STUDY ON MARKETING OF POTATO IN BEGUSARAI DISTRICT OF BIHAR

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ABSTRACT

This research paper examines the marketing channels of potatoes in the Begusarai District of Bihar, focusing on understanding the preferences of farmers and analyzing the associated marketing costs, efficiencies, and price spreads. The study employed a multi-stage sampling design to collect data from 210 farmers, revealing their channel preferences and the economic dynamics involved in each marketing channel. The findings indicate a predominant preference for Channel I, utilized by 49.04% of the respondents, due to its higher marketing efficiency and lower price spread compared to Channels II and III. The research highlights the complexities and trade-offs between direct and intermediary marketing strategies. It concludes with recommendations for enhancing the existing marketing frameworks by improving infrastructure, offering farmer education on advanced marketing tactics, and adapting policies to bolster economic outcomes for the farmers. This study's insights aim to contribute to the development of more sustainable agricultural practices and improved economic conditions in the region.

Keywords: Associate, Efficiency, Sampling, Predominant, Framework, Economy

INTRODUCTION

Farming is really important for India's economy because it helps the country make money and gives jobs to lots of people. Among various agricultural products, potatoes stand out due to their high yield per hectare and essential nutritional value. The marketing of agricultural produce, particularly potatoes, involves intricate channels that considerably affect the profitability and sustainability of farming practices. This research focuses on the marketing channels used by potato farmers in the Begusarai District of Bihar, a region noted for its agricultural productivity. Research shows that efficient marketing systems can enhance farmer incomes and reduce waste by narrowing the gap between producer prices and consumer spending. A study by *Birthal et al. (2005)* on the efficiency of marketing channels in Indian agriculture emphasizes how direct marketing channels can improve the share of farmers in the consumer's rupee (*Birthal, P. S., Jha, A. K., Tiongco, M. M., & Narrod, C.,*

2005). Furthermore, Minten et al. (2014) discuss the importance of understanding local marketing systems to improve the economic outcomes for farmers, which supports our focus on regional marketing channels *(Minten, B., Reardon, T., & Sutradhar, R., 2014).*

Our study adopts a multi-stage sampling design, targeting specific blocks and villages within the district and focusing on different market functionaries. This methodological approach follows the principles outlined by *Singh and Singla (2012),* who validate the efficacy of multi-stage sampling in capturing the complexities of agricultural marketing *(Singh, S. P., & Singla, N., 2012).*

This paper will give a detailed look at how much money is spent on marketing, efficiencies, and price spreads of three main marketing channels in Begusarai, contrasting these findings against broader trends in agricultural marketing across India. The research aligns with studies like those by Jumrani and *Birthal (2017),* who explore marketing channels' impact on agricultural productivity and farmer incomes across different Indian states *(Jumrani, J., & Birthal, P. S., 2017).*

By detailing the dynamics of these channels, this paper aims to enhance understanding and guide policy and operational decisions that could better support the region's potato farmers.

RESEARCH METHODOLOGY

Sampling Design: Our research employs a multi-stage sampling design to accurately capture the varied experiences and impacts of marketing strategies on Potato cultivation in the Begusarai District of Bihar. This area was purposively selected for its agricultural significance and the prevalence of Potato usage, aiming to understand the marketing impact on farmers' practices and yield improvements.

The sampling process involves several stages:

First Stage: Selection of the Begusarai District, noted for its agricultural practices.
Second Stage: Within the district, the Maithani block was chosen based on the diversity of its agricultural practices.
Third Stage: A random selection of villages within the block to ensure a representative demographic and agricultural sample.
Fourth Stage: Respondents are randomly selected within these villages, including growers, distributors, and local agricultural experts.
Fifth Stage: Focus on two key markets (primary and secondary) within the district to analyze marketing dynamics.
Sixth Stage: Selection of market functionaries randomly within these markets to gain insights into the market dynamics and Potato's market presence.

This design ensures a comprehensive representation across different layers of the market and agricultural community, facilitating an in-depth analysis of the marketing strategies' effectiveness and their impact on Potato cultivation in the region.

RESULT & DISCUSSION

Existing channel of Potato used by farmers in a study area.

Table 1 Channel Preference of Farmers (N=210)

S.No.	Channel Type	No. of Respondent	Percentage
1.	Channel I	103	49.04%
3.	Channel II	65	30.95%
4.	Channel III	42	20%
	Total	**210**	**100%**

Price Distribution in potato marketing of different identified marketing channels.

Table 2 Price distribution in potato marketing channel I.

S.No.	Particulars	Value in Rupees/Kg
1.	Producer's Price	10
	Incured Cost (wholesaler)	
i.	Packing cost	1
ii.	Packing material cost	2
iii.	Transportation cost	2
iv.	Labour cost	1
v.	Loading and Unloading cost	0.5
vi.	Miscellaneous charges	1.5
	Total cost (i-vii)	8
vii.	Margin of Wholesaler	5
2.	**Wholesaler sale Price to Retailer**	**23**
viii.	Packaging Cost	0.25
ix.	Transportation Cost	1
x.	Storage Cost	1.25
	Total cost (viii-x)	2.50
xi.	Margin of Wholesaler	4.5
3.	**Retailer sale price to consumers**	**30**
A.	**Total Marketing cost**	**10.5**
B.	**Total Market margin**	**9.5**
C.	**Marketing Efficiency**	**3.15**
D.	**Price Spread**	**1.90**

Table 3 Price distribution in potato marketing channel II.

S.No.	Particulars	Value in Rupees/Kg
1.	Producer sale price to Middleman	10
	Incurred Cost (Middleman)	
i.	Packing cost	1
ii.	Packing material cost	2
iii.	Transportation cost	3

S.No.	Particulars	Value in Rupees/Kg
iv.	Labour cost	2
v.	Loading and Unloading cost	1
vi.	Storage cost	2
vi.	Miscellaneous charges	2
Total cost (i-vii)		13
vii.	Margin of Middleman	6
2.	**Middleman sale price to Consumer**	**29**
A.	**Total Marketing cost**	**13**
B.	**Total Market margin**	**6**
C.	**Marketing Efficiency**	**2.23**
D.	**Price Spread**	**3.16**

Table 4 Price distribution in potato marketing channel III.

S.No.	Particulars	Value in Rupees/Kg
1.	Producer general sale price	10
	Incurred Cost (Producer)	
i.	Packing cost	1
ii.	Packing material cost	2
iii.	Transportation cost	1
iv.	Labour cost	2
v.	Loading and Unloading cost	1
vi.	Storage cost	2
vi.	Miscellaneous charges	3
	Total cost (i-vii)	12
vii.	Margin of Middleman	6
2.	**Producer sale price to Consumer**	**28**
A.	**Total Marketing cost**	**12**
B.	**Total Market margin**	**6**
C.	**Marketing Efficiency**	**2.33**
D.	**Price Spread**	**1.5**

DISCUSSION

Existing Marketing Channels

The study surveyed 210 farmers to identify their preferences among three distinct marketing channels. Channel I is the most preferred, used by 49.04% of the respondents, followed by Channel II with 30.95%, and Channel III, used by 20% of the farmers. This distribution suggests a significant reliance on Channel I, indicating it might offer better perceived or actual advantages to the farmers, such as accessibility, reliability, or profitability.

Marketing Costs, Efficiency, and Price Spread

Channel I involve a series of transactions from the producer to the wholesaler and then to the retailer. The total marketing cost here amounts to ₹10.5 per kg, which

includes costs incurred at various stages such as packing, transportation, and labor. The market margin—a measure of profitability from the wholesaler's perspective—is ₹9.5, and the marketing efficiency, calculated as the ratio of total market margin to the total marketing cost, is 3.15. The price spread, indicating the difference between the initial producer price and the final retail price, is ₹1.90, reflecting moderate value addition along this channel.

Channel II shows a different structure, where the producer sells directly to a middleman, who then sells to the consumer. This channel has higher total marketing costs at ₹13 per kg and a lower marketing efficiency of 2.23, suggesting less profitability per rupee spent on marketing compared to Channel I. The price spread in Channel II is ₹3.16, indicating a higher cost absorbed by the consumer relative to the initial producer price.

Channel III, which represents the producer selling directly to the consumer, exhibits the highest marketing costs among the three channels at ₹12 per kg but maintains a market margin of ₹6, similar to Channel II. The marketing efficiency here is slightly better at 2.33, compared to Channel II. The price spread is the smallest at ₹1.5, which suggests minimal cost additions beyond the producer's initial price, potentially making it the most consumer-friendly option among the three.

CONCLUSION

This research paper has successfully delineated the marketing channels of potatoes in Begusarai District, Bihar, providing insights into the preferences of farmers and the associated marketing costs, efficiencies, and price spreads. The findings reveal that Channel I is predominantly preferred by farmers, accounting for nearly half of the study's respondents, primarily due to its higher marketing efficiency and lower price spread, which suggests a favourable balance between cost-effectiveness and profitability.

While Channel I is preferred, Channels II and III also play significant roles, each presenting unique advantages and challenges. Channel II, despite its higher costs and lower efficiency, could be offering indirect benefits such as risk mitigation or credit solutions, which are not directly reflected in the marketing metrics. Conversely, Channel III, which facilitates direct sales from producers to consumers, though less favored, offers the lowest price spread, indicating minimal cost additions and a more transparent pricing structure.

The study underscores the need for strategic enhancements in marketing infrastructure and educational initiatives aimed at equipping farmers with advanced marketing knowledge and financial management skills. Such improvements can drive the optimization of all channels, potentially increasing profitability and sustainability in the region's agricultural sector. As market dynamics evolve, continuous adaptation and targeted policy interventions will be critical to supporting the economic viability of farmers in Begusarai.

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