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Marketing of Agricultural Crops in Rural Indian Economy: A Case Study

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Abstract

The marketing of agricultural crops plays an important role not only in stimulating production and consumption, but also in accelerating the pace of economic development. It is not only an economic link between the producers and consumers; it maintains a balance between demand and supply. Study examined the transaction of agricultural crops through rural markets and the price structure of different crops in rural markets of Ambedkarnagar District. It also highlighted the composition and structure of sellers and traders engaged in the marketing process.

Local rural markets are the best option for the marginal and small farmers to dispose off their perishable surplus to get quick returns. Due to the lack of good infrastructural facilities in the study area, most of the farmers prefer local rural markets instead of going to the specialised markets or near-by town area. The variation in the transaction of agricultural produce is mainly due to a number of factors like higher market demand, accessibility, nature of produce, transportation facility, market-size, fair price, and so on. The average price of individual crop also varies from market to market due to the various socio-spatial factors.

Keywords: Marketing, Agricultural crops, Rural economy, Rural markets

1. Introduction

Marketing is the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of the ultimate consumer (Khols, 1967). Agricultural marketing system in broader terms may be defined as physical and institutional setup to perform all activities involved in the flow of products and services from the point of initial agricultural production until they are in the hands of ultimate consumers. Rural market systems play a crucial role in the economic development of the area they serve. It is through the marketing systems that goods articulate and complete the circle from production to ultimate consumption. Produce change hands from the point of production to the destination of ultimate consumption. The longer the route from production to consumption, the higher becomes the price range of goods. Higher the price range lesser is the profit of the primary producer.

Marketing for consumption starts from wholesalers to consumers through retailing. However, the nature of the system will vary according to the type of produce. Goods produced in factories need a different marketing system. In this case, the process of collection is very short as the goods are produced in large quantity at a single point. It needs a chain of agencies, wholesalers, distributors and retailers, etc. In case of agricultural products, the process of collection may need a longer chain. It is because agricultural production is scattered. From farm to wholesalers, there is a wider spatial gap. Most agriculturalists produce a small surplus. The scattered nature of the produce necessitates several channels of collection. Agricultural produce may reach the collection point through farmers themselves, through small traders who act as collecting agents, through these rural markets, through public collecting agencies, etc. It is here that the role of these small but effective trading points (rural markets) is highlighted. These markets, therefore, act as magnates for attracting horizontal and vertical trade. Through horizontal trading, the process of collection starts. The process of collection and distribution of goods is organised through what is termed as marketing system (Shrivastava, 2008).

An efficient marketing system ensures higher levels if income for the farmers reducing the number of middlemen or by restricting the cost of marketing services and the malpractices. It guarantees the farmers

better prices for farm products and induces them to invest their surpluses in the purchase of modern inputs so that productivity and production may increase. This again results in an increase in the marketed surplus and income of the farmers. If the producer does not have an easily accessible market-output where he can sell his surplus produce, he has little incentive to produce more. The need for providing adequate incentives for increased production is, therefore, very important, and this can be made possible only by streamlining the marketing system (Acharaya & Agarwal, 2010).

1.1 Objectives

Taking into consideration the importance of agricultural marketing system in developing economy, the study has been undertaken with the following objectives:

a) To analyse the transaction of agricultural crops through rural markets.

b) To highlight the price structure of different crops in rural markets.

c) To examine the composition and structure of sellers and traders engaged.

1.2 Database and Methodology

The study is entirely based on primary source of data collected though field survey in the year 2009-10 through direct questionnaire method using stratified random sampling technique. One rural market from each development block has been selected for detailed study and from each rural market, 50 percent commodity-wise sellers and traders were interviewed for detailed information regarding transaction, marketing channels, price of different agricultural crops and the composition and structure of sellers and traders.

1.3 Study area

For the study, the district of Ambedkarnagar in the North Indian state of Uttar Pradesh has been selected as study area, taking into consideration its economic backwardness, agricultural base as well as presence of large number of rural market centres. It forms a part of Ghagra basin and lies between 26^{o} 09' N and 26^{o} 40' N latitudes and between 82^{o} 12' E and 83^{o} 05' E longitudes. The study area occupies an area of 2,361 sq km and has a population of 2,026,876. About 91 percent population lives in villages whose main occupation is agricultural farming. About 1,677 sq km (71.03 %) of the total land area of the district are agricultural lands. Administratively, the district has 4 sub-divisions and 9 development blocks. The district has 1780 revenue villages as well as 232 rural markets.

2. Discussion

2.1 Transaction of Different Agricultural Crops in Rural Markets

Table 1 & 2 shows the quantity as well as proportion of marketable arrival of different agricultural crops in the selected rural markets. Study shows that the total arrival of agricultural crops in the selected markets is 4841.90 metric tonnes in 2009-10. Vegetables are accounted for highest marketable surplus i.e. 2056.10 metric tonnes, sharing 42.46 percent of total transaction. It is followed by wheat (1007.30 metric tonnes), paddy (825.40 metric tonnes), fruits (489.90 metric tonnes), oilseeds (330.10 metric tonnes) and pulses (133.10 metric tonnes), with a share of 20.80 percent, 17.05 percent, 10.12 percent, 6.82 percent and 2.75 percent respectively.

The highest proportion of vegetables among different marketable surplus is due to its very perishable nature and high local demand for daily food requirements. Perishability and freshness is the major factors, which discourage the sellers to cover long distances for their transaction. Local rural markets are the best option for the marginal and small farmers to dispose off their perishable surplus to get quick returns. Generally, sellers and traders cover distance ranging between 1-7 kilometres to sell off their products. Due to the lack of good transportation, storing, freezing and marketing facilities in the study area, most of the farmers prefer local rural markets instead of going to the specialized markets or mandis or near-by town area. Study

found market-to-market variation from 19 percent to 60 percent in the proportion of transacted vegetables. This variation in vegetable transaction is mainly due to a number of factors like higher market demand, accessibility, transportation facility, market-size, fair price and so on.

Wheat and paddy are the most important crops occupying second (20.80 %) and third (17.05 %) place in the transactional crops in these markets. They are the leading crops in cultivation and production in the study area, but a major part of their production is carried out for selling into the regulated markets and other agencies. Remaining surplus is saved for future needs by the market participants, and sells throughout the year from time to time in meager quantity, for getting cash for their daily requirement and living.

Next to wheat and rice are fruits and oilseeds, with a total share of 10.12 percent and 6.82 percent respectively. However, their low proportion but high market demand compels the producers to dispose off their surplus into the rural markets. The proportion of pulses is very low in the transacted crops, with just 2.75 percent. It is mainly due to the fact that out of total net sown area of district, only 7.30 percent area (i.e. 11,737 hectares) is dedicated to the pulse cultivation. Inspite of this, it is the most demanded nutritional crop of the study area. Due to high market demand and higher prices, most of the producers prefer to keep a major part of their production for their personal use and for future sell off. Whereas, they dispose off the remaining surplus either into the regulated markets or to the rural markets.

2.2 Price Structures of Major Agricultural Crops in Selected Rural Market

In the rural markets, the prices of commodities are affected by the location of markets, characteristics of the hinterland, nature of demand, supply of goods, durability of commodities, accessibility and transportation cost. Table 3 highlights the average annual retail prices of major agricultural crops, during 2009-10 in the selected rural markets. The average price for wheat is Rs 12.61 per kg and for paddy Rs 15.99 per kg. The average price of pulses varies according to the kind of pulses, from Rs 80.29 per kg for red gram to Rs 22.00 per kg for peas. Similarly, the average price of oilseeds varies for linseed, mustard and sesame i.e. Rs 42.20 per kg, Rs 20.21 per kg and Rs 20.14 per kg respectively.

Table 4 shows the market-wise price structure of vegetables and fruits in the selected markets. The average price of individual crop also varies from market to market. It is mainly due to the several factors like location of market, nature of supply and demand, road connectivity from cultivation area, characteristics of the market hinterland, transportation cost, seasonal effects, and the socio-economic condition of market participants. Apart from these, there are many more socio-spatial factors, which affect the price structure of these agricultural crops in the rural markets.

2.3 Participation of Crop Producer and Non-Producer Sellers

Rural markets are generally a system of direct marketing, which is essentially economical for both producer sellers and consumers. In these markets, there are two types of sellers i.e. producer seller and non-producer seller or village trader. The producer who gets higher price for their commodities realizing middlemen's profit, sell relatively at lower price than the retail price prevailing in near-by town markets. The selling traders, though not getting similar profit as the producer seller, also get handsome profit. It is because he brings the commodities from the villages at lower price (Khan, 1991).

The sellers who are involved in the transaction of different agricultural crops such as wheat, paddy, vegetables, pulses, fruits and oilseeds are called crop-sellers. Generally, agricultural crop sellers are of two types, viz., producer seller and non-producer seller. Table 5 reveals the participation of producer sellers and non-producer sellers to the total crop sellers in the selected rural markets. Out of total crop sellers and traders present in the selected market, the non-producer sellers have recorded high participation i.e. 69.99 percent, whereas the crop producer sellers share only 30.01 percent. The average participation of crop non-producer sellers have been recorded high due to the prevailing unemployment and underemployment in the study area. Nearly 75 percent workforce in the study area is engaged in agriculture activities but majority of them are marginal workers (District Statistical Magazine, 2009-10).

They sell different crops into the rural markets for their livelihood or to supplement their income to sustain their lives. Their proportion varies from market to market, from 39.10 percent in Deoria to 80.73 percent in

Bandipur. Most of them purchase these marketable commodities directly from the producers or regulated markets at a much-subsidized rate to dispose off into the rural markets. However, the participation of producer sellers (30.01 %) is not homogenous in the selected rural markets. It also varies from market to market between 19.27 percent in Bandipur to 60.90 percent in Deoria. Majority of the producer sellers who are engaged in the transaction of agricultural commodities are belong to marginal and small farmers.

2.4 Holding-Wise Participation of Crop Producer Seller

Size of holding and participation of producer sellers in the rural markets has inverse relationship, i.e., higher concentration of producer sellers belong to lower size of land holdings (Khan *et al*., 2006). Table 5 highlights the holding wise participation of producer sellers in selected markets. It indicated different categories of landholders such as landless and marginal farmers (below 1 hectare), small farmers (1-2 hectares), semi-medium farmers (2-4 hectares), medium farmers (4-10 hectares) and big farmers (above 10 hectares). Study shows that more than 93 percent crop producer sellers belong to marginal, small and semi-medium categories of farmers who have holding less than 4 hectares while only 6 percent are from medium and big farmers (above 4 hectares).

3. Conclusion

The study of agricultural marketing in the study area shows that most of the agricultural surplus is marked within the district itself. The highest proportion of vegetables among different marketable surplus is due to its very perishable nature and high local demand for daily food requirements. Local rural markets are the best option for the marginal and small farmers to dispose off their perishable surplus to get quick returns. Due to the lack of transportation and infrastructural facilities, most of the farmers prefer local rural markets instead of going to the specialized markets or near-by town area. Wheat and rice are also the principal crops in cultivation and production, but a large proportion of their production is carried out for selling into the specialized markets whereas remaining surplus is saved for selling throughout the year for their future needs. In addition, the prices of agricultural crops are mainly affected by the location of markets, nature of the hinterland, nature of demand and supply, durability of crops, accessibility and transportation cost.

The peasants are more or less independent and work on individualistic basis. Rural markets are only place for the farmers to dispose off their surplus when they are in immediate need for money. Among different crop sellers, the average participation of non-producer sellers have been recorded high mainly due to the prevailing unemployment and underemployment in the study area. They sell different crops into the rural markets for their livelihood or to supplement their income to sustain their lives. Whereas among the crop producer sellers, majority of them belongs to the marginal, small and semi-medium categories, having very small land holdings. Indebtedness of farmers generally compels them to sell their surplus at distress rate offered by traders who loaned money during pre-harvest period. In general, the marketing of agricultural commodities in the study area is facing a number of difficulties. Organizational as well as infrastructural facilities are lacking. There is an urgent need to reduce these problems, which will help the framers, thereby helping in agricultural development of the district.

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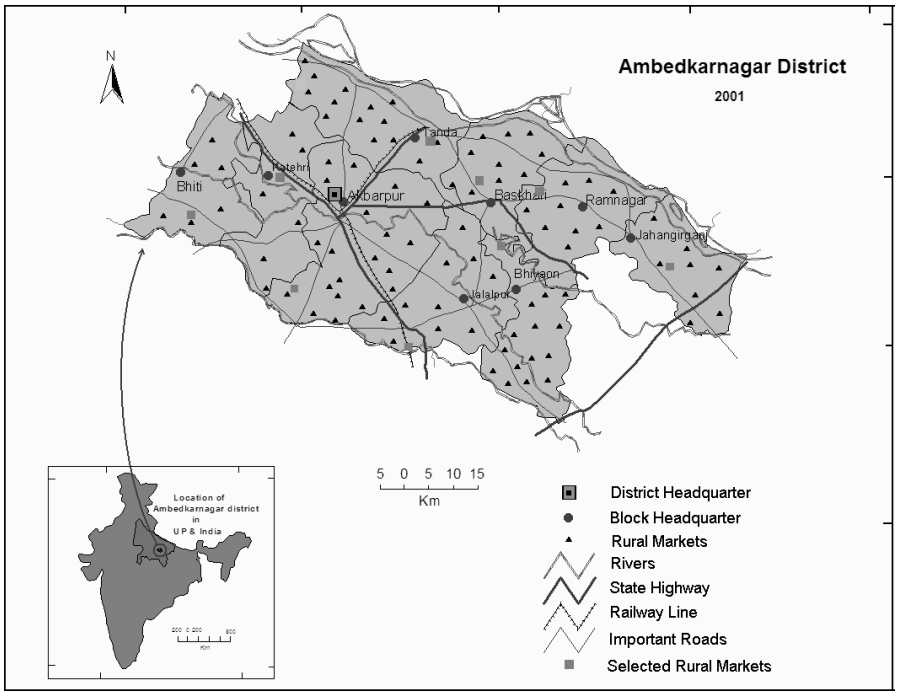

Fig 1. Location Map of Study Area

Table 1. Transaction of Different Crops in Selected Rural Markets, 2009-10

Source: Field Survey, 2009-10

❖ Figure shows weight in metric tonnes.

S. no.	Rural Markets	Wheat	Paddy	Pulses	Oilseeds	Vegetables	Fruits	All
1.	Mijhoura	78.1	67.1	5.1	22.3	85.0	38.1	295.7
2.	Pratappur	132.0	91.3	19.0	55.4	165.0	79.9	543.3
3.	Kurki Bazaar	58.9	73.0	7.2	24.0	46.0	32.0	241.1
4.	Mubarakpur	201.6	187.0	38.6	75.0	523.0	105.4	1130.6
5.	Hanswar	176.5	85.5	22.8	61.0	656.0	85.5	1087.6
6.	Indiapur	51.8	35.7	3.3	15.5	57.7	23.3	187.3
7.	Deoria	43.3	56.8	2.9	11.5	122.0	19.2	255.7
8.	Malipur	185.1	155.2	30.2	48.8	302.4	65.8	787.5
9.	Bandipur	80.0	73.8	4.0	16.6	98.0	40.7	313.1
	Total	**1007.3**	**825.4**	**133.1**	**330.1**	**2056.1**	**489.9**	**4841.9**

Table 2. Proportion of Different Crops in Selected Rural Markets, 2009-10

S. no.	Rural Markets	Wheat	Paddy	Pulses	Oilseeds	Vegetables	Fruits	Total (%)
1.	Mijhoura	26.41	22.69	1.72	7.54	28.75	12.88	100.00
2.	Pratappur	24.30	16.80	3.50	10.20	30.50	14.71	100.00
3.	Kurki Bazaar	24.43	30.28	2.99	9.95	19.08	13.27	100.00
4.	Mubarakpur	17.83	16.54	3.41	6.63	46.26	9.32	100.00
5.	Hanswar	16.23	7.86	2.10	5.61	60.34	7.86	100.00
6.	Indaipur	27.66	19.06	1.76	8.28	30.81	12.44	100.00
7.	Deoria	16.93	22.21	1.13	4.50	47.71	7.51	100.00
8.	Malipur	23.50	19.71	3.83	6.20	38.40	8.35	100.00
9.	Bandipur	25.55	23.57	1.28	5.30	31.30	13.00	100.00
	Average	**20.80**	**17.05**	**2.75**	**6.82**	**42.46**	**10.12**	**100.00**

Source: Field Survey, 2009-10

❖ Figure shows percentage to total crop transaction.

Table 3. Price Structures of Major Agricultural Crops in Selected Rural Market, 2009-10

S. no.	Rural Markets	Wheat	Paddy	Pulses						Oilseeds		
				Red Gram	Green Gram	Gram	Black Gram	Lentil	Peas	Mustard	Linseed	Sesame
1.	Mijhoura	12.75	16.10	80.00	55.00	35.00	60.00	60.00	22.50	20.00	42.50	19.30
2.	Pratappur	12.30	16.20	79.50	55.00	35.50	58.00	60.00	22.00	20.50	41.50	19.50
3.	Kurki Bazaar	12.60	16.50	80.00	54.50	35.20	59.00	59.50	21.80	19.80	42.00	20.00
4.	Mubarakpur	12.40	15.80	79.60	55.00	35.00	60.00	60.00	22.00	20.00	42.00	20.40
5.	Hanswar	12.25	16.00	80.10	56.00	34.40	59.20	59.50	22.50	20.20	43.00	20.50
6.	Indaipur	13.00	16.10	81.10	54.80	35.00	60.20	61.00	22.00	20.40	42.70	19.80
7.	Deoria	12.50	15.70	80.50	55.30	35.50	60.00	60.00	21.50	19.50	41.60	21.00
8.	Malipur	12.50	15.60	79.80	55.10	34.50	59.00	60.00	21.00	20.00	42.50	20.80
9.	Bandipur	13.20	15.90	82.00	55.20	34.80	59.50	60.50	22.70	21.50	42.00	20.00
	Average	**12.61**	**15.99**	**80.29**	**55.10**	**34.99**	**59.43**	**60.05**	**22.00**	**20.21**	**42.20**	**20.14**

Source: Field Survey, 2009-10

- Figure shows retail price in rupee per kg.
- At the time of survey, 1 US dollar = 45.65 Indian rupees.

Table 4. Price Structures of Vegetables and Fruits in Selected Rural Market, 2009-10

S. no.	Rural Markets	Vegetables										Fruits				
		Onion	Potato	Bottle Gourd	Brinjal	Cauliflower	Ridge Gourd	Tomato	Garlic	Coriander	Chilli	Mango	Guava	Papaya	Melon	Musk Melon
1.	Mijhoura	12.00	5.50	15.00	13.50	12.10	12.50	19.00	40.00	24.00	17.50	20.00	12.50	25.00	8.10	14.60
2.	Pratappur	12.30	5.10	14.00	13.30	11.60	12.30	19.30	40.20	24.20	17.00	18.50	13.00	26.30	6.85	15.00
3.	Kurki Bazaar	12.00	5.30	15.20	14.20	11.50	12.00	19.50	38.00	24.00	16.20	19.30	12.50	25.50	7.25	15.50
4.	Mubarakpur	12.50	5.50	14.60	14.00	11.00	12.00	20.00	39.60	23.70	15.80	20.00	11.90	24.80	8.00	14.40
5.	Hanswar	12.50	5.00	14.50	13.50	12.00	11.00	21.00	40.00	24.00	16.50	21.10	12.00	24.70	7.50	15.20
6.	Indaipur	12.80	6.00	15.00	14.50	12.30	11.60	20.50	38.55	23.00	16.63	18.90	13.40	25.40	6.90	15.00
7.	Deoria	11.50	5.80	14.00	13.80	12.00	12.00	20.90	39.00	24.80	17.00	19.50	12.50	26.50	8.00	15.40
8.	Malipur	12.10	5.00	15.30	14.00	11.50	11.50	19.50	39.50	23.60	15.90	20.00	11.50	25.00	7.40	14.60
9.	Bandipur	11.80	6.50	15.50	13.90	12.00	11.60	19.70	40.00	25.00	16.40	19.80	12.70	24.35	6.80	14.50
	Average	**12.17**	**5.52**	**14.79**	**13.85**	**11.78**	**11.83**	**20.83**	**39.43**	**24.03**	**16.55**	**19.68**	**12.44**	**25.28**	**7.42**	**14.91**

Source: Field Survey, 2009-10

- Figure shows retail price in rupee per kg.
- At the time of survey, 1 US dollar = 45.65 Indian rupees.

Table 5. Participation of Crop Producer and Non-Producer Sellers in Selected Rural Markets, 2009-10

S. no.	Rural Markets	Producer Sellers	Non-Producer Sellers	All Traders
1.	Mijhoura	93 (58.13)	67 (41.88)	160 (100)
2.	Pratappur	79 (26.78)	216 (73.22)	295 (100)
3.	Kurki Bazaar	23 (20.72)	88 (79.28)	111 (100)
4.	Mubarakpur	154 (26.19)	434 (73.81)	588 (100)
5.	Hanswar	161 (30.26)	371 (69.74)	532 (100)
6.	Indaipur	64 (25.30)	189 (74.70)	253 (100)
7.	Deoria	81 (60.90)	52 (39.10)	133 (100)
8.	Malipur	97 (27.25)	259 (72.75)	356 (100)
9.	Bandipur	42 (19.27)	176 (80.73)	218 (100)
	Total	**794 (30.01)**	**1852 (69.99)**	**2646 (100)**

Source: Field Survey, 2009-10

❖ Figure in brackets shows percentage to total crop sellers.

Table 6. Holding wise Distribution of Crop Producer Sellers in Selected Rural Markets, 2009-10

S. no.	Rural Markets	Below 1 Hectares	1-2 Hectares	2-4 Hectares	4-8 Hectares	Above 8 Hectares	All
1.	Mijhoura	65 (69.89)	17 (18.28)	09 (9.68)	02 (2.15)	-	93 (100)
2.	Pratappur	54 (68.35)	12 (15.19)	06 (7.59)	04 (5.06)	03 (3.80)	79 (100)
3.	Kurki Bazaar	14 (60.87)	04 (17.39)	04 (17.39)	01 (4.35)	-	23 (100)
4.	Mubarakpur	94 (63.64)	30 (19.48)	19 (12.34)	10 (6.49)	04 (5.60)	154 (100)
5.	Hanswar	96 (59.63)	29 (18.01)	21 (13.04)	09 (5.59)	06 (3.73)	161 (100)
6.	Indaipur	44 (68.75)	12 (18.75)	05 (7.81)	02 (3.13)	01 (1.56)	64 (100)
7.	Deoria	57 (70.37)	13 (16.05)	08 (9.88)	03 (3.70)	-	81 (100)
8.	Malipur	62 (63.92)	18 (18.56)	10 (10.31)	04 (4.12)	03 (3.09)	97 (100)
9.	Bandipur	29 (69.05)	08 (19.05)	04 (9.52)	01 (2.38)	-	42 (100)
	Total	**515 (64.86)**	**143 (18.01)**	**86 (10.83)**	**36 (4.53)**	**17 (2.14)**	**794 (100)**

Source: Field Survey, 2009-10

❖ Figure in brackets shows percentage to total producer sellers.