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To identify different marketing channels of chickpea in Jaipur district

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Abstract
The global chickpeas market grew from \$13.93 billion in 2022 to \$14.9 billion in 2023 at a compound annual growth rate (CAGR) of 7.0%. Chickpea solely contributes nearly 50% of the Indian pulse production. States like Maharashtra (25.97% contribution to national production), Madhya Pradesh (18.59%), Rajasthan (20.65%), Gujarat (10.10%) and Uttar Pradesh (5.64%) are major chickpea producing states of India. The study was conducted in Jaipur district of Rajasthan which is one of the 50 districts of Rajasthan. Jaipur district comprising 13 blocks among 1 block was selected. i.e., Kotputli block was selected for the study. A list of 4 villages was selected randomly out of them. In the study area, three marketing channels *viz*., Channel-I (Chickpea-producer → village trader → Wholesaler-cum-commission agent → Retailer → Consumer), Channel-II (Chickpea-producer → Wholesaler-cum-commission agent → Retailer → Consumer) and Channel –III (Chickpea-producer → Consumer) were identified in the sale of chickpea. It was noticed that majority of selected farmers were used channel-II (45.59 per cent of total sample farmers) for marketing of chickpea because, farmers want to avoid one middleman (village trader) for getting the more price of their produce. Channel-I and channel-III was adopted by 41.18 and 13.24 per cent of total sample farmers.

Keywords: Market arrivals, price variations, and regulated market

Introduction

Chick pea (*Cicer arietinum*) is preferred to food legumes because of its multiple uses for growing population across the world. During 2017-18, globally it was grown on 149.66 lakh ha area, with the total production of 162.25 lakh tonnes (FAOSTAT, 2019) and average productivity of 1252 kg/ha. Chickpea production in India has peaked to all time high at 11.23 million tons during 2017-18 (Mo AF&W, 2019) and it was sustained to 10.32 million tons (MoA F&W, 2019) which has ushered self sufficiency for this main pulse crop in India. During 2021-22 (fourth estimate), chickpea production of India was 13.75 million tonnes from an acreage of 10.91 million ha. with a productivity of 12.6 q./ha (DES 2023, MOAF&W, GoI). Chickpea solely contributes nearly 50% of the Indian pulse production. States like Maharashtra (25.97% contribution to national production), Madhya Pradesh (18.59%), Rajasthan (20.65%), Gujarat (10.10%) and Uttar Pradesh (5.64%) are major chickpea producing states of India. The global chickpeas market grew from \$13.93 billion in 2022 to \$14.9 billion in 2023 at a compound annual growth rate (CAGR) of 7.0%. Chickpea solely contributes nearly 50% of the Indian pulse production. States like Maharashtra (25.97% contribution to national production), Madhya Pradesh (18.59%), Rajasthan (20.65%), Gujarat (10.10%) and Uttar Pradesh (5.64%) are major chickpea producing states of India. Chickpea has a diverse consumption pattern in the Indian market. In Madhya Pradesh the area of chickpea is 2160.0 million ha, production is 3214.08 million tonnes and the yield is 1488 kg/ha (2020-21).The chickpeas market is expected to grow to \$19.19 billion in 2027 at a CAGR of 6.5%. During 2021, INDIA's share in global Export of chickpea was 5.87% (Rank 5, Export Volume 94.08 MKGs) and share in Import was 12.51% (Rank 2, Import Volume 240.97MKGs). Share of India in global chickpea Production was 73.46% during 2020 [Tridge, 2023]. 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.

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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 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, Tamil Nadu and Odisha, Major states in India that grow chickpeas are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharastra, and Andhra Pradesh, among others. 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 Karnataka (14% & 15%). 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. As a result, when marketing the chickpea crop, it is necessary to determine marketing expenses, margin, and price spread. Expenses in agriculture are crucial to the farm sector's economic viability and feasibility in the face of ongoing input price increases that have an impact on crop firms' profitability. Crop marketing is still in its infancy in India. Growing output is not the only crucial aspect of marketing development. Farmers always want to act as middlemen between themselves and the consumer in order to enhance their revenue, and they also want to earn a fair price for the produce they grow. Therefore, to ensure profitable transactions and obtain the farmer's part of the consumer's rupee, meticulous planning of food-grain marketing is needed. Research on marketing channels, such as producer-wholesaler-retailer-consumer, is necessary to understand how they behave in the market with regard to fees, commissions, and transportation-related issues like price increases. The promotion of food grains is essential for boosting both production and consumption as well as for expanding the economy. It's been said to be the primary multiplier of agricultural growth. The system of agricultural marketing contributes to economic growth in two ways. Farmers always want to receive a fair price for the produce they grow in nations where agriculture is the main source of resources.

Data and methodology
The study was conducted in Jaipur district of Rajasthan which is one of the 50 districts of Rajasthan. Jaipur district comprising 13 blocks among 1 block was selected. i.e., Kotputli block was selected for the study. A list of 4 villages was selected randomly out of them. List of all the chickpea growers of each selected village along with their size of operational holding was prepared with the help of patwaries of the concerned villages. All the farmers were categorized into following five standardized size groups. Among them, 10% farmers for each category of operation holdings of each village were categorized into four categories of farmers

except large farmers because none of large farmer was found in the study area. Thus, in total 68 farmers were selected from study area. Anaj Goun mandi Samiti, 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 chickpea. Tabulation method is used for analysis of data along with required statistical tools for the interpretation of the results. A list of all the village traders and licensed wholesalers-cum commission agents and retailers involved in the marketing of chickpea in the study area was prepared with the help of the chickpea farmers and official of Anaj goun mandi samiti, Kotputli. In total, 12 village trader, 23 wholesalers-cum-commission agents and 48 retailers were identified in the marketing of chick-pea from them 10 per cent of total intermediaries or at least 5 middlemen were selected randomly for obtaining the required information pertaining to the marketing costs and margins in the marketing of chick pea. Thus 5 village trader 5 wholesalers-cum commission agents and 7 retailers were selected for detailed study. 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 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
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

Results
Marketing channel in marketing of chickpea
A marketing channel is way or route through which the product moves from producer to ultimate consumers. The length of channels varies from product to product. The following three marketing channels were identified in marketing of chickpea in the study area and selected farmers in each marketing channel are depicted in table-1.

Channel-I: 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

Marketing channel –I:
(Chickpea-producer → village trader → wholesaler-cum-commission agent → Retailer → Consumer)

In this channel, chickpea -producers sold their produce to the village trader at own farm field and the village trader sold the produce to the wholesaler cum commission agents or Arhatias at Anajgoun mandi samiti, Dudu and then, wholesaler sold it to the retailers as per their requirements. Retailers sold the produce to the ultimate consumers in small quantities. Table.1 depicts that, among the total number of selected farmers,

41.18 per cent of selected sample farmers used channel-I for marketing of chickpea in the study area. Among the different size group of farmers, 53.33 per cent of total marginal farmers, 42.86 per cent of total small farmers, 34.78 per cent of total semi-medium farmers and 33.33 per cent of total medium farmers adopted in channel-I. This channel was inversely related with the size of land holding, i e., number of farmers decreases with the increase in size of land holding.

Marketing Channel –II
(Chickpea-Producer → Wholesaler-cum-commission agent → Retailer → Consumer):
In this marketing channel, chickpea-producer sold their produce directly to the wholesaler cum commission agent or arhatias at Anajgoun mandi samiti, Kotputli, then wholesaler sold it to the retailers and finally retailers sold the produce to the consumers.

Table 1 reveals that among total number of farmers (45.59 per cent of total) was adopting marketing channel –II for selling their produce. The channel –II was adopted by 33.33 percent of total marginal farmers, 33.33 percent of total small farmers, 56.52 per cent of total semi-medium farmers and 66.67 per cent of total medium farmers. The interrogation revealed that adoption of channel II was increase with increase in farm size because farmers want to decrease the middlemen in sale of their produce and increase their share in consume's rupee.

Marketing channel-III: (Chickpea-producer →Consumer)
Table.1 reveals the marketing channel of chickpea. In this marketing channel-III, chickpea producer sold their produce directly to the consumers. This marketing channel was adopted by 13.24 per cent of total sample farmers. Among the sample farmers, this channel was adopted by 13.33 per cent of marginal farmers and 23.81 per cent of small farmers and 8.70 per cent of semi-medium and none of the medium farmers.

Table 1: Distribution of selected chickpea farmers adopting different marketing channels

S. No.	Marketing channel	Marginal N=16	Small N=22	Semi-Medium N=21	Medium N=10	Total N=68
				Farm size group		
I.	Chickpea -producer→ village trader→ Wholesaler-cum-commission agent → Retailer → Consumer	8 (53.33)	9 (42.86)	8 (34.78)	3 (33.33)	28 (41.18)
II.	Chickpea -producer→ Wholesaler-cum-commission agent → Retailer → Consumer	5 (33.33)	7 (33.33)	13 (56.52)	6 (66.67)	31 (45.59)
III.	Chickpea-producer → Consumer	2 (13.33)	5 (23.81)	2 (8.70)	-	9 (13.24)
		15 (100)	21 (100)	23 (100)	9 (100)	68 (100)

Conclusions
In the study area, three marketing channels *viz.*, Channel-I (Chickpea-producer → village trader → Wholesaler-cum-commission agent → Retailer → Consumer), Channel-II (Chickpea-producer → Wholesaler-cum-commission agent → Retailer → Consumer) and Channel –III (Chickpea-producer → Consumer) were identified in the sale of chickpea. It was noticed that majority of selected farmers were used channel-II (45.59 per cent of total sample farmers) for marketing of chickpea because, farmers want to avoid one middleman (village trader) for getting the more price of their produce. Channel-I and channel-III was adopted by 41.18 and 13.24 per cent of total sample farmers.

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