

Analysis of Farmers Purchase Behavior towards Agricultural Inputs at Agro Service Center in Nashik District of Maharashtra

Shubhada Namdeo Ghule

Research Scholer

KBC North Maharashtra University, Jalgaon, India

Dr. Minakshi V. Waykole

Principal, Arts, Science and P.O. Nahata Commerce College, Bhusawal, India

ABSTRACT

Successful marketing strategies initiate with targeting the definite audience by understanding the demographic characteristics, lifestyles and consumer buying behavior. Agriculture inputs are the resource used in farm production. Agro service centers are one of the players that are responsible to deliver inputs according to the demand of the farmers. Farmers want to buy agricultural inputs as required depending upon the types of soil and area of agriculture land. Marketers need to understand the buying behavior of farmers for their Products to do well. It is really important for marketers to understand what prompts farmers to purchase agricultural inputs .A qualitative study in Nashik districts was conducted. Primary data was collected for this study. Questionnaire method and discussions were held with agro service centers as well as the farmers. The research was conducted to study factors influencing purchase behavior of farmer and influence of different promotional activities on farmers purchase decision. It was observed that majority of farmers were influenced by Retailers advice, their Past experience and demonstration on farm. Different promotional activities also influenced farmers purchase decision .The study found that there is significant relationship between promotional activities and farmers satisfaction.

KEYWORDS- Farmers Purchase Behaviour, Agro Inputs, Agro service center, etc

I.INTRODUCTION

Agriculture is an important sector of the Indian economy, about half of the population still counts on agriculture as its principal source of income and it is a source of raw material for a great number of industries. However it fails nearly 30% of its potential crop to insects, weeds and rodent attacks; the major loss being caused by insects, followed by weeds and diseases. The agricultural inputs industry plays a vital role in protecting crops from damage by weeds, pests, insects and fungus, both before and after harvest. This benefit to increase crop yields, which is important given the rate at which cultivable land is shrinking. Agriculture inputs are the resource

used in farm production. The importance of purchased farm input has significantly amplified in the recent past with the technological breakthrough in the Indian agriculture. The well-timed supply of modern farm inputs to the farmers to the entire category at rational price depends on the existence of the efficient marketing system. The effect of change in production method can, therefore be realized only if the farm inputs reaches the farmer in the time at a least cost. Agro service centers are operating with the objective of providing quality input at a reasonable price to farmers.

Consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of Products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society. Discovering the best targets requires extensive consumer behavior research. There is need of comprehensive, reliable customer behavior profile information is vital to effectively customize one's marketing programs. The purpose of studying buyer behavior is to better meet the needs of customers. Marketers need to understand the buying behavior of farmers for their Products to do well. It is really important for marketers to understand what prompts farmers to purchase agricultural inputs. Hence study was conducted to analyze farmers purchase behavior towards agricultural inputs at agro service center.

II. REVIEW OF LITERATURE

Kaushal Chandra Sharma (2017) shows that majority of the respondents belonged to middle age group having graduates and above level of education with medium experience as an agri-input retailer. The findings regarding correlation coefficient between independent variables (age, experience as an agri-input retailer, training received, types of agriinput marketed by them, mode of advertisement, after sales services, sales work force, value of present stock of agri-inputs of different companies, type of demonstration/display, type of discount, payback mode, knowledge about legal issues, knowledge about rice crop production activities) and dependent variable entrepreneurial behaviour were found positively significant.

Rahul Kulshrestha (2015) conducted study for assessment of Pesticide market and understanding farmers' Purchase Decision for Pesticides in Rampur district of Uttar Pradesh State. The study displayed that 60.0 per cent of the farmers had opinion that the pesticide market is going to increase whereas 20.0 per cent farmers stated that market is going to remain stagnant and 12.0 per cent were of the opinion that the market is going to decrease. Tata Rallis, Sriram, Sinochem and Excel are the major players of pesticides in Rampur district. Through the study it was detected that price and quality (> 80%) are the major attributes that affects the buying decision of farmers. Packaging of products also plays a significant part in purchasing decision. Sugarcane and Paddy were found to be contributing to more than half of the total pesticide consumption in Rampur district. Most of the farmers i.e., 44 percent watched for brand name on the package, 23 percent observed for the price, 22 percent saw for quantity and the remaining 11

percent observed for the ingredients. It was also detected during the study that farmers grow different perception about products and equivalence it with other brands. 72.5 per cent farmers observed with the fact that well recognized brands are costlier than other brands. The higher priced products are of better quality were decided by 37.0 per cent farmers. The farmers which decided to the fact that well recognized brands are of better quality is 42.5 per cent. The farmers which continued neutral on the notion that lower price need not indicate lower quality is 41.25 per cent and 37.5 per cent farmers were neutral on the fact that good packaging reflects better quality. 65 per cent of the respondents procured pesticides on credit basis and 35 per cent on cash basis. Desired results and follow ups by the company were identified as the most satisfying factors. Increased field activities, subsequent follow ups should be the prime objective of companies to increase the satisfaction level of farmers towards a particular product was suggested in study. The thesis is helpful for study of satisfaction factors of farmers, study of purchase decision of farmers and study of farmer's perception about input.

P. Bharatharaj (2012) concludes that Private dealers and Agro chemical companies were the main sources of information of pesticide among the farmers. Dealer recommendation, progressive farmers were less effective for selection of pesticide and brand by the farmers. The price of the preferred brand, its efficiency, nature of chemical, and advertisement has affected for selection of the pesticide, and brand among the farmers. Preferred brand and Credit availability, Quality of the products were the factors that affected the dealer's loyalty. The types of pest, intensity of pest stages of crop growth and dealer recommendation were the major factors that affect the quantity of the pesticide usages. In the study of input dealers, 90% of the dealers were literates and had an experience of over twenty years. Most of dealers' product mix is fertilizer or seed and pesticide and deals with multiple companies. They kept many brands in order to satisfy the farmers' requirements. Credit sales and personal contact was the most active promotional methods by the dealers. Dealers' knowledge is good to have an idea about Pesticide Company, price, brand packaging and compatibility. But they have not well known about bio pesticides and biotechnology. Input retailer provide knowledge about the new hybrid seed, new brand, new company chemicals, usage methods and are communicating the information about seminar and exhibition and training. The researcher has determined that dealers have good knowledge about marketing customs like AGMARK, ISI, MRP and bill of purchases, tax and payment methods.

Leelavani Madem(2011) reveals detailed analysis of profile characteristics of input dealers specified that majority of the respondents were middle aged with secondary education and were landless with business as their key occupation. Majority of the respondents had annual income above 5 lakhs with business experience of 11-30 years, farming experience up to 15 years followed by 31-60 days of training received along with medium economic direction and medium innovativeness. Majority of the respondents had medium level of information of agri input and communication behaviour. The independent variables such as education, business experience, occupation, farming experience, annual income, social participation, training received, economic orientation and innovativeness of input dealers exhibited significant relationship with all the

components of communication behaviour viz., information input behaviour, information processing behaviour and information output behaviour.

III.OBJECTIVES OF THE STUDY

1. To study profile characteristics of farmers and agro service centers
2. To analyse factors influencing purchase behaviour of farmers.
3. To study influence of different promotional activities on farmers purchase decision.

IV.HYPOTHESES OF THE STUDY

H₀: There is no significant relationship between promotional activities and farmers satisfaction.

H₁: There is significant relationship between promotional activities and farmers satisfaction.

V.SCOPE OF THE STUDY

This research study provides the direction about, which factors influences purchase behaviour of farmer. The study also throws light on the influence of Agro Services centers suggestion on vital decision about farming by farmers and ultimately on future prospectus of the same.

VI. RESEARCH METHODOLOGY

The study is based on critical evaluation and analysis of basically Primary Data. The primary sources include farmers. A study is undertaken in the sampled regions to see its impact for which a detailed questionnaire is prepared to collect relevant information from the primary source for the guidance of the researchers. With the help of the questionnaire, detailed discussions were made with the certain sources of primary data to understand their views, thinking and attitude which would help to give the researchers useful recommendations, if any. The questionnaire is processed with the help of statistical tools like tabulations, grouping, percentages, averages, testing of hypothesis etc. As far as promotional activities is concerned, following of them are taken into consideration viz, Retailers advice, their Past experience demonstration on farm, company representative and sales persons etc , where as in case of farmers satisfaction concern, they were taken under the consideration as per farmers' perception as satisfied and dissatisfied.

Research Area

Researchers selected entrepreneurs from Nashik. Sample sizes of 110 farmers have been taken under study from Umarane, Dahiwad, Chinchave(ni), Rahud, Dongargaon (villages) region by simple random method. Researcher collects data through Primary and Secondary sources. Researcher distributed 110 questionnaires among the respondents.

Limitations of the study

1. As the study was to be completed in a short time, time factor acted as a substantial limit on the scope and the comprehensiveness of the study.
2. The study is based on limited geographical area.
3. The information provided by respondents may not be fully truthful due to unavoidable biases.
4. Further variables could be added for the purposes of detail study.

VII.RESULT AND DISCUSSION

Researcher prepared the questionnaire for respondents and distributed it among them. After receiving the questionnaire researcher analyse the questionnaire.

**Table No.1
Information of questionnaire**

Sr.No	Respondent	Questionnaire distributed	Questionnaire received	Questionnaire rejected (due to incomplete, wrongly filled etc)	Net Sample size for study
1	Farmers	110	102	02	100

**Table No.2 Land holding capacity of farmers
Land holding Capacity (n=100)**

Sr. No	Holdings	Size of farm	Frequency (No. of Farmers)	Percentage %
1.	Marginal Holding	Less than 1 ha	15	15
2.	Small Holding	1 to 2 ha	36	36
3.	Medium Holding	2 to 4 ha	40	40
4.	Large Holding	More than 4 ha	09	09

From the above data, it was observed that 40% farmers hold 2 to 4 ha land while 36% of farmers hold 1 to 2 ha land.

Table No.3 Type of farming done by Farmers (n=100)

Sr. No	Type of Farming	Frequency (No. of Farmers)	Percentage %
1.	Irrigated	100	100
2.	Rain fed	0	0

From the above data, it was observed that almost all the farmers are doing irrigated type of farming.

Table No.4 Method of Irrigation used by farmers (n=100)

Sr. No	Method	Frequency (No. of Farmers)	Percentage %
1.	Flood	36	36
2.	Drip	58	58
3.	Sprinkler	6	6

From the above data, it was observed that 58% farmers are uses drip irrigation for irrigating the crops and 36% farmers uses flood irrigation. And only 6% of farmers use sprinkler irrigation.

Table No.5 Various Crops cultivated by Farmers (n=100)

Sr. No	Crops	Frequency (No. of Farmers)	Percentage %
1.	Grapes	08	08
2.	Tomato	18	18
3.	Capsicum	7	7
4.	Pomegranate	22	22
5.	Groundnut	5	5
6.	Maize	15	15
7.	Onion	25	25

From the above data, it was observed that most of the farmers are cultivates Pomegranate followed by onion, tomato, maize.

Table No.6 Influences on purchase decision of Farmers (n=100)

Sr. No	Factor	Frequency (No. of Farmers)	Percentage %
1.	Retailers advise	28	28
2.	Sales Persons	11	11
3.	Result demonstration	12	12
4.	Past experience	23	23
5.	Company Representative	08	08
6.	Past experience + Retailer advise	12	12
7.	Result demonstration + past experience	06	06

From the above data, it was observed that most of the farmers purchase inputs from their retailers advise (28%) followed by 23% farmer purchase agricultural input from his past experience.

Table No.7 Parameter Considered in purchasing of product (n=100)

Sr. No	Parameter	Frequency (No. of Farmers)	Percentage %
1.	Price	20	20
2.	Quality	24	24
3.	Brand Name	12	12
4.	Experience	14	14
5.	Quality + Price	17	17
6.	Brand Name + Experience	13	13

From the above data, it was observed that 24% farmers purchases agricultural inputs by quality of the product, followed by 20% farmer purchase agricultural inputs according the price of the product.

Table No.8 Brand Awareness (n=100)

Sr. No	Brand Name	Frequency (No. of Farmers)	Percentage %
1.	High	76	76
2.	Medium	17	17
3.	Low	5	5
4.	Very low	2	2

From the above data, it was observed that the 76% farmers are highly aware about the brand.

Table No.9 Perception about Price (n=68)

Sr. No	Price	Frequency (No. of Farmers)	Percentage %
1	High	17	25
2	Medium	41	60.29
3	Low	10	14.70

From the above data, it was observed that most of farmers (60.29%) think that the price of the product is medium.

Table No.10 Quality of the product (n=68)

Sr. No	Quality	Frequency (No. of Farmers)	Percentage %
1	High	38	55.88
2	Medium	30	44.12
3	Low	0	0

From the above data, it was observed that the 55.88 % of the farmers thought the product is high quality.

Table No.11 Satisfaction level of the farmers (n=68)

Sr. No	Satisfaction Level	Frequency (No. of Farmers)	Percentage %
1.	Satisfied	62	91.18
2.	Moderately satisfied	6	8.82
3.	Unsatisfied	0	0

From the above table, it was observed that 91.18 % of the farmers are satisfied with the use of agriculture inputs

Testing of Hypothesis

H0: There is no significant relationship between promotional activities and farmers satisfaction.

H1: There is significant relationship between promotional activities and farmers satisfaction.

Table No.12 Mathematically

OBSERVED FREQUENCIES		Farmers Satisfaction					Total
		Highly Satisfied	satisfied	Uncertain	Dissatisfied	Highly Dissatisfied	
Promotional Activities	Demonstration	7	3	8	5	4	27
	Retailers	1	5	4	2	3	15
	Past experience	2	1	1	3	12	19
	Company Repetitive	4	9	1	2	7	23
	Sales person	3	2	9	1	1	16
	Total	17	20	23	13	27	100

Sr No	H ₀	H ₁	χ_{cal}	χ_{table}	p_value	Decision
1	There is no significant relationship between promotional activities and farmers satisfaction	There is significant relationship between promotional activities and farmers satisfaction	41.4463	26.30	0.000477	Reject H ₀ (i.e. There is significant relationship between promotional activities and farmers satisfaction)

*Here level of significance is 0.05

The Chi-square calculated value (41.44) is more than table value (26.30) at Degree of Freedom=16. Thus, our null hypothesis, There is no significant relationship between promotional activities and farmers satisfaction is rejected. Alternatively we accept our alternative hypothesis; There is significant relationship between promotional activities and farmers satisfaction

VIII.CONCLUSION

The farmers are found to be very conscious about the quality and price of the agricultural inputs. So, the companies must confirm to have a good balance between the quality and price of agricultural inputs, in order to gain a competitive power in the market. Brand image in this market is mainly ruled by the “results after use” and the follow-ups by the company. So, the companies must emphasis on offer a better product with a better follow up. Majority of farmers are highly aware about the brand and satisfied with the use of agriculture inputs. Most of the farmers purchase inputs from their retailer’s advice followed by his past experience. It was found that there is significant relationship between promotional activities and farmer’s satisfaction

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