

Original Research Article

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Farmers Knowledge on Emerging Marketing Interventions of Fruits and Vegetables in Karnataka, India

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ABSTRACT

Keywords

Knowledge, Public market intervention, Co-operative market intervention, Private market intervention

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The present study was conducted in Davangere district of Karnataka state during 2017-18. For the study, 40 farmers each from public, co-operative and private market intervention were selected following simple random sampling procedure. Thus, the total sample size constituted to 120. The data was collected using pre-tested questionnaires. The knowledge level of farmers was measured considering criteria like General information, post-harvest activities and Market related information by framing different statements. The data was analyzed using excel and results was presented in frequency and percentage. The findings of the study indicated that the farmers had cent percent knowledge on awareness, grading procedure, packing, transit loss, Electronic weighment services, Acceptance of produce irrespective of quality and quantity and market updates in Public market intervention. In case of Co-operative market intervention, the farmers had full knowledge (100.00%) on awareness, harvesting procedure for HOPCOMS and branding of the produce under HOPCOMS trade name. The Private market farmers had same knowledge (100.00%) on awareness, grading and mechanical grading, establishment of local market and collection centers, timely co-operation of staff and monitoring of farming activities. The study reflects that the farmers are having fair knowledge in all three market interventions.

Introduction

Agriculture in India has two important components. One is the production and another is marketing of the produce. Farmers role is up to production aspect where their efforts are more but the profit is mainly depending on the effective and efficient marketing of the produce. The country has

witnessed a great stride in agriculture production, especially with the introduction of improved farm technology during the “green revolution” period. Horticulture takes a prominent place among other sectors of agriculture by being blessed with the unique gift of nature, like abundant sunshine hours, different soil types and other agro-climatic conditions. With varied agro climatic

conditions, India is able to grow an array of fruits and vegetables exceeding 100 types.

Karnataka enjoys a prominent place in the production of horticultural crops. The state provides a congenial atmosphere for the production of horticultural crops both under rain fed and irrigated conditions as well. The fruits and vegetables being perishable commodities having less shelf life and there is a need for special kind of marketing as it is a time-bound activity. Thus, marketing of fruits and vegetables is subjected to price fluctuations, which is exploited by the middleman. Apart from this, there has always been a debate on providing remunerative price to farmers and at the same time an affordable price to consumers. This focuses on the issue of marketing with a thrust to reduce the price strategies between the primary producers and ultimate consumers. The study has been taken up to know the knowledge of the farmers about different market interventions for their crops. So that the farmers can know about the prices and other market related information necessary for sale of produce at reasonable price.

Materials and Methods

The study was conducted in Davanagere district of Karnataka state in 2017-18. The district was purposively selected based on the functioning of public, co-operative and private institutional market interventions. From these institutional interventions APMC (Agricultural Produce Market Committee) was selected under public, HOPCOMS (Horticultural Producers' Cooperative Marketing and Processing Society) under co-operative and Big Bazaar and Reliance Fresh were selected under private. From each intervention, 40 farmers growing fruits and vegetables were selected. Thus, total sample size for the study was 120. The pertinent data was collected from the sample farmers using

pre-tested interview schedule. A schedule was developed to measure the knowledge level of respondents. A large number of statements were collected under different headings to assess the knowledge level of farmers about public, co-operative and private institutional market intervention. For this purpose, all possible knowledge items were developed from a review of the literature, discussion with experts, agricultural scientists and farmers. In these processes finally most suitable 36 items, which includes 'Yes/No' statements and 10 multiple choice questions were selected and included in the schedule. The score of one was given for 'Yes' response and zero for 'No' response, for each right answer in subquestion a score of one was given. The individual score was obtained by summing up the scores for all the statements. The maximum score one could obtain was 46 and the minimum score could be zero. The respondents were grouped into three categories based on the mean and standard deviation as a measure of the check. The results were expressed in frequency and percentages.

Results and Discussion

Overall knowledge level of the farmers on institutional market interventions

The data depicted in Table 1 indicate that, respondents were having medium level of knowledge in case of public (72.50 %), co-operative (70.00 %) and private (70.00 %) market intervention.

In all the three cases farmers were having medium level of knowledge due to accessibility of the market to farming community. Present information technology and also education level of the farmers might have influenced them to have medium to high level of knowledge.

Table.1 Overall knowledge level of farmers on institutional market interventions

n = 120

Category	Public(n ₁ =40)			Co-operative(n ₂ =40)			Private(n ₃ =40)		
	Criteria	f	%	Criteria	F	%	Criteria	f	%
Low (<\bar{x} - SD)	<41.12	6	15.00	<36.72	4	10.00	<32.32	2	5.00
Medium($\bar{x} \pm$ SD)	41.12-45.98	29	72.50	36.72-41.53	28	70.00	32.32-36.98	28	70.00
High (>\bar{x} + SD)	>45.98	5	12.50	>41.53	8	20.00	>36.98	10	25.00

f = Frequency

%-Percentage

Table.2 Knowledge level of farmers on Public market intervention (APMC)

		n = 40	
Sl. No	Knowledge statements	f	%
A. General Information			
1.	Are you aware of APMC	40	100.00
2.	The existence of APMC can be traced before independence	39	97.50
B. Post-Harvest activities			
3.	Post-harvest handling is labour intensive and requires skilled labour	35	87.50
4.	Are you grading your produce at field level	40	100.00
5.	Is there any grading facilities at APMC	35	87.50
6.	Whether you need to wait for longer period to get your produce graded at APMC	1	2.50
7.	Are you satisfied with grading services provided at APMC	34	85.00
8.	Are you packing your produce before marketing	40	100.00
9.	Whether packing reduces loss during transit	40	100.00
10.	Does APMC provide transportation services	7	17.50
11.	Are you spending higher cost on transportation	11	27.50
12.	Does the APMC have cold storage facility	1	2.50
13.	Whether you are satisfied with cold storage facilities provided by APMC	4	10.00
14.	Do you process your produce	0	0.00
15.	Are you getting any services related to processing of produce at APMC by licensed processors	0	0.00
16.	The services provided by APMC for processing of produce is satisfactory	1	2.50
17.	Are you obtaining satisfactory services from the licensed commission agents at the APMC	35	87.50
C. Market related activities			
18.	Whether commission agents are charges higher rates than prescribed	34	85.00
19.	Are you selling your produce through middlemen which fetches better prices	16	40.00
20.	Do you think market cost increases with increase in the middlemen involvement	37	92.50
21.	Do you aware of electronic weighment services at APMC	40	100.00
22.	Have you come across defective weighment any time	13	32.50
23.	Are you paying for weighment services provided at APMC	28	70.00
24.	APMC is providing auction facility to farmers	39	97.50
25.	Whether you participate in auction at APMC	38	95.00
26.	Are you satisfied with price quoted during auction	21	52.50
27.	Whether e-auction facility is available at APMC	0	0.00
28.	APMC's will accept all type of produce from farmers irrespective of quality and quantity	40	100.00
29.	APMC helps farmers in getting remunerative prices for produce and payment will be immediate	31	77.50
D. Others			
30.	APMC provides technical advice to farmers	26	65.00
31.	Are you obtaining market updates in the form of SMS from APMC	40	100.00
32.	APMC has good infrastructure facilities	39	97.50
33.	APMC will provide waste disposal facilities	36	90.00
34.	Does the APMC is helping you in acquiring insurance facilities for your produce	0	0.00
35.	APMC facilitates farmers to avail pledge loan	0	0.00
36.	Does market committee supervise the trading activity	37	92.50

Table.3 Knowledge level of farmers on Co-operative market intervention (HOPCOMS)

		n=40	
Sl. No	Knowledge statements	f	%
A. General Information			
1	Are you aware of HOPCOMS, a co-operative society	40	100.00
2	Are you aware of rules and regulations of HOPCOMS	36	90.00
3	HOPCOMS is working since from last 50 years	27	67.50
4	Are you a member of HOPCOMS	33	82.50
5	Whether you harvest the produce as per the requirements of HOPCOMS	40	100.00
B. Post-Harvest activities			
6	Post-harvest handling is labour intensive which requires skilled labour	39	97.50
7	Are you grading your produce at field level to reap the advantages of grading	37	92.50
8	Is there any grading facilities at HOPCOMS	0	0.00
9	Whether you need to wait for longer period to get your produce graded at HOPCOMS	5	12.50
10	Are you packing your produce before marketing	34	85.00
11	Do you think packing reduces transit loss	35	87.50
12	Does HOPCOMS provide transportation services	2	5.00
13	Are you spending higher cost on transportation	10	25.00
14	Does the HOPCOMS have cold storage facility	0	0.00
15	Whether you are satisfied with cold storage facilities provided by HOPCOMS	0	0.00
16	Do you process your produce	0	0.00
17	Are you getting any services related to processing of produce at HOPCOMS given by licensed processors	0	0.00
18	The services provided by HOPCOMS for processing of produce is satisfactory	0	0.00
19	Are you branding your produce under HOPCOMS trade name which fetches higher price	40	100.00
20	Are you aware of electronic weightment services at HOPCOMS	36	90.00
21	Have you come across defective weightment any time	12	30.00
22	Are you paying for weightment services provided at HOPCOMS	26	65.00
23	Are you satisfied with prices announced by HOPCOMS	29	72.50
24	HOPCOMS will accept all type of produce from farmers irrespective of quality and quantity	14	35.00
25	HOPCOMS has its own quality standards	37	92.50
26	HOPCOMS is providing remunerative prices for produce where in payment is immediate	30	75.00
C. Market related activities			
27	HOPCOMS is providing technical advice, market information and inputs to farmers	9	22.50
28	HOPCOMS is supplying inputs to the farmers at reasonable prices	0	0.00
29	HOPCOMS intervention reduces middlemen	39	97.50
30	HOPCOMS has its own procurement and marketing outlets	35	87.50
31	Whether HOPCOMS assists in claiming insurance facilities for your produce	0	0.00
32	Whether market committee supervises the trade activity	39	97.50
D. Others			
33	Are you obtaining adequate and timely co-operation from the HOPCOMS and its staff	35	87.50
34	HOPCOMS is conducting regular meetings for member farmers	17	42.50
35	HOPCOMS is involved in advertisement of its products to promote sales	38	95.00
36	HOPCOMS is involved in conducting training to farmers	0	0.00

Note: Responses are mutually inclusive
 f- Frequency % - Percentage

Table.4 Knowledge level of farmers on Private market intervention (Big Bazaar and Reliance Fresh)

		n=40	
Sl. No	Knowledge statements	f	%
A. General Information			
1.	Are you aware of private markets like Big bazaar, More, Reliance Fresh etc.,	40	100.00
2.	Are you selling your produce to any of the private market where in you are member	40	100.00
3.	Is there any procedure to register under private market intervention	40	100.00
4.	Private market intervention is a registered body under APMC	10	25.00
5.	Do you have any contractual agreement with private market intervention	0	0.00
6.	The existence of private market intervention can be observed from 20 th century	35	87.50
B. Post-Harvest activities			
7.	Post-harvest handling is labour intensive and requires skilled labour	38	95.00
8.	Are you grading your produce at field level	40	100.00
9.	Are you aware of the advantages of grading	39	97.50
10.	Whether grading facilities are provided at private market	25	62.50
11.	Are you satisfied with the grading procedure followed at private market interventions	28	70.00
12.	Do you wait for longer period to get your produce graded at private market intervention	11	27.50
13.	Are you packing your produce before marketing	32	80.00
14.	Do you think packing reduces transit losses	33	82.50
15.	Does private market intervention provide transportation services	0	0.00
16.	Are you spending higher cost on transit	13	32.50
17.	Does the private market intervention have cold storage facility	0	0.00
18.	Are you branding your produce under private market interventions trade name which fetches you higher price	23	57.50
19.	Do you think private market intervention has well equipped processing facility	0	0.00
20.	Do you think market cost increases with increase in the middlemen involvement	38	95.00
21.	Are you aware of electronic weighment services at private market	32	80.00
22.	Have you come across defective weighment any time	12	30.00
23.	Are you paying for weighment services provided at private market intervention	23	57.50
24.	Quality is the main concern for private market intervention	39	97.50
C. Market related activities			
25.	Private markets will accept only A grade quality products	39	97.50
26.	Private market intervention will indent the produce before 2 days	38	95.00
27.	Private market will accept an only specified quantity of the produce from farmers	38	95.00
28.	Whether private market is supplying inputs to farmers at reasonable prices	0	0.00
29.	Private market intervention offers remunerative prices for produce where in payment is immediate	39	97.50
30.	Private market intervention is providing technical advice to farmers	19	47.50
31.	Are you obtaining market updates provided from private market intervention	32	80.00
32.	Private market intervention will provide waste disposal facilities	5	12.50
D. Others			
33.	Private market intervention will have collection and market centers	40	100.00
34.	Are you obtaining adequate and timely co-operation from the private intervention's staff	40	100.00
35.	Private market intervention is providing mechanical grading facility	40	100.00
36.	Private market interventions will monitor the farming activities of farmers	40	100.00

Note: Responses are mutually inclusive

f- Frequency

% - Percentage

Photo: Researcher with the farmers at fields during data collection at Davangere taluk



In case of public sector (APMC) is having slightly high level of knowledge due to long period of existence and accessible by all the farmers for all the crops irrespective of quality and quantity.

Knowledge level of the farmers on public market interventions

The results in Table 2 indicates that farmers had complete knowledge (100.00 %) on awareness, grading procedure, packing, transit loss, electronic weightment services, acceptance of produce irrespective of quality and quantity and market updates through SMS. They lack knowledge on processing, e-auction, insurance and pledge loan facility.

This might be due to the fact that, all these facilities were available at APMC and farmers were actively involved in all these activities as this was a mandatory work for many crops sold at APMC. Processing, e-auction, pledge loan and insurance facility was not available at study area and farmers were not exposed to it.

Knowledge level of the farmers on co-operative market interventions

Cent pent of farmers had same knowledge (100.00 %) on awareness, harvesting procedure for HOPCOMS and branding of the produce under HOPCOMS trade name and reducing middle men. This might be due to the fact that HOPCOMS having its own standards, quality requirements and marketing strategies of the produce. This made the farmers to have a complete knowledge on that to prepare the product for getting better price in the co-operative market intervention. Even though they had knowledge, they lack knowledge on processing, cold storage, insurance and supply of input due to fact that HOPCOMS was mainly involved in direct purchasing of quality produce from farmers

and selling to customers for better profit. This might be the reason for having lack of knowledge on all these aspects.(Table 3)

Knowledge level of the farmers on private market interventions

The data in Table 4 depicts that in case of private market the farmers had complete knowledge (100.00 %) on awareness, grading, establishment of local market and collection centers, timely co-operation and monitoring. In private market intervention, buyers are more specific about the grading of the quality produce to full fill the requirements of global market. To get more quantity product, they used to monitor the crop at every stage and provide better collection and transportation services to avoid the post-harvest handling loses of the produce. This might have been influenced for the following result. They lack knowledge on processing, cold storage activities were taken care by the buyers.

In conclusion, the present study focused on assessing the knowledge level of farmers on emerging institutional market interventions. It was found that sampled farmers had high knowledge on General information in all the three categories of markets. Whereas in case of post-harvest activities and market related activities, the farmers have less knowledge. So, there is need to provide information and education related to marketing of the fruits and vegetables through different extension functionaries at different market channels. The action could be taken by authorities of these market interventions to provide all the facilities relate to marketing to farmers.

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