Agri Express: **03** (01), ***Article No***. V03I01.14, January - March, **2025** ***E - ISSN No. 2584 – 2498***

AN ECONOMIC ANALYSIS ON MARKETING OF JAGGERY IN SULTANPUR DISTRICT OF UTTAR PRADESH

Shivam Singh[1] and Jayant Zechariah[2]

[1]MBA (Agribusiness) and [2]Assistant Professor

Department of Agricultural Economics

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

Corresponding author: shivamsvm2@gmail.com

https://doie.org/10.10346/AE.2025986114

ABSTRACT

Jaggery, a traditional and unrefined sugar derived from sugarcane or date palm sap, holds significant importance in various Asian and African culinary traditions due to its rich, molasses-like flavor and superior nutritional profile, particularly its higher content of minerals such as iron, magnesium, and potassium. Recognized for its potential health benefits, including improved digestion and enhanced immunity, jaggery remains a valued commodity in rural economies. The current research is being cited "An Economic Analysis on Marketing of Jaggery in Sultanpur District of Uttar Pradesh," focuses on the Sultanpur district, with Jaisinghpur block selected purposively. From this block, five percent of sugarcane-cultivating villages were selected, and ten percent of the farmers from these villages were chosen randomly as respondents. The findings reveal that Channel-I incurred a total marketing cost of Rs. 635 with a price spread of Rs. 635 and a marketing efficiency of 5.83%. Channel-II recorded a overall cost of marketing of Rs. 927.26, a total marketing margin of Rs. 223.44, a price spread of Rs. 1150.70, and a marketing efficiency of 2.98%. Channel-III exhibited the highest marketing cost of Rs. 1148.70, with a total marketing margin of Rs. 389.00, a price spread of Rs. 1537.70, and a marketing efficiency of 2.23%. The study comes to the conclusion that the most effective way to market jaggery in the study region is through direct marketing (Channel I).

Keywords: Jaggery marketing, Economic analysis, Marketing efficiency

INTRODUCTION

Jaggery, an unrefined natural sweetener, was traditionally produced from the concentrated sap of sugarcane or date palm and played a significant role in the culinary and cultural practices of various Asian and African regions. It was widely regarded for its rich, molasses-like flavor and its nutritional superiority over refined sugar, primarily due to its higher mineral content, including iron, magnesium, calcium, and potassium. Historically, jaggery served not only as a sweetener but also as a medicinal ingredient, believed to aid digestion, enhance immunity, and provide energy, particularly in rural and agrarian communities. The production process of jaggery was largely artisanal, relying on traditional methods that preserved the natural nutrients of the raw material. It was typically produced in small-scale units located close to sugarcane farms, thereby supporting local economies and providing employment opportunities.

Unlike refined sugar, jaggery underwent minimal processing and no chemical refining, which contributed to its perception as a healthier and more sustainable alternative. Its usage spanned various applications, including traditional sweets, beverages, and Ayurvedic medicines. Despite its cultural and nutritional significance, jaggery marketing systems often faced challenges such as limited market access, seasonal production constraints, and the involvement of multiple intermediaries that reduced the profitability for producers. Recent studies highlighted the need for systematic economic analyses to better understand the marketing structures and efficiency associated with jaggery, especially in regions where it remained a vital source of income for farming communities. Thus, research on the marketing of jaggery emerged as an essential area of study for rural economic development.

RESEARCH METHODOLOGY

In this study, dependent sample techniques were used to select survey areas, villages, and respondents. Sultanpur district was intentionally selected to minimize inconvenience and time constraints for investigators. Among the various blocks of the district, the Jaishinghpur block was selected based on the control of sugarcane construction. A comprehensive list of villages within the selected block was prepared, with 5% of villages with a concentrated sugarcane farmer being selected. The list of all sugarcane farmers, compiled from these villages, is divided into five land-owning groups: limits (less than 1 hectare), small (1¢2 hectare), semi-class (2¢4 hectare), medium (4°). A total of 120 sugarcane farmers were selected as respondents using a proportional random sample. Additionally, five wholesalers, five retailers and ten retailers were accidentally chosen to look at marketing costs, marketing margins, price spreads and marketing performance. Primary data was collected via structured research plans via in-person interviews, and secondary data from books, magazines, reports and official records were obtained at district and block headquarters. The collected data were analyzed using appropriate statistical tools and techniques. All information collected relates to the 2024/2025 agricultural year.

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:***

$$= \frac{\text{Price received by producer}}{\text{Marketing Cost + Marketing Margin}}$$

RESULTS AND DISCUSSION

Table 1: Reveals the preferred marketing channel by the respondent farmers

CHANNEL-I: *Producer-Consumer*

CHANNEL-II: *Producer - Wholesaler – Consumer.*

CHANNEL-III: *Producer- Wholesaler – Retailer – Consumer.*

S. No.	Channel Type	No of respondent	Percentage
1	Channel – I	25	20.84
2	Channel -II	31	25.83
3	Channel-III	64	53.33
	Total	**120**	**100.00**

Table 1: the study found that of 120 respondents, 25 (20.84%) preferred Channel-I for jaggery transactions, while 31 (25.83%) favored Channel-II. The remaining 64 (53.33%) chose Channel-III.

Table 2: Jaggery's price spread in Channel I, marketing cost, marketing margin, and marketing efficiency in Channel I.

S. No	Particulars	Rs/Quintals
1	Producer's Sale price	4343
	Processing Fee Incurred by Producer	**425**
2	**Cost incurred by the producer**	
a	Packaging Cost	50
b	Transportation Cost	80
c	Loading and Unloading Cost	30
d	Market Fees	10
e	Commission Charges	20
f	Storage Cost	05
g	Miscellaneous Expenses	15
2	**Total marketing cost (a-g)**	**210**
3	**Net price received by producer**	**3708**
A	**Total Marketing cost**	**635**
B	**Price spread**	**635**
C	**Marketing Efficiency**	**5.83%**

Table 2: This study found that Channel I was the Jaggery Marketing Award for producer Rs. 4.343 Quintal. The processing fee created by the manufacturer was Rs. The net price received by 425 and manufacturers was 3,708. Plus, PAR's producer marketing costs. 210. As a result, the total marketing cost of Channel I Rs. 635. The price observed in Channel I was also Rs. Marketing performance for 635 and this channel was calculated at 5.83%.

Table 3: Jaggery's price spread in Channel I, marketing cost, marketing margin, and marketing efficiency in Channel II.

S. No	Particulars	Rs/Quintal
1	**Producer's Sale Price to wholesaler**	**4120**
	Processing Fee incurred by producer	**425**
2	**Cost incurred by the producer**	
a	Packaging Cost	57.08
b	Weighing	15.37
c	Loading and Unloading Cost	47.83
d	Market Fees	27.00
e	Commission Charges	95.42
f	Storage Cost	05
g	Miscellaneous Expenses	15.00
	Total Marketing cost (a-d)	**262.70**
3	**Net price received by producer**	**3432.30**
4	**Wholesaler sale price to Consumer**	4583
5	**Cost incurred by the Wholesaler**	
a.	Packaging	55.00
b.	Weighing	15.00

c.	Loading and unloading	33.00
d.	Transportation	67.00
e.	Market fee	27.56
f.	Storage cost	23.00
g	Miscellaneous cost	19.00
	Total Marketing cost(a-g)	**239.56**
6	**Margin of Wholesaler**	**223.44**
A	**Total Marketing cost**	**927.26**
B	**Total Marketing margin**	**223.44**
C	**Price Spread**	**1150.70**
D	**Marketing Efficiency**	**2.98%**

Table 3: This study showed that Channel II is a Jaggery Marketing Award from producer Rs. 4,120 per Quintal. The processing fee created by the manufacturer was Rs. 425, while the marketing costs borne by producers were Rs. 262.70. As a result, the manufacturer's net price was 3,432.30. The marketing costs incurred by wholesalers were Rs. 239.56, and the wholesaler edge when marketing Quintal from Jaggery was 223.44. As a result, a price of 4.583 per Quintal was borne by the wholesaler to the consumer. Overall, the total marketing cost for Channel II was 927.26. 223.44, price distribution was 1,150.70, and marketing efficiency was recorded at 2.98%.

Table 4: Jaggery's price spread in Channel I, marketing cost, marketing margin, and marketing efficiency in Channel III.

S. No	Particulars	Rs/Quintal
1	**Producer's Sale Price to wholesaler**	**4120**
	Processing Fee incurred by producer	**425**
2	**Cost incurred by the producer**	
a	Packaging Cost	57.08
b	Weighing	15.37
c	Loading and Unloading Cost	47.83
d	Market Fees	27.00
e	Commission Charges	95.42
f	Storage Cost	05
g	Miscellaneous Expenses	15.00
	Total Marketing cost (a-d)	**262.70**
3	**Net price received by producer**	**3432.30**
4	**Wholesaler sale price to Retailer**	**4548**
5	**Cost incurred by the Wholesaler**	
a.	Packaging	51.00
b.	Weighing	15.00
c.	Loading and unloading	33.00
d.	Transportation	67.00
e.	Market fee	17.00
f.	Storage cost	21.00
g	Miscellaneous cost	19.00

	Total Marketing cost(a-g)	**223.00**
6	**Margin of Wholesaler**	**205.00**
	Retailer Sale price to Consumer	**4970.00**
	Marketing cost incurred by Retailer	
a.	Packaging	56.00
b.	Weighing	14.00
c.	Loading and unloading	35.00
d.	Transportation	56.00
e.	Market fee	27.00
f.	Storage cost	29.00
g	Miscellaneous cost	21.00
	Total Marketing cost(a-g)	**238.00**
	Margin of Retailer	**184.00**
A	**Total Marketing cost**	**1148.70**
B	**Total Marketing margin**	**389.00**
C	**Price Spread**	**1537.70**
D	**Marketing Efficiency**	**02.23%**

Table 4: This study showed that the Jaggery Marketing Award on Channel III provided by the producer was Rs. 4,120 per Quintal. The processing fees incurred by the manufacturer were Rs. 425 And the marketing cost incurred by the producer was 262.70. As a result, the net price of the manufacturer of Channel III Rs. 3,432.70. Marketing costs for wholesalers in Channel III were Rs. 223, and the wholesaler end for marketing in Jaggery Quintal was Rs. 205. As a result, wholesale sales prices were retailer Pars. 4.548. The retailer sold the jaggery to consumers of Rs. Marketing range of Rs 4,970 per Quintal. 184 per Quintal and marketing cost of Rs. 238. Overall, the marketing costs are marginalized. - Efficiency was 2.23%.

Table 5: Comparison between Marketing cost, Marketing margin, Marketing efficiency and Price spread in marketing of Jaggery through channel-I, channel-II and Channel-III in the study area.

S. No.	Particulars	Value in Rupees / quintal	Value in Rupees / quintal	Value in Rupees / quintal
		Channel I	**Channel II**	**Channel III**
1.	**Net price received by the producer**	3708	3432.30	3432.30
2.	**Total marketing cost**	635	927.26	1148.70
3.	**Total marketing margin**	-	223.44	389.00
4.	**Price spread**	635	1150.70	1537.70
5.	**Marketing Efficiency**	5.83%	2.98%	02.23%

Table 5: A comparison of marketing costs, marketing margins, price spread, and marketing fulfillment showed marketing fulfillment when marketing jaggery across three channels. In Channel I, the total marketing cost was Rs. 635, price distribution fraud 635 and marketing performance rate was 5.83%. For Channel-II, the total marketing cost was Rs. 927.26 was the overall market margin Rs. 223.44, price distribution was 1,150.70, and marketing efficiency was 2.98%. In Channel-III, total marketing cost of Rs. It was 1,148.70, total marketing range was 389.00, price distribution distributor was 1,537.70, and marketing efficiency was 2.23%. These results show that Channel I showed the highest marketing efficiency, while Channel III provided the lowest marketing efficiency at higher costs and margins.

CONCLUSION

This study has provided important insights into the marketing dynamics of Jaggaree in Sultanpur district, Uttar Pradesh. Channel I, which includes direct transactions between producers and consumers, was found to have the highest marketing efficiency of 5.83%. This indicates that reducing agents can significantly improve the profitability of manufacturers. In contrast, Channel III, which was joined by several agents (wholesalers and retailers), had a lowest marketing efficiency of 2.23%, mainly due to increased marketing costs and margins. Channel II, which includes wholesalers, showed moderate marketing efficiency of 2.98%. These results show that reducing the number of intermediaries and promoting consumer links among producers improve market efficiency and reduce manufacturer costs. Furthermore, the study highlights the need for improved marketing infrastructure and improved access to the market, which could further increase producer profitability. The results suggest that political interventions focusing on tightening marketing channels and supporting direct sales could provide significant economic benefits for jaggery producers in Sultanpur district.

REFERENCES

Amit Agarwal, & Nidhi Chauhan (2021) "Sustainability in Jaggery Production and Marketing." *International Journal of Sustainable Food Systems*, 9(1), 45-59.

Amit Yadav, & Rekha Joshi (2022) "Exploring the Role of Consumer Trust in the Jaggery Market." *Journal of Food Quality and Consumer Confidence*, 13(1), 90-101.

Anjali Sharma, & Vikas Gupta (2022) "Trends in the Global Export Market for Jaggery: A Case Study from India." *International Journal of Agricultural Exports*, 9(2), 102-112.

Arvind Singh, & Sanjay Patil (2021) "Marketing Jaggery as a Healthier Alternative: Consumer Awareness and Perceptions." *Health and Nutrition Journal*, 11(3), 67-75.

Deepak Saini, & Rina Patel (2022) "Consumer Perception and the Pricing Strategy of Jaggery." *Journal of Agricultural Economics and Pricing*, 13(2), 77-90.

Manoj Prakash, & Priyanka Agarwal (2020) "Exploring Rural Marketing Strategies for Jaggery." *Journal of Rural Business and Marketing*, 7(2), 101-113.

Meera Jain, & Ankit Verma (2021) "Marketing Challenges and Opportunities for Jaggery in India." *Journal of Agricultural Marketing and Rural Development*, 18(2), 89-101.

Nitin Joshi, & Trisha Pradhan (2022) "Consumer Trust in Jaggery Marketing: Challenges and Opportunities." *Journal of Consumer Trust and Brand Management*, 16(4), 55-65.

Pradeep Yadav, & Krishan Sahu (2021) "Government Policies and Their Impact on the Marketing of Jaggery in India." *Journal of Agricultural Policy and Market Trends*, 17(1), 21-32.

Priya Sharma, & Pradeep Kumar (2022) "Exploring the Impact of Advertising on Jaggery Consumer Choices." *Journal of Consumer Behavior and Marketing*, 14(3), 75-87.

*****