

Tapping Marketing Strategies of Agro Products in Rural India

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Introduction

For successful marketing of agro-chemicals the manufacturers have to depend on a number of factors like user and non-user of a particular input, sources of purchase of agro-chemical, brand loyalty, factors effect decision making in purchase of agro-chemicals, promotional activities affecting decisions in purchase, choice of advertisement by farmers and main sources of information. So far based on these factors, appropriate marketing strategies have been worked out by the agro-chemical companies. These factors could differ with the situation of farms i.e. whether they are placed near or away from the market place. Because of many factors, particularly due lack of transport infrastructure the agro-chemical companies feels inconvenient to take up to same kind of advertisement every where.

Taking into consideration all these factors a study the factors responsible for use of agro-chemicals by the farmers of districts of Uttar Pradesh. The results of the factors may help the agro-chemical companies to formulate appropriate marketing strategies. The following are the objectives of the study:

Objectives

- i) To study the reasons for not using agro chemicals among farmers;
- ii) To study the sources of purchase of agro chemicals, brand loyalty, factors affecting decision making, promotional activities followed by the agro-chemical companies, choice of advertisement by farmers and main sources of information.

User and Non-user of Pesticides

Though recurrence of insects and pests forces the farmers to apply various kinds of insecticides/pesticides but a small portion of them does not apply any of them for various reasons. In nearer farms, out of 307 users of pesticides, 98.37 per cent farmers had been using pesticides. Whereas, in distant farms, all the farmers had been using pesticides. Among different size of near farms, small, medium and large farms 90.90, 98.18 and 99.07 per cent respectively have been using pesticides. Only in marginal farm category, all the farmers had been using pesticides. For distant farms, there have been no non-users at all. In summary there had not been any difference in the proportion of farms using pesticides. Details have been given in Table 1.

Reasons for using and not using Pesticides

The reason for using pesticides has been to increase the yield of crops. While the reason for not using pesticides has been due to increasing additional cost of pesticides. In nearer category of farms, 98.37 per cent of farmers had used pesticides to increase the yield of crops. In comparison, only 1.62 per cent of the farmers had not used considering it as a costly affair. With the increase in size of farms in order to increase the yield of crop, use of pesticides has decreased from 100.00 per cent to 99.07 per cent from marginal to large farmers. Whereas in distant farms all the different categories of farmers have used pesticides to increase the production of crops only. Thus with the increase in size of farm there has been any significant change in use of pesticides. Details have been given in Table 2.

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Table 1: User and Non-user of Pesticides by Size of Farms

Sl. no.	District/size of farms	District/size of farms		Near	Distant		Total
		User	Non-user	Total	User	Non-User	
1.	Marginal	13 (100.00)	0 (0.00)	13 (100.00)	6 (100.00)	0 (0.00)	6 (100.00)
2.	Small	20 (90.90)	2 (9.10)	22 (100.00)	14 (100.00)	0 (0.00)	14 (100.00)
3.	Medium	54 (98.18)	1 (1.82)	55 (100.00)	42 (100.00)	0 (0.00)	42 (100.00)
4.	Large	215 (99.07)	2 (0.93)	217 (100.00)	231 (100.00)	0 (0.00)	231 (100.00)
	Total	302 (98.37)	5 (1.63)	307 (100.00)	293 (100.00)	0 (0.00)	293 (100.00)

(Figures in parentheses indicates percentage to total users and non-users)

Table 2: Reasons for using and not using Pesticides by Size of Farms

Sl. no.	District/size of farms			Near		Distant	
	User	Non-user	Total	User	Non-user	Total	
	Increase Yield	Cost		Increase Yield		Cost	
1.	Marginal	13 (100.00)	0 (0.00)	13 (100.00)	6 (100.00)	0 (0.00)	6 (100.00)
2.	Small	20 (90.90)	2 (9.09)	22 (100.00)	14 (100.00)	0 (0.00)	14 (100.00)
3.	Medium	54 (98.18)	1 (1.81)	55 (100.00)	42 (100.00)	0 (0.00)	42 (100.00)
4.	Large	215 (99.07)	2 (0.92)	217 (100.00)	231 (100.00)	0 (0.00)	231 (100.00)
	Total	302 (98.37)	5 (1.62)	307 (100.00)	293 (100.00)	0 (0.00)	293 (100.00)

(Figures in parentheses indicates percentage to total)

Sources of Agro-Chemicals

Different sources of agro-chemicals have been important to farmers buy it either from retailers, wholesalers and different kinds of merchants engaged in business of agro-chemicals.

In any village, for any type of agro-chemical marketing the retailers have been the key functionaries. But in Uttar Pradesh the Indian Tobacco Company (ITC) has also been to retail business of agro-chemicals in villages.

In nearer farms 99 per cent of the farmers have been dependent on retailers for agro-chemicals. From I.T.C. only 1 per cent of the farmers have been buying agro-chemicals. Dependency on I.T.C. has been more for marginal farms and it has gradually reduced with increase in size of the farm for nearer category. For distant farms, all the farmers have been dependent on retailers only. Details have been given in Table 3.

Brand Loyalty

Loyal to any brand of agro-chemical has been the major factor to assess its potentiality among the farmers. Brand loyalty has been influenced by a number of factors, of which some are economical and some are psychological in nature to farmers. Before dealing with the reasons for brand loyalty, it is worth while to examine the extent of farmers who are brand loyal.

Table 3: Sources of agro-chemicals by size of farms

Sl. No.	Size of farms		Near		Distant		
Source of agro-chemicals	Total		Source of agro-chemicals		Total		
Retailer	ITC		Retailer		ITC		
1.	Marginal	12 (92.30)	1 (7.70)	13 (100.00)	6 (100.00)	0 (0.00)	6 (100.00)
2.	Small	15 (100.00)	0 (0.00)	15 (100.00)	14 (100.00)	0 (0.00)	14 (100.00)
3.	Medium	52 (98.11)	1 (1.89)	53 (100.00)	39 (100.00)	0 (0.00)	39 (100.00)
4.	Large	220 (99.54)	1 (0.46)	221 (100.00)	234 (100.00)	0 (0.00)	234 (100.00)
Total	299 (99.00)	3 (1.00)	302 (100.00)	293 (100.00)	0 (0.00)	293 (100.00)	

(Figures in parenthesis indicates percentage to total)

In nearer farms 54.63 per cent farmers have been brand loyal. While for distant farms it has been 49.14 per cent. Brand loyalty has increased with the increase in size of farms. Thus it can be concluded that greater the size of the farm, greater is the loyalty for a particular brand of agro-chemical. Details have been given in Table 4.

Table 4: Brand loyalty by size of farms

Sl No.	Size of farms		Near		Distant		
Loyal	Not loyal	Total	Loyal	Not loyal	Total		
1.	Marginal	6 (46.15)	7 (53.85)	13 (100.00)	1 (16.66)	5 (83.34)	6 (100.00)
2.	Small	2 (13.33)	13 (86.67)	15 (100.00)	10 (47.61)	11 (52.39)	21 (100.00)
3.	Medium	28 (52.83)	25 (47.17)	53 (100.00)	17 (53.12)	15 (46.88)	32 (100.00)
4.	Large	129 (58.37)	92 (41.63)	221 (100.00)	116 (49.57)	118 (50.43)	234 (100.00)
Total	165 (54.63)	137 (45.37)	302 (100.00)	144 (49.14)	149 (50.86)	293 (100.00)	

(Figures in parenthesis indicates percentage to total)

Factors Affecting Decision for Brand

Decision making has been an important aspect before going to market to purchase any agro-chemicals. The decisions are influenced by either different persons or sometimes before going to market the farmers had been unable to decide. Among the persons, as well as factors which generally influences in decision making have been fellow farmers, retailers, Gram Sevaks, own decision and company people. In nearer category of farms, 51.98 per cent farmer's decision making had been influenced by retailers, followed by fellow farmers and company people to the extent of 24.83 and 12.25 per cent respectively. In distant farms, also 51.19 per cent of the farmers had been influenced by retailers followed by fellow farmers and own decision to the extent of 26.96 and 9.21 per cent respectively. In nearer farm, importance of retailers influencing decision making had decreased from 66.66 to 50.67 per cent from marginal to large farms. Inversely, decision making influenced by fellow farmer had increased from 6.66 to 27.60 per cent across different size of the farms. Influence of company people had remained more or less same

in distant farms. Influence of retailers had decreased from 66.66 to 51.28 per cent from small to large farms. Decision making had been influenced by fellow farmers which had decreased from 35.71 per cent to 26.49 per cent from marginal to small farms respectively. Influence of company people had been only found for medium and large farms to the extent of 5.12 and 6.14 per cent respectively. Details have been given in Table 5.

Factors Affecting Purchasing Decision

As outlined earlier a number of factors both economical and psychological plays important role in deciding the purchase of a particular brand of agro-chemicals. The factors which had been found to influences the farmer has been as follows;

- (a) Price;
- (b) Name of company;
- (c) Quality;
- (d) Own experience of farmers;
- (e) Results obtained by use of a particular agro-chemical to particular crop;
- (f) Retailer's propaganda for a particular brand of agro-chemical.

Size group wise analysis indicates that in near farms, company loyalty has increased from 13.33 per cent to 45.24 per cent from small to large farms. Even though own experience of farmers has been low for nearer category of farmers taken together, it has played a significant role in decision making to 61.53 per cent farmers and simultaneously it has reduced to 7.69 per cent as the farm size increased. Likewise dependence on results has increased with the increase in size of the farm from 7.69 to 33.48 per cent from marginal to large farms. Thus as the farm size increased farmers depend more on results obtained by application to crops. Dependence on retailers has decreased from 30.76 per cent to 11.76 per cent from marginal to large farms.

For distant farms the dependence on reputation of the company and own experience has increased with the increase in size of the farms. While results of these factors had decreased from 50.00 to 38.46 per cent respectively from marginal to large farms respectively. Details have been given in Table 6.

Access to Promotional Activities

The agro-chemical companies advertise in various forms for sales promotion. The following had been the different types of promotional activities followed by different companies.

- (a) Farmer meeting;
- (b) Field demonstration;
- (c) Video on wheels;
- (d) Jeep campaigning;
- (e) Kisan mela.

Of these above five types of promotional activities, field demonstration for near farms has been more effective to 55.96 per cent farmers followed by farmers meeting by 31.78 per cent. In the distant farms, field demonstration and farmers meeting had more or less equal responses to the extent of 46.07 and 46.75 per cent respectively.

Table 5: Factors affecting decision making by size of farms

(No.)

Sl. No.		Size of farms						Near						Distant		
Fellow farmer	Retailer	Gram Sevak		Own	Company people	Cannot say	Total	Fellow farmer	Retailer	Gram Sevak	Own	Company people	Cannot say	Total		
1.	Marginal	1 (6.66)	10 (66.66)	2 (13.33)	0 (0.00)	2 (13.33)	0 (0.00)	15 (100.00)	5 (35.71)	7 (50.00)	2 (14.28)	0 (0.00)	0 (0.00)	0 (0.00)	14 (100.00)	
2.	Small	4 (30.76)	9 (69.23)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	13 (100.00)	2 (33.33)	4 (66.66)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (100.00)	
3.	Medium	9 (16.98)	26 (49.05)	3 (5.66)	7 (13.20)	8 (15.09)	0 (0.00)	53 (100.00)	10 (25.64)	19 (48.71)	4 (10.25)	4 (10.25)	2 (5.12)	0 (0.00)	39 (100.00)	
4.	Large	61 (27.60)	112 (50.67)	6 (2.71)	14 (6.33)	27 (12.21)	1 (4.97)	221 (100.00)	62 (26.49)	120 (51.28)	12 (5.12)	23 (9.82)	15 (6.41)	2 (0.85)	234 (100.00)	
Total	75 (24.83)	157 (51.98)	11 (3.64)	21 (6.95)	37 (12.25)	1 (0.33)	302 (100.00)	79 (26.96)	150 (51.19)	18 (6.14)	27 (9.21)	17 (5.80)	2 (0.68)	293 (100.00)		

(Figures in parenthesis indicates percentage to total)

Table 6: Factors affecting purchase decisions by size of farms

Sl. No.		Size of farms						Near				Distant			
Price	Quality	Company	Own experience		Results	Retailers	Total	Price	Quality	Company	Own experience		Results	Retailers	Total
1.	Marginal	0 (0.00)	0 (0.00)	0 (0.00)	8 (61.53)	1 (7.69)	4 (30.76)	13 (100.00)	0 (0.00)	0 (0.00)	2 (33.33)	0 (0.00)	3 (50.00)	1 (16.66)	6 (100.00)
2.	Small	2 (13.33)	0 (0.00)	2 (13.33)	3 (20.00)	3 (20.00)	5 (33.33)	15 (100.00)	0 (0.00)	0 (0.00)	3 (21.42)	0 (0.00)	8 (57.14)	3 (21.42)	14 (100.00)
3.	Medium	3 (5.66)	0 (0.00)	21 (39.62)	6 (11.32)	14 (26.41)	9 (16.98)	53 (100.00)	1 (2.56)	0 (0.00)	18 (46.15)	2 (5.12)	12 (30.76)	6 (15.38)	39 (100.00)
4.	Large	1 (0.45)	3 (1.35)	100 (45.24)	17 (7.69)	74 (33.48)	26 (11.76)	221 (100.00)	0 (0.00)	0 (0.00)	93 (39.74)	12 (50.12)	90 (38.46)	39 (16.66)	234 (100.00)
Total	6 (1.98)	3 (0.99)	123 (40.72)	34 (11.25)	92 (30.46)	44 (14.56)	302 (100.00)	1 (0.34)	0 (0.00)	116 (39.59)	14 (4.77)	113 (38.56)	49 (16.72)	293 (100.00)	

(Figures in parenthesis indicates percentage to total)

Among the different size of near category of farms, farmers relying to field demonstration have increased with the increase with the increase in size of farms from 30.76 to 61.53 per cent for marginal to large farms, Whereas farmers meeting showed an inverse relationship, where proportion of farmers had declined with the increase in size of the farm from 53.84 to 26.69 per cent from marginal to large farms. In distant category of farms the result of promotional activities with regard to field demonstration has been the opposite where farmers accepting field demonstration had reduced from 50.00 to 48.29 per cent from marginal to large farms. Farmers meeting had showed an increasing trend from 33.33 to 43.58 per cent from marginal to large farms. For nearer category of farms, reliance to field demonstration has increased with the increase in size of farms. Reliance on farmers meeting has increased with the increase in size of farms. No difference between field demonstration and farmers meeting for nearer and distant category of farms. Details have been given in Table 7.

Choice of Advertisement by Farmers

Advertisement of any product could be done in any medias. But among them few medias only pays dividend to the companies. Farmers and also the companies selling pesticides had relied on different forms of advertisement, such as local vernacular news paper, posters, radio, banners, wall painting, agricultural magazines etc. In this section it would be analysed how each of the media in which of advertisement made had been effective. In nearer category of farms, 45.69 per cent farmers had relied on display of posters followed by news paper by 21.52 per cent and further listening to radio talks by 17.21 per cent. Likewise in distant farms maximum farmers had relied on posters to the extent of 50.17 per cent followed by radio and news paper by 19.11 and 19.79 per cent respectively. Among the different size of nearer farms prevalence of posters had decreased from 61.53 per cent to 44.34 per cent from marginal to large farms. Whereas prevalence of news paper and radio talk remained more or less same with the increase in size of farms. For different category of distant farms, prevalence on posters had increased from 33.33 per cent to 48.97 per cent from marginal to large farms. Prevalence to listening of radio talk had increased from 16.66 per cent to 21.79 per cent from marginal to large farms. Prevalence of news papers had decreased from 33.33 per cent to 17.52 per cent from marginal to large farms. Thus, in distant farms local vernacular news paper may not reach at different places. Whereas, posters of different companies had reached distant villages. Listening to radio talk regarding use of various pesticides has been most popular option to distant farms. In nearer category of farms, importance of posters decreased with the increase in size of farms. While for distant farms, importance of both posters and radio had increased with the increase in size of the farm. Thus between near and distant farms, there has not been any difference in the importance of the media posters. Details have been given in Table 8.

Access to Main Sources of Information

The main source of information for farmers had varied to a great extent comprising of retailers, Gram Sevaks, company people, educated fellow farmers, agricultural department etc. In nearer category of farms, retailers and company people have been the main source of information by 52.31 and 34.10 per cent respectively. Whereas, the reliance on fellow farmers and agricultural department has been negligible. Even Gram Sevaks who generally are regarded as the important extension agents of the Government could be a source of information to 11.25 per cent farmers only. For distant category of farms, the importance of sources of information had not changed. The retailers and company people happened to be the major source of information by 52.21 and 31.39 per cent nearer farmers. For distant farms, there has been a little importance of sample farmer's interaction with the fellow farmers and agricultural department by 2.04 and 3.07 per cent respectively. Here also the Gram Sevaks had been the third source of information to 10.23 per cent farmers. For nearer farms reliance on company people had increased with the increase in size

Table 7: Access to Promotional Activities by size of farms

Sl. No.		Size of farms						Near				Distant			
Farmer meeting	Field demo	Video on wheels		Jeep campaigning	Kisan mela	Cannot say	Total	Farmer Meeting	Field Demo	Video on wheels	Jeep campaigning	Kisan Mela	Cannot say		Total
1.	Marginal	7 (53.84)	4 (30.76)	2 (15.38)	0 (0.00)	0 (0.00)	0 (0.00)	13 (100.00)	2 (33.33)	3 (50.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (16.66)	6 (100.00)
2.	Small	7 (46.66)	5 (33.33)	1 (6.66)	1 (6.66)	1 (6.66)	0 (0.00)	15 (100.00)	9 (64.28)	5 (35.72)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	14 (100.00)
3.	Medium	23 (43.39)	24 (45.28)	1 (1.88)	1 (1.88)	1 (1.88)	3 (5.66)	53 (100.00)	24 (61.53)	14 (35.89)	0 (0.00)	1 (2.56)	0 (0.00)	0 (0.00)	39 (100.00)
4.	Large	59 (26.69)	136 (61.53)	16 (7.23)	1 (0.45)	1 (0.45)	8 (3.61)	221 (100.00)	102 (43.58)	113 (48.29)	12 (5.12)	4 (1.7)	3 (1.28)	0 (0.00)	234 (100.00)
Total		96 (31.78)	169 (55.96)	20 (6.62)	3 (0.99)	3 (0.99)	11 (3.64)	302 (100.00)	137 (46.75)	135 (46.07)	12 (4.09)	5 (1.7)	3 (1.02)	1 (0.34)	293 (100.00)

(Figures in parenthesis indicates percentage to total)

Table 8: Choice of Advertisement by Farmers by Size of the Farms

Sl. No.		Size of farms							Near				Distant				
News Paper	Radio	Wall painting		Banners	Posters	Agri. magazine	Cannot say	Total	News Paper	Radio	Wall painting	Banners	Posters	Agri. magazine	Cannot say	Total	
1.	Marginal	3 (23.07)	2 (15.38)	0 (0.00)	0 (0.00)	8 (61.53)	0 (0.00)	0 (0.00)	13 (100.00)	2 (33.33)	1 (16.66)	0 (0.00)	0 (0.00)	2 (33.33)	1 (16.66)	0 (0.00)	6 (100.00)
2.	Small	1 (6.66)	3 (20.00)	2 (13.33)	0 (0.00)	8 (53.33)	0 (0.00)	1 (6.66)	15 (100.00)	4 (28.57)	1 (7.14)	0 (0.00)	0 (0.00)	9 (64.28)	0 (0.00)	0 (0.00)	14 (100.00)
3.	Medium	7 (13.20)	15 (28.30)	2 (3.77)	0 (0.00)	24 (45.28)	2 (3.77)	3 (5.66)	53 (100.00)	9 (23.07)	5 (12.82)	1 (2.56)	0 (0.00)	23 (58.97)	1 (2.56)	0 (0.00)	39 (100.00)
4.	Large	54 (24.43)	32 (14.47)	23 (10.40)	0 (0.00)	98 (44.34)	6 (2.71)	8 (3.61)	221 (100.00)	41 (17.52)	51 (21.79)	5 (2.13)	5 (2.13)	113 (48.97)	12 (5.12)	7 (2.99)	234 (100.00)
Total		65 (21.52)	52 (17.21)	27 (8.94)	0 (0.00)	138 (45.69)	8 (2.64)	12 (3.97)	302 (100.00)	56 (19.11)	58 (19.79)	6 (2.04)	5 (1.70)	147 (50.17)	14 (4.77)	7 (2.38)	293 (100.00)

(Figures in parenthesis indicates percentage to total)

Table 9: Access to main source of information by farmers by size of farms

Sl. No.		Size of farms						Near						Distant						
Retailers	Company people	Educated fellow farmers	Agri. Depart-ment	Gram Sevaks	Cannot say	Total	Retailers	Company people	Educated fellow farmers	Agri. Depart-ment	Gram Sevaks	Cannot say	Total	Retailers	Company people	Educated fellow farmers	Agri. Depart-ment	Gram Sevaks	Cannot say	Total
1.	Marginal	12 (92.30)	1 (7.70)	0 (0.00)	0 (0.00)	0 (0.00)	13 (100.00)	4 (66.66)	1 (16.66)	1 (16.66)	0 (0.00)	0 (0.00)	0 (0.00)	6 (100.00)						
2.	Small	8 (53.33)	4 (26.33)	0 (0.00)	0 (0.00)	3 (20.00)	0 (0.00)	15 (100.00)	7 (50.00)	4 (28.57)	0 (0.00)	0 (0.00)	3 (21.42)	0 (0.00)	14 (100.00)					
3.	Medium	27 (50.94)	18 (33.96)	0 (0.00)	0 (0.00)	7 (13.20)	1 (1.88)	53 (100.00)	20 (51.28)	13 (33.33)	1 (2.56)	1 (2.56)	4 (10.25)	0 (0.00)	39 (100.00)					
4.	Large	111 (50.22)	80 (36.19)	2 (0.90)	3 (1.35)	24 (10.85)	1 (0.45)	221 (100.00)	122 (52.13)	74 (31.62)	4 (1.70)	8 (3.41)	23 (9.82)	3 (1.28)	234 (100.00)					
Total	158 (52.31)	103 (34.10)	2 (0.66)	3 (0.99)	34 (11.25)	2 (0.66)	302 (100.00)	153 (52.21)	92 (31.39)	6 (2.04)	9 (3.07)	30 (10.23)	3 (1.02)	293 (100.00)						

(Figures in parenthesis indicates percentage to total)

of the farms from 7.70 to 36.19 per cent from marginal to large farms thus indicating as the size of the farms has increased the interaction with company people had increased. Retailers as a source of information have decreased with the increase in size of the farms from 92.30 to 50.22 per cent respectively. For distant farms reliance on company people has also increased from 16.66 to 31.62 per cent from marginal to large farms respectively. Reliance on retailers has also decreased from 66.66 to 52.13 per cent from marginal to large farms respectively. Reliance on company people as a source of information had increased with the increase in size of farms for both nearer and distant category. Details have been given in Table 9.

Summary and Conclusions

There had not been any difference in the proportion of farms using pesticides. With the increase in size of farm there has been any significant change in use of pesticides. Dependency on I.T.C. has been more for marginal farms and it has gradually reduced with increase in size of the farm for nearer category. For distant farms, all the farmers have been dependent on retailers only. Greater the size of the farm, greater is the loyalty for a particular brand of agro-chemical. There has been no difference between the factors which has led to the purchase of agro-chemicals between near and distant category of farms. As the farm size increased farmers depend more on results obtained by application to crops and dependence on retailers has decreased from 30.76 per cent to 11.76 per cent from marginal to large farms. For nearer category of farms, reliance to field demonstration has increased with the increase in size of farms. Whereas reliance to farmer's meeting has increased with the increase in size of farms. No difference between field demonstration and farmers meeting was found for nearer and distant category of farms. In nearer category of farms, importance of posters decreased with the increase in size of farms. While for distant farms, importance of both posters and radio had increased with the increase in size of the farm. Thus between near and distant farms, there has not been any difference in the importance of the media posters. Reliance on company people as a source of information had increased with the increase in size of farms for both nearer and distant category.