



Research Article

MARKET INFORMATION SYSTEM FOR BASMATI RICE IN KARNAL DISTRICT OF HARYANA

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Abstract- Basmati Rice is a suitable crop in Karnal district, which was selected purposively. Assandh and Karnal Blocks were selected purposively on the basis of maximum production under Basmati Rice. Further, Karnal, Gharunda, Taraori and Assandh markets were selected for the market study. Finally, 60 farmers from two blocks and 40 traders from four regulated markets of Karnal district were randomly selected. On the basis of nature, extent, sources, utilization and expectations of a market information system by farmers, traders and official's simple averages, percentages *etc.* were used for the data. From the findings of the research study in Karnal district farmers, awareness on prices and arrivals in other markets was (I-Rank) and (II-Rank) Market Information System (MIS) Adopters and Non Adopter farmers in reference market was I-Rank and II-Rank. Contacts in other markets and fellow traders formed major sources of market information in Karnal district. About 86.7% of farmers expressed that market information was not available in required form in Karnal district. Farmers have also faced difficulty on accessibility aspects (70%).

Keywords- Karnal, Marketing information system, Regulated market, Trader.

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Introduction

Marketing pertains to customers in addition to any other business function, where building customer relationship based on customer worth and agreement is the heart of modern marketing [1]. Marketing is the process of adding value to the product beside distributing, promoting, and selling the products, services and ideas to make easy satisfying exchange relationship with customers in a lively environment [2]. Market information is defined as "A service usually operated by the public sector involves the collection of information on a regular basis and large number of quantities and extensively moved from rural assembly markets to the wholesale and retail markets and dissemination of this information on appropriate and regular basis to farmers, traders, government officials, policy makers and others including consumers through various media" [3]. It is essential to the farmers to make knowledgeable decisions as regards what to grow, when to harvest, to which market produce should be sent and whether to retain and sell. At present, the information is provided to different markets and the farmers through various media, *i.e.*, radio, newspapers, blackboard display, *etc.*, "Basmati" is grown for many centuries in the specific geographical area of the Himalayan foot hills of Indian sub-continent with uniqueness *extra-long* slender grains having twice of their original size with a characteristics soft and downy quality upon cooking, delectable taste, better-quality aroma and distinct flavor. Basmati Rice is grown, currently, in an area of 8.15 lakh hectare with production of 22.13 lakh tones and productivity 27.16 q/ha during 2014-2015. Punjab has contributed nearly 76% of its rice production to the central pool during the last four decades. The marketed surplus of paddy was quite high to the extent of 99%. The study revealed that per holding the debt of the selected farmers was Rs 1,71 lakh. The maximum arrival of paddy in the regulated markets of the state was in the month of October in all the years (1997-98 to 2007-08). The paddy price was almost equal to the MSP in the post-harvest months (September to December) and in most of the paddy post-harvest period (1997-98 to 2007-08). None of the selected farmers in the study area were opinioned in favors of staggered public

procurement of 1 paddy due to storage and other problems at the farm level. The public procurement agencies have also practical limitations to operate in the grain markets throughout the year for the procurement of the paddy in the state. Such a step will add to the procurement price and the burden of food subvention to be borne by the Union Government. Above all, from the point of view of food security of the country, it is not desirable to have staggered public procurement because rice is the most important cereal crop in India. Therefore, keeping in view the scenario at the farm and market level, it is not practicable to have staggered public procurement of paddy in Punjab [4]. The market price information helps in agricultural value chain to make informed decisions, which will promote efficient production doing the business. It is especially helpful for the producers that sell in local and regional markets and also helps producers to negotiate with traders, determine what markets to sell, store their crops until price increases or even arrangement for future crops [5]. [6] Studies that the Agricultural Marketing Information System (AMIS) helps in reducing business risks of farmers, sellers and traders. In spite of this there is lack of consistency, duplication of efforts, poor network for information flow, lack of coordination and integration among various agencies are some of the limitations of Market Information System [7]. Therefore, the present studies entitled 'Market Information System for Basmati Rice in Karnal district of Haryana' has been planned with the specific objectives as follows:

1. To study the existing market information system for Basmati rice crop in Karnal district of Haryana.
2. To study the pattern and extent of dissemination and utilization of existing formal information by stakeholders, and
3. To identify the constraints in the existing formal information system and suggest alternatives.

Materials and Methods

The present study has been carried out on the basis of primary data was

collected by personal interview method by using pre-tested structured schedule prepared for the purpose. Karnal district was purposively selected due to maximum area under Basmati Rice. In Karnal district, two blocks were selected due to the maximum area. From Karnal district four regulated markets were selected due to maximum arrivals of Basmati Rice. From two blocks four villages (MIS Adopters and Non-Adopters) was randomly selected. Interview method was developed to get complete and reliable information by the help of well-structured schedule. To study the sources of agriculture market information and their utilization among the 60 farmers and 40 traders from village and markets area were selected for the study, based on random sampling technique. To identify with the market information system for agricultural commodities, tabular methods were designed to analyze the data of the study. The find out nature, extent, sources, utilization and expectation of the market information system by farmers and traders, tabular analysis with simple averages, percentages etc. were computed. The farmers and traders response was scored giving a weight of 3 for 'always', 2 for 'sometime', 1 for 'rarely' and 1 for 'yes' and 0 for 'No'.

Results and Discussion:

Farmers Awareness on Agricultural Market Information System in Karnal district of Haryana

Awareness of farmers: From [Table-1], indicated the awareness of the sample farmers on different components of market information. In Karnal district of farmers, the awareness on prices in other markets was found to be I-Rank and awareness on arrivals in other markets was II-Rank who use Market Information System (MIS) Adopters in Karnal district of markets. However, arrivals in reference market were III-Rank and prices in reference market were IV Rank. It is interesting to note that Karnal district of Basmati Rice farmers was aware of either area, production, quality of produce to particular crops. In the case of Non Adopters Karnal district of farmers, the extent of awareness on arrivals and prices in reference market was I-Rank and II-Rank and awareness on arrivals was III-Rank and prices in other market was to be found IV-Rank, respectively. It is worth noting but similar pattern follows (MIS adopters and Non-adopters), Karnal district of farmers were aware of parameters like area sown V Rank and quality/grade of produce VI-Rank. Similar findings were also reported by [8].

Table-1 Farmers awareness on market information in Karnal district for MIS Adopters and Non Adopters of Haryana n=60

S. No.	Type of market information	Degree of Awareness						Total	Rank
		Always		Sometime		Rarely			
		Score	Percentage	Score	Percentage	Score	Percentage		
1	Arrivals in other market	117	65	28	23.3	7	11.7	152	II
2	Arrivals in reference market	96	53.3	44	36.7	6	10.0	146	III
3	Prices in other market	105	58.3	46	38.3	2	3.3	153	I
4	Prices in reference market	87	48.3	50	41.7	6	10.0	143	IV
5	Area under crops	69	38.3	50	41.7	6	10.0	127	V
6	Quality/ grade required	0	0	0	0.0	0	0.0	0	VI
Non Adopters									
S. No.	Type of market information	Always		Sometime		Rarely		Total	Rank
		Score	Percentage	Score	Percentage	Score	Percentage		
1	Arrivals in other market	63	35.0	70	58.3	4	6.7	137	IV
2	Arrivals in reference market	81	45.0	62	51.7	2	3.3	145	I
3	Prices in other market	75	41.7	56	46.7	7	11.7	138	III
4	Prices in reference market	72	40.0	68	56.7	2	3.3	142	II
5	Area under crops	54	30.0	44	36.7	20	33.3	118	V
6	Quality/ grade required	0	0.0	0	0.0	0	0.0	0	VI

Table-2 Traders awareness of Regulated market information in Karnal district of Haryana n=40

S. No.	Type of market information	Degree of Awareness						Total	Rank
		Always		Sometime		Rarely			
		Score	Percentage	Score	Percentage	Score	Percentage		
1	Arrivals in other market	96	80.0	16	20.0	0	0.0	112	II
2	Arrivals in reference market	90	75.0	20	25.0	0	0.0	110	III
3	Prices in other market	111	92.5	6	7.5	0	0.0	117	I
4	Prices in reference market	90	75.0	20	25.0	0	0.0	110	III
5	Area under crops	84	70.0	20	25.0	2	5.0	106	IV
6	Production	63	52.5	20	25.0	9	22.5	92	V
7	Grade/Standard required	60	50.0	30	37.5	5	12.5	95	VI

Awareness of traders: It was revealed from the [Table-2] that in general, the degree of awareness of market information was found to be high among the sample traders. Among the different components of market information, the awareness on prices in other market formed I-Rank followed by arrivals in other market, arrivals in reference market, and prices in reference market (III-Rank) in Karnal district. It is worth noting that more than 75 percent of traders were aware of arrivals and prices regularly. Unlike farmers, traders were aware of information on the area under crops and quality/grade aspects of the produce by Karnal district. It was observed that traders were aware of a market information system on the area under crop production of agricultural products. Similar findings were also reported by [8].

Sources of market information of farmers and traders

Sources of market information of farmers: [Table-3] showed that the sources of market information at village level on arrival information indicated that Neighbors and newspapers (I Rank) and (II Rank) were the general sources of market information of Karnal district of village farmers. Whereas Relatives and Television (III Rank) and (IV

Rank) in Karnal district of villages formed the sources of market information. Neighbor's formed the major source of market information in Karnal district of Villages. The institutional agencies like Gram Panchayat, co-operative credit society and Self Help Groups (SHG's) did provide labor's market information. However, Krishi Vigyan Kendra's (KVKs) were part of market information to farmers at village level.

Sources of market information of traders: [Table-4], revealed that contacts in other markets and fellow traders formed major sources of market information on arrivals and prices among traders with I and II ranks among different sources of market information. Always more than 70 percent of traders were sourcing their market information through fellow traders and contacts in other markets regularly in Karnal district markets. Newspaper (III-rank) was same in Karnal district, display boards in APMC (V-rank) in Karnal district of markets, bulletins of APMC (IV-rank) was in Karnal district of markets, magazines was the other important sources of market information to the traders. Traders did not prefer Government publications, market intelligence cell, internet and television as their source of market information. Similar findings were also reported by [9].

Table-3 Farmers sources of market information at village level in Karnal district of Haryana n=60

S. No.	Sources	Degree of Awareness							Rank
		Always		Sometime		Rarely		Total score	
		Score	Percentage	Score	Percentage	Score	Percentage		
1	Newspaper	90	50.0	56	46.7	2	3.3	148	II
2	Television	84	46.7	40	33.3	2	3.3	126	IV
3	Radio	60	33.3	46	38.3	17	28.3	123	V
4	Gram Panchayat	9	5.0	20	16.7	47	78.3	60	XI
5	Neighbors	99	55.0	50	41.7	12	20.0	161	I
6	Relatives	75	41.7	36	30.0	17	28.3	128	III
7	KVKs	54	30.0	32	26.7	26	43.3	112	VI
8	Cooperative credit society	42	23.3	28	23.3	32	53.3	102	VII
8	SHGS	36	20.0	26	21.7	35	58.3	97	VIII
10	Magazine	30	16.7	24	20.0	38	63.3	92	IX
11	Internet	27	15.0	30	25.0	36	60.0	93	X

Table-4 Sources of Regulated market information system for trader in Karnal district of Haryana n=40

S. No.	Sources	Degree of Awareness							Total score	Rank
		Always		Sometime		Rarely				
		Score	Percentage	Score	Percentage	Score	Percentage			
1	Newspaper	54	45.0	26	32.5	9	22.5	89	III	
2	Television	36	10.0	20	25.0	18	45.0	74	VII	
3	Radio	15	12.5	12	15.0	29	72.5	56	VIII	
4	Magazine	54	45.0	28	35.0	7	17.5	89	III	
5	Internet	3	2.5	10	12.5	27	67.5	40	X	
6	Fellow traders	90	75.0	14	17.5	3	7.5	107	II	
7	Contact in other market	96	80.0	16	20.0	0	0.0	112	I	
8	Announcement by APMC	3	2.5	10	12.5	27	67.5	40	X	
9	Govt. publications	3	2.5	4	5.0	35	87.5	42	IX	
10	Display board in APMC	27	22.5	20	25.0	21	52.5	68	V	
11	Bulletins by APMC	48	40.0	24	30.0	4	10.0	76	IV	
12	Market Intelligence Cell	3	2.5	10	12.5	27	67.5	40	X	
13	APMC tender data for previous days	15	12.5	20	25.0	25	62.5	60	VI	

Pattern of dissemination of market information

Mode and frequency of dissemination: The markets resorted to different modes of dissemination of the market information in all the four markets of Karnal district. The market information was transmitted through notice boards, announcements in market yards, fax, phone, All India Radio (AIR), television and newspapers [Table-5]. The market information was disseminated daily to the District Information Officer, All India Radio (AIR), newspaper, television, internet and District Statistical Officer. Whereas, it was transmitted to Haryana State Agriculture Marketing Board (HSAMB) on the weekly, monthly and annual basis. Similarly, the market information was also sent to Zilla Panchayat, Agriculture Research Station and Deputy Commissioner once in a year in the form of annual reports [Table-6]. Similar findings were also reported by [10].

Table-5 Dissemination of market information in Karnal district markets of Haryana n=4

S. No.	Mode of dissemination	Karnal district	
		Score	Percentage
1	Notices board	4	100.0
2	Announcement	4	100.0
3	Fax	4	100.0
4	Telephone	4	100.0
5	Internet	4	100.0
6	AIR	4	100.0
7	Television	4	100.0
8	Posts	4	100.0
9	Newspaper	4	100.0

Utilization by farmers: The [Table-7 and 7.1] indicated the extent of market information utilized by Karnal district of farmers in decision-making. It can be clearly seen that making use of market information on arrivals in decision making on various aspects of farming. However, about 86.7% used the information in deciding the crops to be sown. In case of post harvest technique majority was drying (96.7%) in Karnal district of farmers. Another case in selling decision majority was when to sell (90.0%) in Karnal district of farmers. In case of where to

sell (86.7%) in Karnal district used the information on market arrivals, respectively. With respect to the arrivals and prices in other market (53.3%) in Karnal district of farmers utilized the information for deciding the crop to be sown, deciding where to sell (30.0%) in Karnal, district of farmers. Post harvest technique majority was in drying (91.7%) in Karnal district of farmers. Another technique was handling (83.3%) in Karnal district of farmers. Similar findings were also reported by [8].

Table-6 Distribution of market information to different agencies in Karnal district markets of Haryana n=4

S. No.	Mode of dissemination	Karnal district	
		Score	Percentage
1	State Agricultural Marketing Board	4	100.0
2	Department of Agriculture	4	100.0
3	District Statistical Offices	4	100.0
4	Agriculture Research Station	4	100.0
5	Newspapers	4	100.0
6	Zila Panchayat	2	50.0

Table-7 Extent of Market Information utilization by farmers in Karnal district of Haryana n=60

Arrival and Price in reference market			
S. No.	Nature/Types of decision	No.	Percentage
1 Production decisions			
I	Crops to be sown	52	86.7
II	Area to be sown	22	36.7
2 Selling decisions			
I	When to sell	54	90
II	Where to sell	52	86.7
III	Whom to sell	44	73.3
IV	Quantity to sell	48	80.0
3 Post harvest handling decisions			
I	Drying	58	96.7
II	Bagging	34	56.7
III	Transportation	50	83.3

Table-7.1 Market Information utilization by farmers in different districts of Haryana
n=60

Arrival and Price in other Market			
S. No.	Types of Benefits	No.	Percentage
1	Deciding the crop to be sown	32	53.3
2	Deciding area to be sown	0	0.0
3	Deciding where to sell	24	40.0
4	Deciding When to sell	18	30.0
5	Deciding Whom to sell	16	26.7
6	Post harvest handling decisions		
I	Drying	46	76.7
II	Bagging	42	70.0
III	Handling	32	53.3
IV	Transportation	24	40.0
7	Deciding the quantity to sell	28	46.7
8	Processing decisions	8	13.3
9	Storage decisions	22	36.7

Table-8 Benefits derived from market information by farmers in Karnal district of Haryana
n=60

Obtained higher price			
S. No.	Types of Benefits	No.	Percentage
1	By changing place of sale	44	63.3
2	Changing time of sale	32	53.3
3	Drying of produce	48	80.0
4	By storage	30	50.0
5	By change of mode of transportation	20	33.3
6	By better mode of packaging	20	33.3

[Table-8], indicated that the benefits from Karnal district of farmers have derived as per their opinion by utilizing market information. It revealed that farmers were benefited and obtained higher price by utilizing the market information's system. In case of Karnal district of farmers, the market information was used in deciding to drying of producers (80%), change of place of sale (63.3%), change of time of sale

(53.3%) and by storage (50.0%). Similar findings were also reported by [10].

Table-9 Benefits derived from agricultural market information by traders in Karnal district of Haryana N=40

Obtained higher price			
Sr. No.	Types of Benefits from market information system	No.	Percentage
1	Changing place of sale	32	80.0
2	Changing time of sale	36	90.0
3	Changing post harvest handling	18	45.0
4	Drying of produce	28	70.0
5	Mode of packing	14	35.0
6	Mode of storage	30	75.0
7	Changing quantity of sale	16	40.0
8	Changing buyer	10	25.0

The [Table-9], indicated that the benefits from Karnal district of traders have derived as per their opinion by utilizing market information. It revealed that traders were benefited and obtained higher price by utilizing the market information's system. It was observed that traders were most benefited by changing time of sale (90.0%), followed by changing the place of sale (80.0%), followed by mode of storage (75.0%), followed by drying of produce (70.0%), in Karnal district of markets. Similar findings were also reported by [8].

Pattern of utilization by traders: The [Table-10], Indicated that the extent of utilization of agricultural market information by traders for decision making on price to be quoted and the quantity to be purchased, followed by storage decisions of quantity to be sold and the time of storage. It was clearly seen that the agricultural market information was utilized by traders in deciding the price to be quoted (I-Rank), followed by the quantity to be purchased (II-Rank) in Karnal district and quantity to be a store (III-Rank) in Karnal district. The traders had utilized market information for making decision on when to sale (IV-Rank), when to store (V-Rank) and (VI-Rank) in Karnal district and followed by quantity to be sold (VI-Rank) in Karnal district. Similar findings were also reported by [8].

Table-10 Nature and Extent of Utilization of market information by traders of Karnal district of Haryana

n=40

S. No.	Types of utilizations	Degree of usage							
		Always		Sometime		Rarely		Total Score	Rank
		Score	Percentage	Score	Percentage	Score	Percentage		
1	Purchase decisions								
	Deciding the price to be quoted	96	80.0	14	17.5	1	2.5	111	I
	Deciding the quantity to be purchased	90	75.0	18	22.5	1	2.5	109	II
2	Storage decisions								
	Deciding the necessity of storage	36	30.0	28	35.0	14	35.0	78	VIII
	When to store	60	50.0	30	37.5	7	17.5	97	V
	Quantity to store	81	67.5	20	25.0	3	7.5	104	III
3	Selling decisions								
	Quantity to be sold	66	55.0	22	27.5	7	17.5	95	VI
	Deciding where to sell	60	50.0	24	30.0	8	20.0	92	VII
	Deciding whom to sell	24	20.0	20	25.0	18	45.0	62	IX
	Deciding when to sell	72	60.0	30	37.5	1	2.5	103	IV
4	Post purchase handling decisions								
	Necessity of processing	0	0.0	0	0.0	40	100.0	40	XI
	Deciding handling of the commodity	0	0.0	0	0.0	40	100.0	40	XI
	Drying	33	27.5	0	0.0	29	72.5	62	X
	Grading	0	0.0	0	0.0	40	100.0	40	XI
	Transportation	0	0.0	0	0.0	40	100.0	40	XI

Constraints, expectations and suggestions of stakeholder on market information's

Constraints faced by farmers: The constraints as perceived by traders in the existing market information are presented in [Table-11]. About (86.7%) of farmers expressed that market information was not available in required form in Karnal district. Farmers also faced difficulty on accessibility aspects (70%), followed by high transportation cost aspect (63.3%), followed by non-availability of required information on price/prices in other markets/production aspect (53.3%), followed by better marketing facilities and warehousing facilities aspect (36.6%), followed

by Non-availability in time aspect (46.7%) in Karnal district. Similar findings were also reported by [11] and [8].

Constraints faced by traders: The constraints as perceived by traders were presented in [Table-12]. About (85.0%) of farmers expressed that market information was not available in required form in Karnal, district. Traders were also faced difficulty on non-availability of required information on price/prices in other markets/ production aspect (80.0%), followed by Non-availability in time aspect (65.0%), followed by accessibility aspects (45.0%), followed by Inadequate

network system aspect (40.0%), followed by lack of information in an barrier production aspect (30.0%), followed by lack of proper dissemination of market Intelligence through communication (25.0%) in Karnal district. Similar findings were also reported by [11].

Table-11 Constraints as perceived by farmers in existing Agriculture Marketing Information's of Karnal district of Haryana N=60

S. No.	Constraints	No.	Percentage
1	Accessibility	42	70.0
2	Costly	8	13.3
3	Non- availability in time	28	46.7
4	Non-availability of required information on price/ price in other markets/ arrival/ area/ production	32	53.3
5	Non-availability of information in required form	52	86.7
6	Face to high transportation costs	38	63.3
7	Better Marketing facilities and warehousing facilities	22	36.6

Table-12 Constraints as perceived by traders in existing Agriculture Marketing Information's of Karnal district of Haryana n=40

S. No.	Constraints	No.	Percentage
1	Information available but not accessible	18	45.0
2	Costly	6	15.0
3	Non- availability in time	26	65.0
4	Non-availability of required information on price/ price in other markets/ arrival/ area/ production	32	80.0
5	Non-availability of information in required form	34	85.0
6	Inadequate Network for Information flow	16	40.0
7	Lack of information is an barrier production and traders	12	30.0
8	Lack of Proper dissemination of Market Intelligence through communication	10	25.0

Constraints faced by markets: The constraints in the existing market information in different market committees were presented in [Table-13]. About (100.0%) of market expressed a maximum number of non availability of trained personnel was in Karnal district. Members of different markets committee persons faced difficulty in compilation was (100.0%), followed by lack of awareness was (75.0%), followed by insufficient personnel was ((100.0%) in Karnal district. Similar findings were also reported by [11, 8].

Table-13 Constraints in management of market information in Karnal district markets of Haryana n=4

S. No.	Constraints	No.	Percentage
1	Lack of awareness	6	75.0
2	Insufficient personnel	8	100.0
3	Non availability of trained personnel	6	75.0
4	Time consuming	4	50.0
5	Difficulty in compilation	8	100.0

Table-14 Expectation of market information by farmers in Karnal district of Haryana n=60

S. No.	Expectations	No.	Percentage
1	Projections/ future price movements	50	83.3
2	Prices in other nearby markets	55	91.7
3	Variety wise prices	48	80.0
4	Post harvest handling information for better price	28	46.7

Table-14.1 Expectation of agricultural commodities traders on market information of Karnal district n=40

S. No.	Expectations	No.	Percentage
1	Projections on prices/ future price movement	36	90.0
2	Prices in other nearby markets	38	95.0
3	Variety wise prices	37	92.5
4	Post harvest handling information for better price	34	85.0

Expectations of stakeholders: Expectation of the farmers from market

information was presented in [Table-14], indicated that the information on the price prevailing in nearby market was (91.7%), followed by projections/future price movement was (83.3%), followed by variety wise prices was (80.0%), followed by post harvest handling information for better price was (46.7%), in Karnal district. The commodities trader's expectations of market information as given in [Table-14.1] clearly indicated that the projections on price/future price movement was (95.0%) in Karnal district. Price in other nearby market was (90.0%), followed by variety wise prices (92.5%), followed by post harvest handling technique was (85.0%) in Karnal district. Similar findings were also reported by [11, 8].

Conclusion

Based on following finding of the study for improving the agricultural marketing information system in Karnal district of Haryana. Awareness of farmers on different components of market information was very poor as compared to the awareness of traders in Karnal district. None of the selected district farmers was aware of either area, production, quality of produce or scientific post harvest handling of the produce. Unlike farmers, traders were aware of information on these aspects besides details of the produce in Karnal district markets. Farmer's sources of market information at village level, neighbors and newspapers were the main source of market information to the farmers whereas, commission agents were the most sought source at the market level. Some of the Karnal district farmers also relied on magazines and internet as their sources of market information. Besides a very few farmers also depended on the announcements and display boards at the market. Contacts in other markets and fellow traders were the major source of the market information to the traders of selected district markets. The modes of dissemination of market information were the traditional announcements, display boards, transmission through television and newspapers of Karnal district markets. The utility of market information was low among the farmers as compared to traders. The benefit derived in the form of higher price by traders was relatively more when compared to benefits derived by farmers of Karnal district markets. Non availability of real information on prices was the major constraint as opined by farmers. Whereas the traders opined that they had difficulty in obtaining the information in the required form. The markets were facing the constraint of inadequate personnel of Karnal district markets. Expectation of farmers on market information was prices prevailing in nearby markets followed by price projections. The trader's expectations were on area and production information followed by price projections of Karnal district markets. The MIS should be deliver fast, reliable and accurate information in a user friendly manner for utilization by the farmers and other stakeholders in order to facilitate the farmers to decide what and when make crop and marketing planning, how to cultivate, when and how to harvest, what post harvest management practices to follow, when, where, how to sell etc. of the agricultural produce in the study area.

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Abbreviations:

AMIS: Agricultural Marketing Information System
HSAMB: Haryana State Agriculture Marketing Board

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

Conflict of Interest: None declared

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