



A Study on Marketing of Mushroom in Gorakhpur

District of Uttar Pradesh

Abhishek Mishra¹ and Jayant Zechariah²

¹MBA (Agribusiness), Department of Agricultural Economics

Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj, U.P.

²Assistant Professor, Department of Agricultural Economics

Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj, U.P.

Corresponding author: <u>kohliabhishek12@gmail.com</u>

https://doie.org/10.0713/AE.2024652486

ABSTRACT

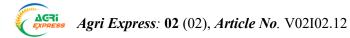
This study explores the marketing dynamics of mushrooms in Gorakhpur district, aiming to understand the challenges and opportunities faced by local producers. The research focuses on the supply chain, pricing strategies, consumer preferences, and the role of intermediaries in the distribution network. Data were collected through surveys and interviews with farmers, retailers, and consumers. Findings indicate that while there is a growing demand for mushrooms due to their nutritional benefits, producers face significant hurdles such as inadequate infrastructure, lack of awareness, and market access issues. The study suggests that improving marketing strategies, enhancing supply chain management, and providing educational support to farmers can significantly boost mushroom production and sales in the region.

Keywords: Supply chain, Pricing strategies, Consumer preferences, Agricultural infrastructure.

INTRODUCTION

Mushrooms are а multibillion-dollar industry that has grown significantly as modern customers seek health advantages in their diet. Mushroom output in India is estimated at 3 million tons, with the major nations being China, the United States, the Netherlands, and France. Supporting the mushroom business is critical for growing the rural economy, increasing job and income prospects, and providing revenue for small farmers. Mushroom growing requires little space and is a feasible option for both rural farmers and peri-urban residents. It also offers chances to improve the sustainability of small farming systems by recycling organic materials.

Mushroom growing is good for women, the elderly, and children since it is lowmaintenance and can be done part-time. Female empowerment has been increased through mushroom production programs by providing them with agricultural skills, financial independence, and self-respect. Mushroom output worldwide is estimated at 15.25 million tons, with an annual growth rate of more than 7%. Mushroom consumption and output may continue to expand, reaching 24 million tons by 2028. Mushrooms are abundant in nature and thrive in a variety of settings, including moist regions, timber, desert sands, lake dunes, gardens, open fields, marshy areas, and stored straw.



OBJECTIVE OF THE STUDY

- 1. To work out marketing cost, marketing margin, price spread and marketing efficiency.
- 2. To find out the constraints of marketing of mushrooms and suggest suitable measures and implications.

RESEARCH METHODOLOGY

methodology The research involves defining the problem and objectives, selecting the appropriate research design, collecting data through surveys, interviews, and observations, analysing the data using statistical and qualitative techniques, and presenting the findings in a clear and concise manner. This rigorous and systematic the research approach ensures that objectives are met and the findings are accurate and reliable. The research report is

written in a structured format, following the guidelines of the research community. The study was carried out in Gorakhpur district, Uttar Pradesh, a location with a big number of mushroom producers. The district, which encompasses 3483.8 square kilometres, was chosen for its renowned position and favourable agro climate characteristics. The Khorabar block, located near Gorakhpur, was chosen due to its population of 2,210. The research chose nine towns from the designated block, with 10% drawn at random. Mushroom cultivators were chosen from each village's list, and 10% of the farmers were chosen at random. Surajkund Mandi and Sahjanawa Sabzi Mandi were chosen as the principal and secondary markets, respectively. Data was gathered through personal interviews and other means.

DATA ANALYSIS

Table 1: Marketing Cost,	Marketable Surplus an	d Price Spread in Dif	fferent Size ofFarms Group
--------------------------	-----------------------	-----------------------	----------------------------

Channel - I = Proc	lucer – Consumer	(Value in Rupees/kg)	
S.NO	PARTICUARS	VALUE IN RUPEES	
1	Producer's sale price to Consumer	80	
2	Cost incurred by the Producers		
Ι	Packing material	1.5	
1	cost	(1.87)	
II	Transportation cost	1	
11		(1.25)	
***		1.75	
III	Market cost	(2.18)	
137		0.5	
IV	Labour cost	(0.62)	
X 7	Loading and	0.75	
V	unloading charges	(0.93)	
X / X	*** * 1 * 1	0.5	
VI	Weighing charges	(0.62)	
	Miscellaneous	1	
VII	charges	(1.25)	

VIII	Packing cost	2 (2.5)	
3		9	
3	Total cost (i-viii)	(11.25)	
4	Marketable surplus	8	
4	(per 100 g)	(10)	
5	Net price Received	63	
3	by producer	(78.75)	
6	Drian aproad	21.25	
0	Price spread	(26.56)	
7	Consumer paid	80	
/	price	(100)	
8	Marketing	8.88	
	efficiency (%)	(11.1)	

Note: Figures in the parenthesis indicates percentage to the of total consumer price.

Table 1, shows that the entire marketing cost for selling mushrooms is 9 rupees/kg and the marketable surplus is 8 rupees/kg, which explains why the producer's price was 63 rupees/kg, the price spread was 9 rupees/kg, and marketing efficiency was 8.88%. Overall, the client spent 80 rupees per kilogram.

S. No.	PARTICULARS	VALUE IN RUPEES
Α	Producer's sale price to village merchants/retailers	75
1	Cost incurred by the Producers	
Ι	Packing material cost	1.5
1	r deking inderial cost	(2)
Π	Transportation cost	1
	Transportation cost	(1.33)
III	Market cost	1.75
		(2.33)
IV	Labour cost	0.5
		(0.66)
V	Loading and unloading charges	0.75
		(1)
VI	Weighing charges	0.5
		(0.66)
VII	Miscellaneous charges	1
		(1.33)
VIII	Packing cost	
		(2.66) 9
2	Total cost (i-viii)	(12)
		7.5
3	Marketable Surplus (per 100 gm)	(10)
		58.5
4	Net price Received by producer	(78)
В	Village Merchant/Retailers purchase price	75
D	, mage merenant retainers parenase price	15

Table 2: Marketing Cost, Marketable Surplus and Price Spread in Differ	ent Size ofFarms Group
Channel – II = Producer – Village Merchant/Retailer – Consumer	(Value in Rupees/kg)

Ι	Cost incurred by village merchants/retailers	
Ι	Loading and unloading charges	0.5 (0.55)
II	Carriage up to shop	(0.55) 1.5 (1.66)
III	Weighing charges	0.5 (0.55)
IV	Town charges	2 (2.22)
V	Transportation	1 (1.11)
VI	Losses and Miscellaneous charges	0.5 (0.55)
4	Total cost	6 (6.66)
5	Sale price of village merchant/retailer	90
6	Village merchant/ retailers margin	9 (10)
7	Producer's share in consumer's rupee (%)	78
8	Price spread	35 (38.88)
9	Consumers paid price	90 (100)
10	Market efficiency	1.09

Note: Figures in the parenthesis indicates percentage to the of total consumer price

Table 2, shows that the overall charges incurred by the producer were Rs 9 per kg, while the retailer paid 6 rupees per kg in marketing costs. The marketable excess is 7.5 rupees; therefore, the producers obtain a net price of 58.5 rupees per kg. The retailer's purchase price from the producer was 75 rupees/kg, and the total cost spent by the retailer was 6 rupees/kg. The retailer's sale price to the customer was 90 rupees/kg, therefore the retailer margin after these costs was 9 rupees/kg. Price spread is 26 rupees per kilogram, and market efficiency is 1.09%.

		(Value in Rupees/kg)
S.N.	PARTICULARS	VALUE IN RUPEES
Α	Producer's sale price to Commission agent	70
1	Cost incurred by the Producers	
Ι	Dealing material cost	0.75
1	Packing material cost	(0.67)
п	Transportation cost	1.25
11	Transportation cost	(1.12)
III	Market cost	0.5
111	Warket cost	(0.45)
IV	Labour cost	0.3
1,	Labour cost	(0.27)
V	Loading and unloading charges	0.6
•	Loading and unloading charges	(0.54)
VI	Weighing charges	0.5
V #	thereining charges	(0.45)

Table 3: Marketing Cost, Marketable surplus and Price Spread in Different Size of Farms Group Channel – III = Producer – Commission agent/Wholesaler – Retailer – Consumer

VII	Miscellaneous charges	0.6 (0.54
VIII	Packing cost	1.5 (1.35)
2	Total cost (i-viii)	6 (5.4)
3	Marketable surplus	7
4	Net price Received by producer	57 (81.42)
5 6	Commission agent/wholesaler purchase price Cost incurred by commission agent/wholesaler	70
Ι	Loading unloading charges	1.25 (1.35)
II	Grading	1 (0.9)
ш	Packing	1.5 (1.35)
IV	Market fee	0.75 (0.67)
V	Loses and miscellaneous charges	0.5 (0.45)
VI 6 7 8	Total cost Wholesaler margin Sale price of commission agent /wholesaler to retailer Cost incurred by the retailers	5 7 82 (73.87)
I	Weighing charges	0.5 (0.45)
II	Loading and unloading charges	1 (0.9)
III	Town charges	0.6 (0.54)
IV	Carriage up to shop	1.35 (1.21)
V	Miscellaneous charges	0.55 (0.49)
9	Total cost	4
10	Retailer margin	25
11	Sale price of retailers to consumers	111
12	Price spread	36.93
13	Consumer paid price	111 (100)
14	Market efficiency	2.7

Note: Figures in the parenthesis indicates percentage to the of total consumer price.

Table 3, shows that the total expenses sustained by the producer were 6 rupees/kg, the marketable excess was 7 rupees/kg, and the net price obtained by the producer was 57 rupees/kg. The wholesaler's purchase price from the retailer was 70 rupees/kg, the wholesaler's total cost was 5 rupees/kg, and the wholesaler's sale price to the retailer was 82 rupees/kg, resulting in a 7 rupees/kg margin. The total cost incurred by the retailer was 4 rupees/kg as marketing expense, while the retailer's sale price to the customer was 111 rupees/kg, resulting in a 25 rupees/kg profit. However, the price spread is 36.9 rupees per kilogram, and market efficiency is 2.46%.

S. NO.	PARTICULAR S.	CHANNEL I	CHANNEL II	CHANNEL III	SAMPLE AVERAGE
1	Marketing cost	9	15	15	13
2	Marketable surplus	8	7.5	7	13.6
3	Market efficiency	1.11	1.09	2.7	4.33
4	Price spread	9	36.93	25	25.3

Table 4: Marketing cost, Marketable surplus, Marketing efficiency and Pricespread in all the channels

This result is supported by the review of Al Maruf, M. Azim, A. & Mukherjee S. rt. al(2020), Raman Jegadeesh et. al (2018), Sharma et al. (2017).

S.N.	PARTICULARS	Frequency	RANKING
1	Lack of storage facilities	64	II
2	Lack of regular market	37	IV
3	Lack of export facility	70	Ι
4	Lack of transportation facility	14	VII
5	Poor marketing facilities	42	III
6	Lack of knowledge about processing	9	VIII
7	Lack of consumer awareness	15	VI
8	Lack of education among people about nutritive values of mushroom	19	V

Table 5: Constraints in Marketing of Mushroom by Farm Families in differentsize of groups

Table 5, depicts the distribution of mushroom farmers in terms of the seriousness of the limitations experienced by them. The most important marketing constraints were identified as a lack of export facilities (70), followed by a lack of storage facilities (64), poor market facilities (42), a lack of a regular market (37), a lack of education among people about nutritional value (19), a lack of consumer awareness (15), a lack of transportation facility (14), and a lack of knowledge about processing (9). This conclusion is corroborated by the reviews of Kumar Santosh et al. (2019), Kumari & Singh D.P et al. (2018), and Gautam Ashok Kumar et al. (2015).

CONCLUSION

ΔGRi

The research conducted in Uttar Pradesh's Gorakhpur area focuses on the marketing of mushroom products and the need of focused interventions to promote farmer education awareness. Respondents' and socioeconomic characteristics include age, education level, household size, and monthly income. The research found three marketing channels: major producerconsumer. village merchants/retailersand producer-commission consumer, agent/wholesaler-retailer-consumer. The analysis discovered large marketing expenses and pricing spreads across distant wholesaler and retailer channels. Farmers emphasized a lack of export facilities, storage facilities, market access, consumer awareness, transportation facilities, and processing knowledge. The research also revealed marketing restrictions such as a lack of export and storage facilities, insufficient market facilities, and low customer awareness.

REFERENCES

- Sruti, M. and N.S. Shivalingegowda. 2015. Mushroom Marketing Channels and Consumer Behaviour: A critical analysis, Mysore Journal of Agricultural Sciences 49 (2); 390-393.
- Ferreira, Jorge A., et al. "Waste biorefineries using filamentous ascomycetes fungi: present status

and future prospects." *Bioresource Technology* 215 (2016): 334-345.

- Singh, Manjit, Shwet Kamal and V. P. Sharma. 2017. Status and trends in world mushroom marketing Research 26(1): 1-20.
- Poverenov, Elena, et al. "Potential of chitosan from mushroom waste to enhance quality and storability of fresh-cut melons." *Food Chemistry* 268 (2018): 233-241.
- **O'Brien, Brendan J., et al.** "Integrating anaerobic co-digestion of dairy manure and food waste with cultivation of edible mushrooms for nutrient recovery." *Bioresource technology* 285 (2019): 121312.
- Khoo, Shing Ching, et al. "Development of formaldehyde-free bio-board produced frommushroom mycelium and substrate waste." *Journal of Hazardous materials* 400 (2020): 123296.
- Jones, Mitchell, et al. "Leather-like material bio fabrication using fungi." *Nature Sustainability* 4.1 (2021): 9-16.
- Xu, Shuai, et al. "Upcycling from chitinwaste biomass into bioethanol and mushroom via solid-state fermentation with Pleurotus ostreatus." *Fuel* 326 (2022): 125061.
