Market Efficiency and price spread in Jaipur district

ABSTRACT

Study about Price spread or farm retail spread is the difference between the price paid by the consumers and the price received by the producer for an equivalent quantity of farm produce. Sometime this is called as gross marketing margin.The marketing margin refers to the difference between the price received by seller at a particular stage of marketing and the price paid by him at preceding stage of marketing during an earlier period.The producer's net share, total marketing costs, total marketing margins, consumer's price and price spread in channel-II are given in table-3 Table table-3reveals that, out of price of Rs 5765.00 per quintal paid by consumer, chickpea producer got Rs 5102.00 per quintal which accounted for 88.50 percent share. The share of marketing costs paid by chickpea-producer, wholesaler-cum-commission agent and retailer was 1.37, 2.05 and 0.49 per cent of total consumer's price, respectively. Total share of wholesaler-cum-commission agent was highest followed by chickpea-producer and retailer. Thus, total share of marketing cost of intermediaries in consumer's price was 3.90 per cent. Total margin earned by middlemen, wholesaler-cum-commission agent and retailers was 5.60 and 1.94 per cent of price paid by consumer. Wholesaler earned more as compare to retailer. So, total share of market intermediaries in consumer's price was 7.55 per cent. Price spread in channel –I was Rs 660.00 per quintal which was 11.45 per cent of consumer's price.

Keyword- Pricespread, Wholesaler, Marginal farmer, cost ratio

Comment [U1]: The writer may need to remove "Study about" since the writer is attempting a definition of "Price Spread or Retail Farm Spread"

Comment [U2]: Sometimes,

Comment [U3]: ??

Comment [U4]: The dollar equivalent of all prices, please

Comment [U5]: The writer may need to be consistent in the use of percent, per cent and %.

Comment [U6]: Price spread

1. Introduction

In India food grains occupy 65% of total gross cropped area comprising cereals in 50% and pulses in about 14%. Within pulses, gram occupies 5% area followed by Mung 3%, Urd&Arhar (2% each), Lentil 1% and the other pulses cover about 2% of gross cropped area. India leads the world in chickpea production and area, but its low productivity is a result of farmers' inadequate adoption of improved varieties and production systems. Other than India, the world's top producers of chickpeas are Ethiopia (2.92%), Burma (3.25%), and Australia (12.35%). Source: Directorate of Pulses Development's Annual Report 2017–18. In India, there were 10.17 million

Comment [U7]: There are scientifically approved means of referencing and this should be followed

hectares of chickpeas grown, yielding 11.35 million tonnes of output and 1116 kg/ha of productivity. In India, total pulse area and production has been >290 Lha and 238 Lt respectively. Out of the total area >60 Lha is confined to Madhya Pradesh alone, earning a prime status in pulse production commodity contributing a remarkable 21% of the country's pulse area with 25% production, thereby ranking first both in area and production followed by Rajasthan, Maharashtra and Uttar Pradesh with 16%, 15% and 10%. ß More than 90 per cent of total pulse production has been contributed by 10 states of Madhya Pradesh, Rajasthan, Maharashtra, Uttar Pradesh, Karnataka, Andhra Pradesh, Gujarat, Jharkhand, Tamilnadu and Odisha, Major states in India that grow chickpeas are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharastra, and Andhra Pradesh, among others. In Madhya Pradesh the area of total pulses is 60.74 lakh ha which contribute 21% production is 59.70 lakh tons of which contributes 25% and yield is 983 2 kg/ha .In Rajasthan the area of total pulses is 57.99 lakh ha which contribute 20% 38.19 lakh tons of which contributes 16% and yield is 659 kg/ha . The Normal area coverage and production of Kharif Pulses has been 140 Lha and 87 Lt respectively. Rajasthan outshined with first rank in area and production both with 28% and 20% respectively followed by Madhya Pradesh (16% each), Maharashtra (15% & 18%) and Karntaka (14% & 15%). All India Rabi pulse acreage and production has been recorded 150 Lha and 151 Lt. Madhya Pradesh with 26 per cent of area and 30 per cent of total rabi pulse production in the country outshined at first rank followed by Maharashtra (14% & 13%), Rajasthan (13% & 14%). ß More than 90 per cent pulse production was recorded from 10 states of Madhya Pradesh, Rajasthan, Maharashtra, Uttar Pradesh, Andhra Pradesh, Karnataka, Gujarat, Chhattisgarh, Tamil Nadu and Bihar. Chickpea was cultivated in about 99 Lha. The country harvested a record production of 107 Lt at a highest productivity level of 1086 kg/ha. As usual, MP has contributed a significant 28% of the total gram area and 34% of total gram production in the country, thereby ranking first both in area and production followed by Maharashtra (20% and 18%), Rajasthan (19% & 18%) and Karnataka (10% & 6%).In Rajasthan total area of chickpea crop is 18.59 lakh ha which contributed 19% production is 19.72 lakh tons of which contributes 18% and the yield is 1061 kg/ha. According to DAC and FW, there were 2.46 million hectares of chickpeas grown in Rajasthan, with a yield of 2.66 million tonnes and a productivity of 1080 kg/ha. Major districts in Rajasthan that grow chickpeas are Churu, Jhunjhunu Hanumangarh, Bikaner, Jaipur, Jaisalmer, Sikar, and Ajmer, among others. Chickpea output in Jaipur totaled 152151 million tonnes, with a yield of 1256 kg/ha on a 121117 hectare area (Anonymous, 2019–20). After Madhya Pradesh, Rajasthan is the second-largest producer of pulses, covering 6.34 million hectares and producing 449 million tonnes (DAC & FW 2020).India is the world's largest producer (i.e., 25%), consumer (27%), and importer (14%), of pulses. Historically, pulses have been one of the most significant components of Indian cropping and

Comment [U8]: Meaning please

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consumption patterns and have been referred to as "the poor man's meat" due to their lower cost of protein (Mohanty and Satyasai, 2015). Due to rising income levels and population growth, there has been a global increase in demand for legumes as a result of recent price increases. The changing demand structure is mostly due to the rising need for animal feed in developing nations. The need to produce more food for more people with less resource will only increase, and in order to meet this expanding need, we will have to rely more and more on high-quality crops. This is an agricultural race in which chickpea has an advantage. Like growers of other crops, producers of chickpeas have a number of challenges, such as the unavailability of HYV seeds and fertilizers, inadequate understanding of best practices, insect pest and disease control, and other issues that need for further research. Increasing the income level of farmers can be achieved through the implementation of an effective marketing system. A more optimal pricing for produce is achieved in the economy by well-managed marketing facilities, effective marketing channels, and marketing machinery as opposed to a disorganized approach. There are twenty-eight marketing channels: eight are occupied by village traders; eight are occupied by grain wholesalers; eight are occupied by processors; five are occupied by dal (split) wholesalers; fifteen are used by retailers. Based on the assumption that there were 100 units of farmer surplus entering the marketing channel, 4.24 percent of the surplus from outside the state was entered at the wholesaler and processor level. In order to comprehend the income route in the farm sector and to formulate policies regarding costs and output prices, it is necessary to critically evaluate this mechanism. Studying the expenses and benefits of the chickpea crop in the research area is therefore necessary. Hence; the present study “Economic performance of different marketing channels of chickpea in Jaipur District of Rajasthan”

2. Materials and Mathods

Data were collected both from farmers and marketing functionaries. Multistage sampling will be used for sampling procedure.

In the study area, the market middlemen and agencies involved in movement of produce from producers to consumers were identified for detailed study. Survey and personal interview with farmers and intermediaries was conducted to study disposal pattern, the information on time and place of disposal of chickpea were also collected. Simple statistical tools like averages, percentages, etc. were employed. Marketing channel is the path traced in the direct or indirect transfer of title of product, as it moves from a producer to an ultimate consumer. Market channel is the structure of intra-company agents and dealers, wholesalers and retailers through

Comment [U10]: Methods

Comment [U11]: What do the researcher mean by marketing functionaries, please??

Comment [U12]: The manuscript should be reported in the Past tense, please

Comment [U13]: There should be a step by step analysis of how the sampling is carried out and how the samples are obtained, please

which the commodity, product or service is marketed. Information regarding marketing pattern revealed that there were three marketing channels were prevailing in the study area through which chickpeas moved from producer to ultimate consumer. These identified channels were;There were three marketing channels adopted by chickpea growers as under

Comment [U14]: Please, the researcher may need to provide how the channels were identified.

Channel-1 Chickpea producer Village trader → Wholesaler-cum-commission agent-Retailer → Consumer

Channel-II Chickpea-producer Wholesaler-cum-commission agent Retailer → Consumer

Channel-III Chickpea-producer →Consumer

AnajGounmandiSamiti, Kotputli was selected purposively as study farmer's sale their produce in this mandi and magnitude of marketing costs, margins and price spread in the marketing of chickpeaIn the present study marketing margin meant the remuneration that the intermediaries receive for the services rendered by them in moving the goods in the marketing channels. The margin was expressed on the following various measures;

a. Absolute marketing margin (Ami) = PRi - (Ppi + Cmi)

b. Percent marketing margin (Pmi) =PRi - (Ppi +Cmi) / Pui × 100

c. Mark-up margin (Mi) = PRi- (Ppi+ Cmi) / Ppi

Comment [U15]: The writer should use the equation tool of the MS Word for easy comprehension and cohesion

Where,

PRi = Total value of receipts per Qt. (sale price)

Ppi = Purchase value of goods per Qt. (purchase price)

Cmi = Costs incurred on mark

3. Results and Discussion

Market efficiency, market margin and price spread in marketing of chickpea

4 C.1 Marketing margins and price spread

Price spread or farm retail spread is the difference between the price paid by the consumers and the price received by the producer for an equivalent quantity of farm produce. Sometime this is called as gross marketing margin.

The marketing margin refers to the difference between the price received by seller at a particular stage of marketing and the price paid by him at preceding stage of marketing during an earlier period.

Table 1. Costs incurred in marketing of chickpea in channel –II (chickpea-producer → Wholesaler-cum-commission agent → Retailer → Consumer) (Rs/quintal)

Particulars of cost	Producer	Wholesaler	Retailer	Total cost
Transport	39 (49.37)	0	12 (42.86)	51 (22.67)
Commission	0	82 (69.49)	0	82 (36.44)
Mandi fee	0	28 (23.73)	0	28 (12.44)
Cleaning	3 (3.80)	0	0	3 (1.33)
Cost of plastic bag	20 (25.32)	0	0	20 (8.89)
Loading charge	5 (7.59)	0	3 (10.71)	8 (3.56)
Unloading charge	5 (7.59)	0	3 (10.71)	8 (3.56)
Weighing Charges	3 (3.80)	0	3 (10.71)	6 (2.67)
Miscellaneous	4 (5.06)	8 (6.78)	7 (25.00)	19 (8.44)
Total	79 (35.11)	118 (52.44)	28 (12.44)	225 (100)

Comment [U16]: The Table is not clear, please? The percentages for each particular do not add up to 100% and for example, is the "39" under Transport a frequency (the number of producers) or what, please? Same for others

4 C.2 Price spread in marketing of chickpea in channel –I

The producer's net share, total marketing costs, total marketing margins, consumer's price and price spread are given in channel-I table-2

Table 2. Price spread in marketing of chickpea in channel –I

S.No.	Particulars	Rs / quintal	Share in consumer's rupee(in percentage)
1	Producer's net share	4925	85.42
2	Cost incurred by		
(a)	Producers	34.00	0.59
(b)	Village traders	67	1.16
(c)	Wholesaler	112	1.94
(d)	Retailer	25	0.43
	Total Cost	239.00	4.15
3.	Margin earned by		
(a)	Village trader	116	2.01
(b)	Wholesaler	323	5.60
(c)	Retailer	112	1.94
	Total margin	551	9.56
4.	Total cost and Total margin	790	13.70
5.	Consumer's price	5765	100

Comment [U17]: Also, the researcher is claiming that the cost incurred by different intermediaries comes from the consumer's price. This might be misleading please. The researcher needs to convince the audience on this, please

6.	Price spread	790	13.70

Table 2 shows that chickpea producer obtainedRs 4925.00 per quintal of a price of `Rs 5765.00 per quintal paid by consumer. Consequently, the chickpea-producer's share in consumer's price was 85.42 percent. The marketing costs paid by producer, village trader, wholesaler-cum-commission agent and retailer were 0.59 per cent, 1.16 per cent, 1.94 per cent and 0.43 per cent of total price paid by consumer, respectively. Among the intermediaries, marketing costs borne by wholesaler-cum-commission agent were highest followed by village trader, producer and retailer. Thus, total marketing cost of intermediaries was 4.15 per cent of total consumer's price Total margins earned by village trader, wholesaler-cum-commission agent and retailers were 2.01, 5.60 and 1.94 per cent of price paid by consumer, respectively. So, total share of market functionaries in consumer's price was 9.56 per cent and it was highest for retailer in this channel. The price spread in channel –I was Rs790.00 per quintal which was 13.70 per cent of consumer's price.

Comment [U18]: What do the researcher mean by "quintal" please?

Comment [U19]: Please, this is not clear and is confusing. How do the researcher come about the 0.59%, 1.16%, 1.94% and 0.43%? Is the researcher saying that those costs are a part of the price paid by the consumer? What exactly do the researcher mean by cost incurred? The costs incurred are from what activities, please?

4 C.3 Price spread in marketing of chickpea in channel –II

The producer's net share, total marketing costs, total marketing margins, consumer's price and price spread in channel-II are given in table-3

Table3 reveals that, out of price of Rs 5765.00 per quintal paid by consumer, chickpea producer got Rs 5102.00 per quintal which accounted for 88.50 percent share. The share of marketing costs paid by chickpea-producer, wholesaler-cum-commission agent and retailer was 1.37, 2.05 and 0.49 per cent of total consumer's price, respectively. Total share of wholesaler-cum-commission agent was highest followed by chickpea-producer and retailer. Thus, total share of marketing cost of intermediaries in consumer's price was 3.90 per cent. Total margin earned by middlemen, wholesaler-cum-commission agent and retailers was 5.60 and 1.94 per cent of price paid by consumer. Wholesaler earned more as compare to retailer. So, total share of market intermediaries in consumer's price was 7.55 per cent. Price spread in channel –I was Rs 660.00 per quintal which was 11.45 per cent of consumer's price.

Comment [U20]: The same as above please

Table 3. Price spread in marketing of chickpea in channel –II

S.No.	Particulars	Rs/ quintal	Share in consumer's rupee(in percentage)
1	Producer's net share	5102	88.50
2	Cost incurred by		
(a)	Producers	79	1.37
(b)	Wholesaler	118	2.05
(c)	Retailer	28	0.49
	Total Cost	225	3.90
3.	Margin earned by		
(a)	Wholesaler	323	5.60
(b)	Retailer	112	1.94

	Total margin	435	7.55
4.	Total cost and Total margin	660	11.45
5.	Consumer's price	5765	100
6.	Price spread	660	11.45

4 C.4 Price spread in marketing of chickpea in channel –III

Table 4 depicts that chickpea-producer sold their produce directly to the consumers so there was no marketing cost incurred by the producers. The price paid by consumer was Rs 5140 per quintal for chickpea and producer got Rs 5140 per quintal, which was 100 per cent share of the consumer's rupee. The net price received by farmers in channel-III was highest as compared to channel-I and channel-II.

Comment [U21]: What about the cost of packing or other costs that must have been incurred prior to purchase, please?

Table 4. Price spread in marketing of chickpea in channel –III

S. No.	Particulars	Rs / quintal	Share in consumer's rupee (in percentage)
1.	Producer's net share	5140	100
2.	Consumer's price	5140	100

It was resulted that absence of intermediaries found in the channel-III so, producer's net share in the consumer's rupee was highest (100 percent) in the channel-III followed by channel-II (88.50 per cent) and channel-I (85.42 per cent). Highest market margins were computed in the channel-I followed by channel-II and no market margin found in the channel-III. Price spread was highest in the channel-I followed by channel-II and no price spread detected in the channel-III

The total marketing costs of chickpea was highest in channel-I (Rs 239 per quintal) followed by channel-II (Rs225 per quintal) because of more number of intermediaries were involved in channel-I. the channel-III, market intermediaries was not involved in marketing of chickpea, so, there is no marketing cost.

In the channel-I, the total marketing costs incurred by the chickpea-producer, village trader, wholesalers-cum-commission agents and retailers were 34.00 (14.23 per cent), 67.00 (28.03 per cent), 112.00 (46.86 per cent) and 25 (10.46 per cent), respectively with wholesalers bearing the maximum marketing cost.

In the channel-II, per quintal total marketing costs incurred by producers, wholesaler-cum commission agents and retailers were 79 (35.11 per cent), 118 (52.44 per cent) and 28(12.44 per cent), respectively in the study area.

The margins earned by different market intermediaries had significant difference. The village trader, wholesaler-cum-commission agents and

retailers gained 2.01 per cent (116 per quintal), 5.60 per cent (323 per quintal) and 1.94 per cent (112 per quintal) market margins in channel-I. Among them wholesaler got the higher margins due to sale of chickpea produce at higher prices to the ultimate consumers.

In the channel-II, per quintal market margins were 323 (5.30 per cent) and 112 (1.94 per cent) for wholesaler-cum-commission agent and retailer, respectively.

The price spread in channel-I was 790 per quintal, which was 13.70 per cent of price paid by consumer. Per quintal price spread in channel-II was 660 and it was 11.45 per cent of consumer's price.

4. Conclusion

It was resulted that absence of intermediaries was found in the channel-III. So, producer's net share in the consumer's rupee was highest (100 per cent) in the channel-III followed by channel-II (88.50 per cent) and channel-I (85.42 per cent). Highest market margins of intermediaries were computed in the channel-I followed by channel-II and no market margin found in the channel-III. Price spread was highest in the channel-I followed by channel-II and no price spread detected in the channel-III.

Comment [U22]: This is not a conclusion, please. This is the same with what the researcher has on Page 7 after the Table 4. The researcher should present a conclusion and give adequate recommendations

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