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Market performance of paddy in Gonda district of Uttar Pradesh

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Abstract

In this paper examine the marketing efficiency, marketing cost, market margin and price spread in Gonda district of Uttar Pradesh. A multistage stratified purposive cum random sampling technique was applied for the selection of district, block, villages and respondents. Total 100 growers were selected randomly through proportionate allocation method in the population during 2022-23. The primary data were collected through survey schedule with the help of personal interviews. The objectives were achieved by using shepherd's formula for marketing efficiency. There are three types of marketing channels were observed in paddy marketing i.e., Channel-I (producer → consumer), Channel-II (producer → retailer → consumer) and Channel-III (producer → wholesaler → retailer → consumer). Overall maximum produce of paddy was sold by different group of farms through channel-III but the most efficient marketing is Channel I.

Keywords: Marketing efficiency, marketing pattern, marketing cost, price spread, producer's share in consumer rupee

Introduction

The economy of India and the mainstay of people's lives both depend heavily on agriculture. The agricultural state of Uttar Pradesh, which produces the most rice in the nation, formerly provided a sizeable portion of the grain to the central stockpile of food. In terms of area and production, Uttar Pradesh is ranked second, according to the Directorate of Economics and Statistics, DAC&FW. It produces 15.52 million tonnes per year over an area of around 5.74 million hectares. The agricultural produce in India is distributed from the producer to the consumer through a complex and interconnected network of markets. India's market system includes terminal distribution marketplaces in every metropolitan city or town, 7,000 wholesale assembly markets at the secondary stage, and 30,000 rural primary markets (Ramesh, 2018) [5].

Marketing is generally seen as a powerful multiplier and growth engine. A profitable rice marketing strategy reduces marketing costs while raising middleman profit, hence increasing the farmer's part of the consumer rupee. The final step in the farming process is marketing, in which the farmer converts all of his labour and capital into money. Any unfavourable treatment at this critical point will very certainly diminish the farmer's desire to continue investing in and maintaining the farm (Churpal *et al.*, 2015; Nirmala and Muthuraman, 2016) [1, 4]. The advent of regulated markets has resulted in significant changes in India's conventional agricultural market structure. A well-planned marketing strategy can help farmers produce significantly more cash. As a result, it is critical to compute marketing expenses, margins, and pricing spreads while promoting goods (Tawale *et al.*, 2009) [6].

Paddy farmers confront a number of marketing difficulties. Among the most important are higher marketing expenses, price changes, and as shortage of transportation. The bulk of rural markets lack the essential facilities—such as auction platforms, godowns, and warehouses—necessary for effective crop trade (Mohapatra *et al.*, 2018; Kshirsagar *et al.*, 2020) [3, 2]. All of these issues result in decreased agricultural revenue and a lower producer share of the consumer rupee for rice farmers. The present study covers the market performance of paddy in Gonda district of Uttar Pradesh. It intends to propose potential corrective measures to achieve the required improvement in paddy marketing.

Materials and Methods

The study was based on primary data which collected from Gonda district in which tarabganj mandi serving as major market for disposal of paddy in the study area was selected for studying the nature and magnitude of marketing costs and margin in the marketing of paddy. A multistage stratified purposive cum random sampling technique was applied for the selection of district, block, villages and respondent. Total 100 respondent (i.e., 49 marginal, 32 small and 19 medium) were selected randomly through proportionate allocation to the population during June-September, 2022. The main market functionaries engaged in the marketing of marketing in five villages (Karnipur, Rampur, Narayanpur, Girdhapur and Semra Jamalkhani) village traders, wholesaler/commission agent and retailers. Therefore, a list of all market functionaries involved in the marketing channel have been prepared and then a sample of 10 percent of all market functionaries have been randomly selected for the study of marketing aspect. Model Price was used for the study.

Marketable and marketed surplus

1. The marketable and marketed surplus of paddy generated by different size groups of farms have been worked out as follow:

$$MS = P - C$$

Where,

MS = Marketable surplus

P = Total production of crop

C = Total requirement (family consumption, seeds, payment of wages to labours, cattle feed, payments to service providers persons such as carpenter, blacksmith, barber, washer man etc.)

2. The marketed surplus indicates the actual quantity of produce sold by $MT = MS - L$

Where,

MT = Marketed surplus

MS = Marketable surplus actually sold

L = Losses during storage and transportation and spared for home consumption marketable surplus left for home.

Marketing efficiency was analysed with following Shepherd's formula:

$$\text{Marketing efficiency (ME)} = I/V * 100$$

Where,

V = Value of goods sold (Consumer's price)

I = Total marketing costs (MC)

Higher the ratio, the higher efficiency and vice-versa.

Price Spread

The difference between the price paid by the consumer and the net price received by producer was taken as the concept of spread. This included not only the actual prices at various stages of marketing channels, but also the costs incurred in the process of the movement of the produce from the farm to the consumer and the margin of the various intermediaries.

Marketing Margin

Marketing margins represent the difference between the price paid and received by a given market intermediary in the

marketing of a commodity such as wholesaler, retailer etc. What a farmer get ultimately for a product is the residual amount that remains after the costs and margins are accounted for in the consumer's rupee.

Marketing cost

The movement of the products from the producers to the ultimate consumers involve costs, taxes and cess which are called marketing costs. These costs vary with the channels through which a particular commodity (vegetable). Marketing costs indicate the extent of costs incurred in the movement of a commodity from producer to consumer.

Results and Discussion

Marketing channels, Marketing costs, Marketing margins and Price spreads

The price spread refers to the difference between the price paid by the consumer and price received by the producer for an equivalent quantity and quality of farm product. Marketing margins refers to the difference between the price paid and received by any specific marketing agency. Marketing costs refers to the actual expenses incurred by the marketing agencies engaged in the distribution process. The net margin received by different agencies at each point in the marketing process is determined by the marketing margins received and the costs incurred in handling, assembling, transportation etc. at respective points. Producer is interested in getting the highest share in consumer's rupees. The consumer on the other hand, is interested in paying the lowest possible price. The study of marketing margins assumes importance and significance because of referring to the marketing costs one can judge whether the spread of price in different directions is justifiable, equitable and necessary or not.

Moreover, study on marketing margins can be utilized to develop appropriate price policies for the farm products to fix marketing charges for some of the marketing functionaries and to judge the efficiency of marketing system. Thus, if the goods can be moved from the producer to consumer with the lowest cost and minimum economic wastes consistent with the provision of services of the consumer's desire, the marketing system can said to be efficient. In order to increase operational efficiency and rationalize the margins, costs and price spreads are essential. This study may be helpful in judging and rationalizing the marketing changes for different functionaries and the efficiency of marketing system. Therefore, study examines marketing margins and costs for different size group of farms in different channels. In the study area, three marketing channels were prevalent for marketing of paddy. which are as follows:

Channel - I: Producer → Consumer;

Channel - II: Producer → Retailer → Consumer; and

Channel - III: Producer → Wholesaler → Retailer → Consumer.

Per farm nature and extent of marketable and marketed surplus of paddy

Marketable and marketed surplus of paddy is the difference between the total production and consumption of paddy, including family consumption, retained for wage payment, stored for seed, retained for cattle feed, spread for payment to service man and demands, as well as losses during storage.

Per farm nature and extent of marketable and marketed surplus of paddy is presented in table 1

It is observed from table that marketable and marketed surplus were increasing with increase in size of sample farms. Marketable surplus was observed to be 10.13, 32.07 and 74.10 quintals on marginal, small and medium size group of

farms with overall average 29.31 quintals. Marketed surplus was observed to be 9.19, 29.29 and 57.76 quintals on marginal, small and medium size of sample farms, respectively with an overall average of 24.85 quintal. It may be concluded that paddy cultivation has a positive correlation with the size of farms in the study area.

Table 1: Per farm nature and extent of marketable and marketed surplus of paddy on different size group of farms (qtl.)

S. No.	Size of Farms	Total Production	Family Consumption	Retained for wage payment	Stored for seed	Retained for cattle feed	Spared for miscellaneous	Losses during stores	Total	Marketable Surplus	Marketed Surplus	Difference between Marketed & Marketable
1.	Marginal	18.86 (100.00)	5.72 (30.33)	1.62 (8.59)	0.48 (2.55)	0.66 (3.50)	0.19 (1.01)	0.06 (0.32)	8.73 (46.29)	10.13 (53.71)	9.19 (48.73)	0.94 (4.98)
2.	Small	54.25 (100.00)	12.43 (22.91)	6.52 (12.02)	0.61 (1.12)	2.04 (3.76)	0.48 (0.88)	0.10 (0.18)	22.18 (40.88)	32.07 (59.12)	29.29 (53.99)	2.78 (5.12)
3.	Medium	110.07 (100.00)	19.55 (17.76)	9.41 (8.55)	2.85 (2.59)	2.34 (2.13)	1.29 (1.17)	0.53 (0.48)	35.97 (32.68)	74.10 (67.32)	57.76 (52.48)	16.34 (14.85)
Overall		47.51 (100.00)	10.49 (22.09)	4.67 (9.82)	0.97 (2.05)	1.42 (2.99)	0.49 (1.04)	0.16 (0.34)	18.21 (38.32)	29.31 (61.68)	24.85 (52.30)	4.45 (9.38)

Note: Figures in parentheses show percent to total.

Disposal pattern of paddy through different channels of distribution

The total yield of paddy production on marginal, small and medium farms were 18.86, 54.25 and 110.07 quintals, respectively (table 1).

Disposal pattern of paddy through various channels, as producer → consumer, producer → retailer → consumer; and producer → wholesaler → retailer → consumer is given table 2.

Table 2: Disposal pattern of paddy through different channels on different size group of farms (qtl.)

S. No.	Size of group of farms	Channel - I	Channel - II	Channel - III	Total Quantity
1.	Marginal	2.26	5.91	10.69	18.86
2.	Small	5.74	18.13	30.38	54.25
3.	Medium	12.55	31.47	66.05	110.07
Total		20.55	55.51	107.12	183.18

This table indicates that the maximum sale of paddy was done through channel - III (107.12 qtl.) followed by channel - II (55.51 qtl.) and channel - I (20.55 qtl.), respectively. In respect to marginal farms, the maximum sale of paddy was routed through channel - III (10.69 qtl.), followed by channel

- II (5.91 qtl.) and channel - I (2.26 qtl.). In the case of small farms, the maximum sale of paddy was also done through channel - III (30.38 qtl.) followed by channel - II (18.13 qtl.) and channel - I (5.74 qtl.), respectively. In respect to medium farms, maximum sale of paddy was also done in the same manner as marginal and small farms *i.e.*, channel - III (66.05 qtl.) followed by channel - II (31.47 qtl.) and channel - I (12.55 qtl.), respectively.

Price spread, marketing costs, marketing margin and market efficiency of paddy:

A. Channel – I (Producer → Consumer)

The price spread (marketing cost + market margin) of paddy in the study area was worked out and depicted in table 3. It revealed from the table that the price spread came to Rs. 46.18, Rs. 49.89 and Rs. 55.06 per quintal on marginal, small and medium farms, respectively with accounted for 2.49, 2.71 and 2.98 per cent of the consumer’s price. On an average marketing cost incurred by the producer was worked out *i.e.*, Rs. 49.05 per quintal with accounted for 2.65 per cent of the consumer’s price which was charged for transportation, labour charge and loss during the sale. Producer’s share in consumer’s rupee was 97.35 per cent, as it was highest in comparison to the other three channels.

Table 3: Price spread for paddy marketing in Channel - I (Producer → Consumer) (Rs. / qtl.)

S. No.	Particulars	Size group of farms			
		Marginal	Small	Medium	Average
1.	Net price received by the producer	1809.52 (97.51)	1792.09 (97.29)	1790.66 (97.02)	1800.36 (97.35)
2.	Cost incurred by the producer				
(i)	Transportation	7.65 (0.41)	7.74 (0.42)	8.19 (0.44)	7.78 (0.42)
(ii)	Cost of bags	5.98 (0.32)	6.65 (0.36)	7.03 (0.38)	6.39 (0.35)
(iii)	Weighing charge	7.22 (0.39)	7.38 (0.40)	7.94 (0.43)	7.41 (0.40)
(iv)	Loading and unloading	8.14 (0.44)	8.33 (0.45)	9.01 (0.49)	8.37 (0.45)
(v)	Losses	2.50 (0.13)	2.75 (0.15)	4.56 (0.25)	2.97 (0.16)
(vi)	Other charges	14.69 (0.79)	17.04 (0.93)	18.33 (0.99)	16.13 (0.87)
(vii)	Total cost incurred by the producer	46.18 (2.49)	49.89 (2.71)	55.06 (2.48)	49.05 (2.65)
3.	Producer sale price / consumer purchase price	1855.70 (100.00)	1841.98 (100.00)	1845.72 (100.00)	1849.41 (100.00)
4.	Price spread	46.18 (2.49)	49.89 (2.71)	55.06 (2.98)	49.05 (2.65)

Figures in parentheses indicate percentage total of consumer’s price each size of sample

B. Channel – II (Producer → Retailer → Consumer)

It is observed from table 4 that the sale of paddy was made through producer → retailer → consumer. On an average, share in consumer’s rupee was worked out *i.e.*, 92.13 per cent, which was comparatively lower than channel - I because of one middlemen *i.e.*, the retailer involved. Expenses incurred on the marketing of paddy and margins received by retailer came to 2.06 and 3.38 per cent, respectively. Per quintal price received by marginal, small and medium farms were Rs.

1786.32, Rs. 1781.87, and Rs. 1762.55 however, the producer's share in consumers rupee was 92.99, 91.98 and 91.40 per cent, respectively. It also revealed from the table that the price spread came to Rs. 144.69, Rs. 155.28 and Rs. 165.77 per quintal on marginal, small and medium farms, respectively with accounted for 7.49, 8.02 and 8.60 per cent of the consumer’s price. On an average price spread was worked out *i.e.*, Rs. 152.08 per quintal accounted for 7.87 per cent.

Table 4: Price spread for paddy marketing in Channel – II (Producer – Village trader – Consumer) (Rs. / qtl.)

S. No.	Particulars	Size group of farms			
		Marginal	Small	Medium	Average
1.	Net price received by the producer	1786.32 (92.99)	1781.87 (91.98)	1762.55 (91.40)	1780.38 (92.13)
2.	Cost incurred by the producer				
(i)	Transportation cost	7.45 (0.39)	7.68 (0.40)	8.10 (0.42)	7.65 (0.40)
(ii)	Cost of bags	5.79 (0.30)	6.02 (0.31)	6.45 (0.33)	5.99 (0.31)
(iii)	Weighing charge	7.30 (0.38)	7.89 (0.41)	8.34 (0.43)	7.69 (0.40)
(iv)	Loading and unloading	7.52 (0.39)	7.83 (0.40)	8.48 (0.44)	7.80 (0.40)
(v)	Losses	3.66 (0.19)	4.25 (0.22)	4.74 (0.25)	4.05 (0.21)
(vi)	Other	12.57 (0.65)	14.52 (0.75)	15.97 (0.83)	13.84 (0.42)
(vii)	Total cost incurred by the producer	44.29 (2.31)	48.19 (2.49)	52.08 (2.70)	47.02 (2.43)
(viii)	Producer sale price / Retailer purchase price	1830.61 (95.29)	1830.06 (94.47)	1814.63 (94.10)	1827.40 (94.56)
3.	Cost incurred by the retailer				
(i)	Transportation	6.25 (0.32)	6.87 (0.35)	7.61 (0.39)	6.71 (0.35)
(ii)	Grading & Packaging	3.74 (0.19)	3.99 (0.21)	4.78 (0.25)	4.02 (0.21)
(iii)	Loading and unloading	6.38 (0.33)	6.72 (0.35)	5.20 (0.27)	6.26 (0.32)
(iv)	Market fee	10.41 (0.54)	10.76 (0.56)	10.80 (0.56)	10.60 (0.55)
(v)	Losses	2.78 (0.14)	2.85 (0.15)	3.26 (0.17)	2.89 (0.15)
(vi)	Other charges	8.97 (0.46)	9.52 (0.49)	9.89 (0.51)	9.32 (0.48)
	Total cost incurred by the retailer	38.53 (2.00)	40.71 (2.10)	41.54 (2.15)	39.80 (2.06)
4.	Retailer net margin	61.87 (3.20)	66.38 (3.43)	72.15 (3.74)	65.27 (3.38)
5.	Retailer sale price / consumer purchase price	1931.01 (100.00)	1937.15 (100.00)	1928.32 (100.00)	1932.46 (100.00)
	Price spread	144.69 (7.49)	155.28 (8.02)	165.77 (8.60)	152.08 (7.87)

C. Channel – III (Producer → Wholesaler → Retailer → Consumer)

Channel - III *i.e.*, producer → wholesaler → retailer → consumer was involved in the marketing of paddy. On an average, the share in consumer’s rupee was worked out *i.e.*, 87.76 per cent, which was comparatively lower than channel – I and II because of two middlemen *i.e.*, wholesaler and retailer involved. Expenses incurred on marketing costs at wholesalers and retailers were 1.33 and 2.72 per cent, respectively. Per quintal price received by marginal, small and

medium farms were Rs. 1762.68, Rs. 1742.10, and Rs. 1731.54 however, the producer's share in consumers rupee was 88.20, 87.70 and 87.20 per cent, respectively. It also revealed from the table 5 that the price spread came to Rs. 235.86, Rs. 244.43 and Rs. 254.10 per quintal on marginal, small and medium farms, respectively with accounted for 11.80, 12.30 and 12.80 per cent of the consumer’s price. On an average price spread was worked out *i.e.*, Rs. 239.84 per quintal accounted for 12.03 per cent.

Table 5: Price spread for paddy in Channel – III (Producer → Wholesaler → Retailer → Consumer) (Rs. / qtl.)

S. No.	Particulars	Size group of farms			
		Marginal	Small	Medium	Average
1.	Net price received by the producer	1762.68 (88.20)	1742.10 (87.70)	1731.54 (87.20)	1750.18 (87.76)
2.	Cost incurred by the producer				
(i)	Transportation cost	8.64 (0.43)	8.72 (0.44)	8.97 (0.45)	8.73 (0.44)
(ii)	Cost of bags	5.76 (0.29)	5.87 (0.30)	6.04 (0.30)	5.85 (0.29)
(iii)	Weighing charge	5.12 (0.26)	5.32 (0.27)	5.62 (0.28)	5.28 (0.26)
(iv)	Loading and unloading	7.21 (0.36)	7.35 (0.37)	7.57 (0.38)	7.32 (0.37)
(v)	Losses	2.33 (0.12)	2.41 (0.12)	2.65 (0.13)	2.42 (0.12)
(vi)	Other	12.96 (0.65)	12.59 (0.63)	13.04 (0.66)	12.86 (0.64)
(vii)	Total cost incurred by the producer	42.02 (2.10)	42.26 (2.13)	43.89 (2.21)	42.45 (2.13)
(viii)	Producer sale price / wholesaler purchase price	1804.70 (90.30)	1784.36 (89.82)	1775.43 (89.41)	1792.63 (89.88)
3.	Cost incurred by the wholesaler				
(i)	Grading & Packaging	3.51 (0.18)	3.87 (0.19)	4.18 (0.21)	3.67 (0.18)
(ii)	Market fee	8.95 (0.45)	9.24 (0.47)	9.49 (0.48)	9.08 (0.46)
(iii)	Loading and unloading	6.74 (0.34)	6.92 (0.35)	7.21 (0.36)	6.83 (0.34)
(iv)	Weighing charge	6.89 (0.34)	7.03 (0.35)	7.15 (0.36)	6.95 (0.35)
(v)	Total cost incurred by whole seller	26.09 (1.31)	27.06 (1.36)	28.03 (1.41)	26.53 (1.33)
(vi)	Whole seller margin	52.64 (2.63)	55.48 (2.79)	59.85 (3.01)	54.09 (2.71)
(vii)	Whole seller’s sale price / retailer purchase price	1883.43 (94.24)	1866.90 (93.98)	1863.31 (93.84)	1877.41 (94.14)
4.	Cost incurred by the retailer				

(i)	Transportation	8.59 (0.43)	8.75 (0.44)	9.02 (0.45)	8.67 (0.43)
(ii)	Loading and unloading	7.48 (0.37)	7.53 (0.38)	7.74 (0.39)	7.52 (0.38)
(iii)	Grading	4.97 (0.25)	5.24 (0.26)	5.44 (0.27)	5.08 (0.25)
(iv)	Weighing charge	6.51 (0.33)	6.81 (0.34)	7.23 (0.36)	6.66 (0.33)
(v)	Rent of shop/ rehire	10.41 (0.52)	10.87 (0.55)	11.20 (0.56)	10.60 (0.53)
(vi)	Losses	3.48 (0.17)	3.57 (0.18)	3.62 (0.18)	3.52 (0.18)
(vii)	Other charge	11.95 (0.60)	12.34 (0.62)	12.51 (0.63)	12.10 (0.61)
(viii)	Total cost incurred by retailer	53.39 (2.67)	55.11 (2.77)	56.76 (2.86)	54.16 (2.72)
(ix)	Retailer margin	61.72 (3.09)	64.52 (3.25)	65.57 (3.30)	62.79 (3.15)
(x)	Retailer sale price / consumer purchase price	1998.54 (100.00)	1986.53 (100.00)	1985.64 (100.00)	1994.36 (100.00)
	Price spread	235.86 (11.80)	244.43 (12.30)	254.10 (12.80)	239.84 (12.03)

Marketing efficiency of paddy

The marketing efficiency of paddy under different marketing channels has been presented in Table: 6.

Table 6: Marketing efficiency of paddy in a different channel

Channel	Value of paddy sold (Rs. / qtl.) (consumer's price)	Gross marketing margin (Rs. / qtl.) (Cost + margin)	Marketing Efficiency
I	1849.41	49.05	36.70
II	1932.46	152.08	11.71
III	1994.36	239.84	7.32

Marketing efficiency is maximum in channel- I (36.70 per cent) followed by channel-II (11.71 per cent) and channel-III

(7.32 per cent). Therefore, it is concluded that as the no. of intermediaries increase marketing costs, marketing margins increase thus price spread increase. That results price spread is higher and marketing efficiency is lower. Maximum profit is received in channel-I.

Producer's share in consumer's rupee, marketing costs and middlemen margins of paddy under different channel

Table: 7 shows producer's share in consumer's rupee, (in percent), marketing costs (Rs./q.) and middlemen margins (Rs./q.) of different marketing channel in paddy marketing. The producer's share in consumer's rupee was found maximum 97.35 per cent in Channel-I followed by 92.13 per cent and 87.76 per cent in case of Channel-II and Channel-III, respectively.

Table 7: Producer's share in consumer's rupee, marketing costs, and middlemen margins of paddy in different channel

Particulars	Channel		
	I	II	III
Producer' share in consumer's rupee (%)	97.35	92.13	87.76
Marketing cost (Rs./qtl.)	49.05	86.82	123.13
Middlemen margins (Rs./qtl.)	0.00	65.27	116.87

Marketing costs per quintal were found maximum Rs. 123.13 in channel - III followed by Rs. 86.82 under channel - II and Rs. 49.05 under channel - I.

Middlemen margins were estimated Rs. 65.27 and Rs. 116.87 per quintal under channel - II and channel - III, respectively.

Conclusion

Marketing of paddy assumes great significance from the producer's as well as consumer's point of view. We have emphasized the marketing of paddy. Hence, this study has examined the marketing costs, market margins, market efficiency and price spread of paddy in Gonda district market. Three types of marketing channels were observed in paddy marketing i.e., Channel - I (producer → consumer), Channel - II (producer → retailer → consumer) and Channel - III (producer → wholesaler → retailer → consumer). Overall maximum produce of paddy was sold by different group of farms through channel - III. Marketing cost was maximum in channel - III as compared to other channels while producer's share in consumer's rupee was maximum in channel - I and was minimum in channel - III.

The family use of paddy was observed to be 5.72, 12.43 and 19.55 quintals on marginal, small and medium size group of farms, respectively and marketable and marketed surplus were observed to be 10.73 & 9.19 quintals on marginal, 32.07 & 29.29 quintals on small and 74.10 & 57.76 quintals on

medium farms, respectively. Total disposal of paddy was 183.18 quintals out of which disposal of paddy by channel - I, channel - II, channel - III, came to 20.55, 55.51 and 107.12 quintals, respectively. On overall average, net price received by the producer under channel - I, II and III was ₹ 1800.36, ₹ 1780.38 and ₹ 1750.18 per quintal, respectively. The highest net price received under channel - I due to farmers was to sell produce directly to the consumer in the local area. By comparing gross marketing margins was found maximum 239.84 per cent in channel - III followed by 152.08 per cent and 49.05 per cent in channel - II and channel - I, respectively. The marketing efficiency of paddy under channel - I (36.70 per cent) was found more efficient as compared to channel - II (11.71 per cent) and channel - III (7.32 per cent) because no middlemen were found in channel - I. The producer's share in consumer rupee was found maximum in paddy 97.35 per cent in channel I followed by 92.13 per cent and 87.76 per cent under channel - II and channel - III, respectively.

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