

Agri Express: 03 (03), Article No. V03I03.02, July - September, 2025



AN ECONOMIC ANALYSIS MARKETING OF GREEN GRAM IN PALWAL DISTRICT OF HARYANA



Rohit Attri¹ and Sanjay Kumar²

¹P.G. Research Scholar and ²Associate Professor

Department of Agricultural Economics

Sam Higginbottom University of Agriculture, Technology and Sciences, Naini, Prayagraj

Corresponding author: 23mbaab102@shiats.edu.in

https://doie.org/10.10346/AE.2025647933

ABSTRACT

The study titled "An Economic Analysis of Marketing of Green Gram in Palwal District of Haryana" focused on the marketing dynamics of green gram in the district, specifically in the Hassanpur block. A purposive sampling technique was employed to select villages with high potential for green gram cultivation, and 10% of the respondents were chosen randomly. The analysis revealed two primary marketing channels in the study area: Channel-I (Producer → Wholesaler \rightarrow Consumer) and Channel-II (Producer \rightarrow Wholesaler \rightarrow Retailer \rightarrow Consumer). *In Channel-I, the net price received by the producer was Rs 8319, and the consumer price was* Rs 9671. The total marketing cost amounted to Rs 488, while the marketing margin was Rs 587. The price spread in Channel-I was Rs 1075, and the marketing efficiency stood at 7.99%, with the producer's share in the consumer rupees being 88.88%. In Channel-II, the net price received by the producer remained the same at Rs 8319, but the consumer price was Rs 10312. The total marketing cost was Rs 714, with a marketing margin of Rs 1002. The price spread in Channel-II was Rs 1770, and the marketing efficiency was 4.84%, with the producer's share in the consumer rupees being 80.67%. The findings indicated that Channel-I was more efficient, with higher marketing efficiency and a greater share of the consumer price for the producers compared to Channel-II.

Keywords: Green gram, Marketing channels, Producer's share, Marketing efficiency, Price spread.

INTRODUCTION

Green gram, scientifically known as Vigna radiata, is a significant leguminous crop cultivated in various regions, particularly in tropical and subtropical climates. Known for its high nutritional value, green gram is an excellent source of protein, vitamins, and minerals, making it an essential dietary component in many parts of the world. The crop thrives in well-drained, sandy soils and is typically grown under rainfed conditions, benefiting from its adaptability to diverse agricultural environments.

Its short growing cycle, usually ranging from 60 to 90 days, allows it to be integrated into crop rotation systems, particularly as an intercrop with cereals like maize or sorghum, enhancing soil fertility through its nitrogen-fixing properties. Over time, green gram has gained prominence not only for its nutritional benefits but also for its role in sustainable farming practices, as it improves soil health and reduces the need for synthetic fertilizers. The crop's resilience to drought and ability to grow in marginal lands further contribute to its importance, particularly in regions facing







water scarcity. Additionally, green gram's versatility in food preparation—ranging from soups and salads to snacks and desserts—has contributed to its popularity in global markets. In recent years, the demand for green gram has also increased due to its inclusion in various health and wellness products. Overall, green gram plays a crucial role in both food security and sustainable agriculture, benefiting farmers, consumers, and the environment alike.

RESEARCH METHODOLOGY

The methodology for selecting the district, blocks, villages, and respondents in this study employed a combination of purposive and random sampling techniques. The district of Palwal was chosen to minimize inconvenience and time constraints for the investigator. Within Palwal, Hassanpur block was selected due to the predominant involvement of respondents in green gram cultivation. A comprehensive list of villages within this block was created, and five percent of the villages with a high concentration of green gram farmers were

selected randomly. Subsequently, a list of all green gram farmers in these villages was compiled, categorizing them into five landholding size groups: Marginal (less than 1 hectare), Small (1-2 hectares), Semimedium (2-4 hectares), Medium (4-10 hectares), and Large (more than 10 hectares). From this list, 100 green gram farmers were selected using proportionate random sampling. In addition, 5 producers, 10 wholesalers, 5 retailers, and 5 consumers were selected to study the marketing aspects. including marketing marketing margin, price spread, producer's share in consumer rupees, and marketing efficiency. Primary data were collected using a specially designed schedule, while secondary data were gathered from books, journals, reports, and records from the district and block headquarters. Data collection was carried out through direct personal interviews during the survey process. The statistical tools were applied to analyze the data and present the results. The data pertained to the agricultural year 2024-2025.

Analytical Tools

- 1. Marketing Cost: C = Cf + Cm1 + Cm2 + Cm3 + + Cmn
- 2. Market Margin: AMI=Pri-(Ppi+Cmi)
- 3. **Price Spread:** Marketing Cost + Market Margin
- 4. Marketing Efficiency: = Price received by producer

Marketing Cost + Marketing Margin

5. Producer's Share in Consumer Rupee: Price received by the farmer x100

Retail price paid by the consumer

RESULTS AND DISCUSSION

Table 1: Reveals the preferred marketing channel and disposed pattern by the respondents

Sr. No.	Channel Type	No of respondent	Percentage (%)
1.	Channel – I	16	16.00
2.	Channel -II	84	84.00
	Total	100	100.00





Table 1: Reveals that there are two marketing channels involved in marketing of green gram in Palwal district of Haryana in which channel-II is preferred by majority of respondents with 84.00 percent respondents response among total sample and secondly

preferred channel for marketing of green gram in Palwal district of Haryana is Channel-I with 16.00 percent respondents response among total sample selected for the study.



Table 2: Marketing Cost, Marketing Margin, Price Spread, Producer's Share In Consumer's Rupees and Marketing Efficiency in marketing of Green Gram through Channel I.

	and Marketing Efficiency in marketing of Green Gram through Channel I.				
Sr.	Particulars	Green Gram			
No.		Value in Rs. / Quintal			
1.	Producer sale price to Wholesaler	8893 (91.96)			
2	Marketing cost incurred by the producer				
(i)	Packaging Cost	19 (0.20)			
(ii)	Package material cost	31 (0.32)			
(iii)	Transportation cost	24 (0.25)			
(iv)	Market cost	50 (0.52)			
(v)	Labour cost	38 (0.39)			
(vi)	Loading and Unloading Charge	25 (0.26)			
(vii)	Weighing Charge	15 (0.16)			
(viii)	Miscellaneous Charge	95 (0.98)			
Total c	cost (i-viii)	297 (3.07)			
Net pr	ice received by the producer	8596 (88.88)			
Whole	saler selling price to Consumer	9671 (100.00)			
3.	Marketing cost insured by the retailer				
i.	Loading and Unloading charges	18 (0.19)			
ii.	Charges up to the shop	13 (0.13)			
iii.	Weighing charge	10 (0.10)			
iv.	Town charge	30 (0.31)			
v.	Transportation	45 (0.47)			
vi.	Losses and miscellaneous charges	75 (0.78)			
Total (Cost. (i-vii)	191 (1.97)			
Margi	n of the Wholesaler	587 (6.07)			
A	Total marketing cost	488 (5.05)			
В	Total marketing margin	587 (6.07)			
C	Price Spread	1075 (11.12)			
D	Marketing Efficiency	7.99%			
E	Producer's Share in Consumer Rupee	88.88%			

(Note: Value in the parenthesis represent the percent of consumer purchase price)

Table 2: Reveals that in channel-I the selling price of green gram from producer to Wholesaler is Rs. 8893, the marketing cost incurred by the producer in marketing of 1 quintal of green gram to the Wholesaler is

Rs. 297. Wholesaler selling price to consumer is Rs. 9671/quintal, marketing cost incurred by the Wholesaler is Rs. 191, margin of Wholesaler is Rs.587/quintal. Eventually the total marketing cot is Rs.488,





total marketing margin is Rs.587, price spread in channel-I is Rs 1075, marketing efficiency of channel-I is 7.99% and

producer's share in consumer rupees in channel-I is 88.88%



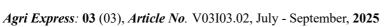
Table 3: Marketing Cost, Marketing Margin, Price Spread, Producer's Share In Consumer's Rupees and Marketing Efficiency in marketing of Green Gram through Channel II.

Sr.	Particulars	Green Gram
No.	1 at ticular 5	Value in Rs. / Quintal
1.	Producer sale price to wholesaler	8893 (86.24)
2	Marketing cost incurred by the prod	` ,
i.	Packaging Cost	19 (0.18)
ii.	Package material cost	31 (0.30)
iii.	Transportation cost	24 (0.23)
iv.	Market cost	50 (0.48)
v.	Labour cost	38 (0.37)
vi.	Loading and Unloading Charge	25 (0.24)
vii.	Weighing Charge	15 (0.15)
viii.	Miscellaneous Charge	95 (0.92)
Total cost (i-viii)		297 (2.88)
Net price received by the producer		8319 (80.67)
-	plesaler selling price to Retailer	9639 (93.47)
4.	Marketing cost insured by the Wholesaler	(55.17)
i.	Loading and Unloading charges	25 (0.24)
ii.	Grading	21 (0.20)
iii.	Packaging	38 (0.37)
iv.	Market Fee	37 (0.36)
V.	Losses and miscellaneous charges	75 (0.73)
	cost (i-v)	196 (1.90)
Margin of wholesaler		550 (5.33)
5.	Retailer Selling price to Consumer	10312 (100.00)
6.	Marketing cost insured by the Retailer	
i.	Weighing charges	24 (0.23)
ii.	Loading and unloading charges	33 (0.32)
iii.	Town charges	30 (0.29)
iv.	Carriage up to shop	37 (0.36)
v.	Miscellaneous charges	97 (0.94)
Total cost (i-v)		221 (2.14)
	n of Retailer	452 (4.38)
A	Total marketing cost	714 (6.92)
В	Total marketing margin	1002 (9.72)
\mathbf{C}	Price Spread	1716 (16.64)
D	Marketing Efficiency	4.84%
E	Producer's Share in Consumer Rupee	80.67%
	Note: Value in the naventhesis venues out the naveout of course	mar nurahasa nriaal

(Note: Value in the parenthesis represent the percent of consumer purchase price)

Table 3: Reveals that the selling price of green gram from producer to wholesaler is Rs. 8893/ quintal, marketing cost incurred by the producer in marketing of. 1 quintal of green gram is Rs. 297. Selling price of green gram from wholesaler to retailer is Rs. 9639,

marketing cost incurred by the wholesaler is Rs. 196, margin of the wholesaler is Rs. 550, selling price of green gram from retailer to consumer is Rs. 10312, marketing cost incurred by the retailer is Rs. 221, margin of the retailer is Rs. 452. Eventually the total







marketing cost in channel-II is Rs. 714, total marketing margin in channel-II is Rs 1002, price spread in channel-II is Rs. 1716,

marketing efficiency of channel-II is 4.84% and producer's share in consumers rupees in channel-II is 80.67%



Table 4: Comparison between Marketing Cost, Marketing Margin, Price Spread, Producer's Share In Consumer's Rupees and Marketing Efficiency in marketing of green gram through channel-I and Channel-II in the study area.

Sr. No.	Particulars	Value in Rupees / quintal Channel I	Value in Rupees / quintal Channel II
	_		
1.	Net price received by	8319	8319
	the producer	(88.88)	(80.67)
2.	Consumer paid price	9671	10312
		(100.00)	(100.00)
3.	Total marketing cost	488 (5.05)	714 (6.92)
4.	Total marketing margin	587 (6.07)	1002 (9.72)
5.	Price spread	1075 (11.12)	1770 (16.64)
6.	Marketing Efficiency	7.99%	4.84%
7.	Producer's Share in Consumer Rupees	88.88%	80.67%

(Note: Value in the parenthesis represent the percent of consumer purchase price)

Table 4: Reveals that comparison of marketing cost, marketing margin, price spread, marketing efficiency and producer's share in consumers rupees in marketing of green gram in channel-I, channel-II. In channel I, net price received by the producer is Rs 8319, Consumer paid price in channel-I is Rs 9671, the total marketing cost in channel I is Rs. 488, the marketing margin was Rs. 587, the price spread seen in channel 1 is Rs. 1075,

marketing efficiency of Channel-I is. 7.99% and producer's share in consumer rupees in channel-I is 88.88%. In Channel-II, net price received by the producer is Rs 8319, Consumer paid price in channel-II is Rs 10312, total marketing cost is Rs. 714, total marketing margin in channel -II is Rs 1002, price spread in channel -II is Rs. 1770, marketing efficiency of channel – II is 4.84% and producer's share in consumer rupees in channel-II is 80.67% respectively.

CONCLUSION

In conclusion, the study on the marketing of green gram in Palwal District of Haryana provided valuable insights into the marketing channels, cost structures, and efficiency of green gram trade. The findings revealed that two primary marketing channels existed in the region: Channel-I (Producer → Wholesaler → Consumer) and Channel-II (Producer → Wholesaler → Retailer → Consumer). Channel-I

demonstrated greater marketing efficiency, with a higher producer's share in the consumer rupees (88.88%) and a relatively lower price spread (Rs. 1075) compared to Channel-II, where the producer's share was 80.67% and the price spread was significantly higher (Rs. 1770). The study highlighted that Channel-I was more beneficial to the producers, offering a better return and lower marketing costs (Rs. 488), whereas Channel-II involved higher





marketing costs (Rs. 714) and lower efficiency (4.84%). The producer's net price remained constant across both channels (Rs. 8319), but the intermediary steps in Channel-II resulted in higher costs and margins for the wholesaler and retailer, thus reducing the economic benefit for producers. The analysis suggested that simplifying the marketing chain by reducing intermediaries could enhance the overall profitability for green gram farmers. Additionally, the study underscored the importance of improving marketing efficiency to ensure better returns for producers, highlighting that more efficient marketing channels can lead to higher income and sustainability for farmers. The findings of this study offer important policy implications for improving the marketing system and supporting farmers in the

REFERENCES

region.

- Bansal, L. S., and Verma, R. K. (2022). "Government policies for reducing post-harvest losses in green gram." *Journal of Agricultural Policy*, 17(5), 102-118.
- Bansilal, A.K., Saini, V. (2020)
 "Constraints and Suggestions as
 Expressed by Green gram Growers
 in North-Eastern Karnataka.",
 Indian Journal of Agriculture.
 Research, 49 (2) 2020: 114-124.
- Chipo Mukonza & Ilze Swarts. (2019) "The influence of green marketing strategies on business performance and corporate image in the retail sector." Business Strategy and the Environment. 25(4):431-436. 10.
- Esther Mwihaki Kihoro, Patrick Irungu, Rose Nyikal, & Immaculate N. Maina. (2019) "An analysis of factors influencing farmers' choice of green gram marketing channels

in Mbeere South Sub-County, Kenya.", IJPR Vol. 3 July 2018 No. lpp97-98.



- Jakhar, D.S., & Kumar, S. (2022). Impact of Cluster Front Line Demonstrations on Green Gram (MH-421) in Sirsa District of Haryana State. Indian Journal of Extension Education, 58(1), 166-168.
- Mehta, A. S., and Joshi, P. R. (2022). "The post-harvest losses of green gram in India." *Journal of Agricultural Economics*, 54(2), 101-115.
- Morey (2019) "Studied the economics of production and marketing of green gram in Solapur district of Maharashtra," *Karnataka Journal of Agricultural Sciences*; 25(4):431-436. 10.
- Radhika J. Bani, Vedanti Patel, Amitkumar Datta, Jensi Nariya, & Mit Nayi. (2025). "Production, processing, and marketing of green gram in India", Journal of economic and social development, vol. v, no. 1.
- Ramakrishna, Singh, S. (2019) "Studied on Constraints in adoption of transplanting method of green gram cultivation.", *The Bihar Journal of Agricultural Marketing*, 3(2): 153-161.
- Rao, M. K., and Singh, A. T. (2022). "Role of cooperatives in reducing post-harvest losses and improving market access for green gram." *Cooperative Development Journal*, 23(3), 178-190.
- Rathi, A. K., and Verma, P. S. (2022). "Economic implications of post-harvest losses on green gram farmers." *Journal of Rural Development*, 41(2), 101-114.





- Reddy, P. S., and Kapoor, N. K. (2022). "Government support for reducing post-harvest losses." Journal of Agricultural Policy and Development, 22(1), 112-125.
- Sowjanya, Tripathi, S. (2019) "Studied use efficiency resource and marketing of green gram.", Journal economic and social development, vol. v, no. 1.
- Sudhakaran, R., & Bukkan, S. (2020) "A review on nutritional composition, antinutritional components health benefits of green gram (Vigna radiata)." Journal of Food Biochemistry, 44(9), e13743.
- Szerena Szabo & Jane Webster. (2020) "Perceived greenwashing: The effects of green marketing on environmental and product perceptions.", Journal of Business Ethics, 171(4), 719–739.
- Tageer Ahmad (2021) "Study to make strategies for reducing the losses, knowledge of extent of losses and their reasons is essential." Journal of Yugoslav Survey, 29(4):63-74.

- Thejashree, H.N., Umesh, K.B. (2020) "An Economic Analysis of green gram Seed Production in Chikkaballapura District of Kamataka" Lumle Regional Agricultural Research Centre Review Paper, 95 (01): 23
- Tiwari, S. N., and Sharma, M. K. (2023). "Technology adoption to reduce post-harvest losses in green gram." Technology in Agriculture Journal, 19(4), 167-182.
- Umesh Sah, Vishal Singh, Jitendra Ojha, Manoj Katiyar, & Shiv Kumar Dubey. (2022). "An insight into value chains of green gram in Bundelkhand region of India." Indian Journal of Extension Education, 58, 163-169.
- Verma, Chandrakar (2021) economic analysis of production and marketing of green gram in district Rajnandgaon Chhattisgarh.". Sustainable agriculture and food security, 327-398.
