storing	5.30
6.	Miscellaneous charges	4.50
Sub-Total		**65.20**
7.	Wholesalers purchase price	4500
8.	Wholesalers sell price	4800
9.	Wholesale margin	234.80
Marketing cost incurred by retailer		

1.	Loading	4.00
2.	Transportation	25.00
3.	Weighing	1.40
4.	Miscellaneous charges	4.50
5.	Storing	5.60
Sub-Total		**40.50**
6.	Retailer purchase price	4800
7.	Retailer selling price	5200
8.	Retailer margin	359.50
9.	Producer share in consumer rupees (%)	86.53%
10.	Price spread (Rs.)	700

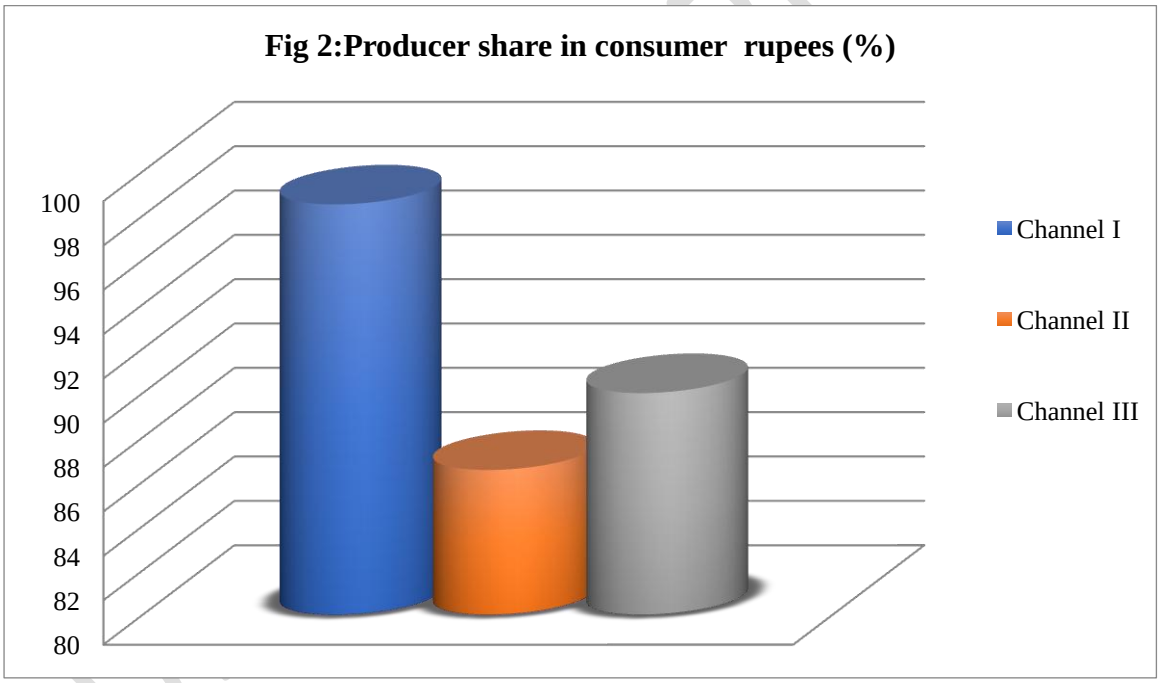
Marketing cost and marketing margin of various agencies in the marketing of chickpea/qt. in channel- III

In the third marketing channel producer sent their produce to village trader to sold out, village trader sells their produce direct to the consumer and earn their margin and various cost which are shown in the table 4. In this type of marketing channel village trader incurred higher cost in terms of store charge, cleaning and grading etc. we can see from the table that total cost incurred by producer and village trader was 55.40 and 60 rupees per quintal respectively and net margin received by village trader was 440 rupees per quintal respectively. Similar result was reported by Banerjee (2010).

Table 4: Costs and margins of various agencies in the marketing of chickpea/qt. in channel- III

S. No.	**Particulars**	**Channel III**
Marketing cost incurred by producer		
1.	Loading	4.00
2.	Weighing	1.40
3.	Gunny bag	50.00
Sub-total		**55.40**
4.	Marketing cost	55.40
5.	Producer sale price	4500
6.	Marketing cost	55.40

7.	Net price received	4444.60
Marketing cost incurred by village trader		
1	Store charge	10.00
2	Cleaning and grading	50.00
Sub-total		60.00
3	Marketing cost	60.00
4	Village trader purchase price	4500
5	Village trader selling price	5000
6	Margin	440
7	Producer share in consumer rupees	90%
8	Price spread	1000



Conclusion:

There are 3 channels of marketing, in channel-I the product was directly sold to the consumers in field. The most used channel of marketing by all sample farms was channel-II and channel-III. In channel II the produce reached to the consumer by wholesaler to retailer and in the third marketing channel the produce reached to the consumer by village trader. Producers share in consumer rupee was 98.51%, 86.53% and 90.00% in channel-I, channel-II and channel-III respectively.

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