Marketing behaviour of tomato growers in western Maharashtra

VIRESH ANDHARI, HRISHIKESH SONAWANE AND P.G. KHALACHE

See end of the article for authors' affiliations

Correspondence to : H.P. SONAWANE Division of Extension Education College of Agriculture, PUNE (M.S.) INDIA

ABSTRACT

The research was conducted in two district of Western Maharashtra. The personal interviewing method used for data collection. The major objective of the research was to study extent of technological gap between recommended and actually adopted tomato technologies by the tomato growers from Western Maharashtra. The present study revealed high technology gap in use of growth regulators, irrigation and nutrient management and plant protection. A majority of the respondents had medium level of marketing behaviour.

INTRODUCTION

There is a yield gap between national and state tomato yield per unit area. For this, the reasons may be many like the use of local material, improper time of planting, shortage of fertilizer, inadequate irrigation facilities etc. Introduction of high yielding varieties and other technologies in tomato is a significant landmark in the agricultural development. The efforts are also being made for transfer of scientific information to potential users as quickly as possible. Nevertheless, there exists a gap between the scientific information evolved and its utilization by ultimate users. Hence, to find out the factors responsible for this are must. With this view in mind, the present study was undertaken to study the personal, social, economic, situational, communication and psychological characteristics of the tomato growers, and to study the marketing behaviour of the tomato growers.

Key words : Technological

gap, Respondent, Tomato growers, and Marketing behaviour

Accepted : April, 2010

METHODOLOGY

This study was carried out in Nashik and Pune districts of Western Maharashtra, where maximum area under tomato cultivation was observed. From each district, two tahsils were selected on the basis of maximum area under tomato cultivation. Accordingly, Niphad and Dindori tahsils from Nashik district and Junner and Ambegaon tahsils from Pune district were selected for the study. Fifteen villages from each tahsil were selected being the maximum area under tomato cultivation. From each

village, 5 respondent tomato growers were selected randomly, so there were in all 2 districts, 4 tahsils, 60 villages and 300 respondent tomato growers for the study purpose.

RESULTS AND DISCUSSION

The findings obtained from the present study are presented below:

Personal, soci- economic, situational, communication and psychological characteristics of the respondent tomato growers:

The half (51.67 per cent) of the respondent tomato growers were in the middle age group followed by 33.67 per cent of them were in young age group. More than one third (37.00 per cent) of the respondents were educated upto secondary level followed by higher secondary (24.00 per cent). In addition, 13.66 per cent of them were educated upto primary, followed by pre-primary (10.67 per cent). The 55.00 per cent of the respondent tomato growers had family size between 5 to 7 members followed by 37.33 per cent of the respondent tomato growers had up to 4 members family size.

Majority of the respondents (59.33 per cent) were found to have 3 to 5 years of farming experience, whereas, 21.33 per cent were observed with more than 6 years of farming experience. The 37.33 per cent of the respondents had medium social

Table 1: Distribution of the respondents on their personal, social, economic, situational, communication and psychological characteristics									
Sr.		Responde	espondents (n=300)						
No.		Frequency	Percentage						
Age									
1.	Young (up to 35 years)	101	33.67						
2.	Middle (36 to 50 years)	155	51.67						
3.	Old (51 and above years)	44	14.66						
Educ	cation level								
1.	Illiterate	29	9.67						
2.	Pre-primary (Std. I to IV)	32	10.67						
3.	Primary (Std. V to VII)	41	13.66						
4.	Secondary (Std. VIII to X)	111	37.00						
5	Higher secondary (Std XI	72	24.00						
5.	and XII) or diploma	12	24.00						
6	Graduates (Degree and	15	5.00						
0.	above)	15	5.00						
Size of family									
1.	Small (up to 4 members)	112	37.33						
2.	Medium (5 to 7 members)	165	55.00						
3.	Big (8 and above members)	23	7.67						
Farming experience									
1.	Low (up to 2 years)	58	19.34						
2.	Medium (3 to 5 years)	178	59.33						
3.	high (6 and above years)	64	21.33						
Socia	al participation								
1.	Low (up to 3 scores)	89	29.67						
2.	Medium (4 to 5 scores)	112	37.33						
3.	High (6 and above scores)	99	33.00						
1.	Low (up to 15 score)	87	29.00						
2.	Medium (16 to 22 score)	159	53.00						
3.	High (23 and above score)	54	18.00						
Size	of land holding	0.0	22.67						
1.	Marginal (up to 1.00 na)	98	32.67						
2.	Small $(1.01 \text{ to } 2.00 \text{ ha})$	125	41.00						
5. 4	Semi-medium $(2.01 \text{ to } 4.00 \text{ na})$	54 15	18.00						
4. 5	Medium (4.01 to 10 na)	15	5.00						
J.	Large (10.01 and above na.)	8	2.07						
Area	Small (up to 0.80 ha)	112	27.24						
1. 2	Madium (0.81 to 1.20 ha)	112	57.54						
2. 3	Large $(1.21 \text{ and shows he})$	22	7 22						
J.	Laige (1.21 and above ha.)	22	1.55						
AIII) 1	$L_{OW} (up to \mathbf{P}_{S} = 150000)$	127	44.00						
1.	Low (up to KS. 150000) Medium (\mathbf{R}_{S} 150001 to \mathbf{P}_{S}	132	44.00						
2.	250000)	102	34.00						
3.	High (Rs. 250001 and above)	66	22.00						

Table 1 Contd....

Contd..... Table 1

Inco	me from tomato crop						
1.	Low (up to Rs. 70000)	142	47.34				
2.	Medium (Rs. 70001 to Rs. 130000)	133	44.33				
3.	High (Rs. 130001 and above)	25	8.33				
Cropping intensity							
1.	Low (Up to 93 score)	48	16.00				
2.	Medium (94 to 162 score)	169	56.33				
3.	High (163 and above score)	83	27.67				
Irrig	gation facilities						
1.	Poor (up to 2 scores)	99	33.00				
2.	Fair (4 to 6 scores)	112	37.33				
3.	Good (7 and above scores)	89	29.67				
Cos	mopoliteness						
1.	Low (up to 2 scores)	67	22.34				
2.	Medium (3 to 4 scores)	169	56.33				
3.	High (5 and above scores)	64	21.33				
Sou	rces of information						
1.	Low (up to 3 scores)	68	22.67				
2.	Medium (4 to 5 scores)	153	51.00				
3.	High (6 and above scores)	79	26.33				
Part	icipation in training						
1.	No training	0	0.00				
2.	One training	39	13.00				
3.	Two trainings	56	18.67				
4.	More than two trainings	205	68.33				
Kno	wledge level						
1.	Low (up to 40 score)	75	25.00				
2.	Medium (41 to 75 score)	167	55.67				
3.	High (76 and above score)	58	19.33				

participation level, followed by 33.00 per cent and 29.00 per cent had high and low levels of social participation, respectively. The 41.66 per cent of the respondents had small land holding (1.01 to 2.00 ha), followed by 32.67 per cent of them had marginal (up to 1.00 ha.) land holding. A majority (55.33 per cent) of the respondents had medium (0.81 to 1.20 ha) size of area under tomato. However, 37.34 per cent and 7.33 per cent of them had small and large size of land under tomato cultivation, respectively. The 44.00 per cent of the respondent tomato growers had low annual income followed by 34.00 per cent and 22.00 per cent of them had medium and high annual income, respectively. Nearly half (47.34 per cent) of the respondent tomato growers had low income from tomato, followed by 44.33 per cent and 8.33 per cent had medium and high income from tomato crop respectively. More than half (56.33 per cent) of the respondent tomato growers had medium

MARKETING BEHAVIOUR OF TOMATO GROWERS IN WESTERN MAHARASHTRA

Table 2: Distribution of the respondents according to various specific marketing activities									
Sr.		Frequency							
No	Marketing activities	Always	Per	Some	Per	Never	Per		
Dlam			cent	time	cent		cent		
Plan	Planning								
1.	Study available resources and facilities in the area before	88	29.33	90	30.00	122	40.67		
2	Understand the consumer's needs before cultivation of crons	80	20.00	111	37.00	100	33 33		
2. 3	Understand distribution system of farm produce	09 78	29.00	111	30.67	100	33.33		
5.	Collect information about institution/persons engaged in	78	20.00	119	39.07	105	54.55		
4.	marketing of farm produce	69	23.00	123	41.00	108	36.00		
5.	Decide the marketing channel that will give maximum profit	113	37.67	127	42.33	60	20.00		
6.	Use various sources for collecting market information	110	01101		12100	00	20100		
	Newspaper	79	26.33	143	47.67	78	26.00		
	Radio	86	28.67	154	51.33	60	20.00		
	Television	86	28.67	167	55.67	47	15.67		
	APMCs	75	25.00	134	44.67	91	30.33		
	Farmers in the village	76	25.33	154	51.34	70	23.33		
	Internet	85	28.33	97	32.34	118	39.33		
Decis	sion making/Action plan								
1.	Issues decided after planning								
	Crops and varieties to be grown	69	23.00	124	41.33	107	35.67		
	Management of markets source	65	21.67	145	48.33	90	30.00		
	Area allocation for crops	87	29.00	78	26.00	135	45.00		
	Cultivation technology to be followed	74	24.67	81	27.00	145	48.33		
	Sources and methods of procuring inputs	84	28.00	102	34.00	114	38.00		
2.	Sources consulted while taking decisions								
	Progressive farmers	103	34.33	88	29.34	109	36.33		
	Self intuition	145	48.33	74	24.67	81	27.00		
	Successful marketers	92	30.66	86	28.67	122	40.66		
	Family members	69	23.00	143	47.67	88	29.33		
	Extension Persons	78	26.00	89	29.67	133	44.33		
	APMC Personnel	98	32.67	85	28.33	117	39.00		
Mar	keting activities performed								
1.	Type of market used for selling farm produce								
	Regulated market	112	37.33	110	36.67	78	26.00		
	Wholesale market	78	26.00	116	38.67	106	35.33		
	Distant market	89	29.67	132	44.00	79	26.33		
	Local market	121	40.33	102	34.00	77	25.67		
	Retail market	110	36.66	101	33.66	89	29.67		
2.	Place of market								
	Within taluka	127	42.33	87	29.00	86	28.67		
	Within district	143	47.66	83	27.66	74	24.67		
	Within village	70	23.33	104	34.67	126	42.00		
	Within state	79	26.33	132	44.00	89	29.67		
	Outside state	82	27.33	108	36.00	110	36.67		
3.	Packing of farm produce by improved methods	68	22.67	154	51.33	78	26.00		
4.	Mode of transport of farm produce								
	Own vehicle	105	35.00	123	41.00	72	24.00		
	Private vehicle	116	38.67	132	44.00	52	17.33		
	Public vehicle	87	29.00	95	31.67	118	39.33		
5.	Agency for sale of produce								
	Self	142	47.33	92	30.67	66	22.00		
	Through co-operative	84	28.00	114	38.00	102	34.00		
	Through commission agent	81	27.00	116	38.67	103	34.33		

cropping intensity with the remaining 27.67 per cent and 16.00 per cent of them had high and low cropping intensity respectively. The 37.33 per cent of the respondent tomato growers had fair irrigation facilities, followed by the 33.00 per cent and 29.67 per cent which of them poor and good irrigation facilities, respectively.

More than half (56.33 per cent) of the respondents had medium cosmopoliteness, followed by 22.33 per cent of them had low cosmopoliteness and 26.33 per cent had high cosmopoliteness. More than half (51.00 per cent) of the respondent tomato growers had medium level of sources of information. The remaining two categories were 26.33 and 22.67 per cent of them had the high and low use of sources of information, respectively.

Majority (68.33 per cent) of the respondent tomato growers attended more than two training programmes for the past three years. Two trainings was attended by 18.67 per cent of the respondent tomato growers. Only one training was attended by the 13.00 per cent of the respondent tomato growers. There was not a single respondent tomato grower found that, who had not attended training programme. More than half (55.67 per cent) of the respondent tomato growers had medium knowledge about the recommended tomato cultivation practices.

Marketing behaviour of tomato growers from Nasik and Pune districts of Western Maharashtra:

In the present investigation the marketing behaviour of the respondent tomato growers was accessed according to various specific marketing activities and data presented in the following Table 2.

It is observed from Table 2 that in case of planning of marketing activities, 42.33 per cent of the respondent tomato growers sometime decided the marketing channels that give maximum profit to tomato growers, followed by 41.00 per cent of them sometime collected required information about market and 40.67 per cent never studied available resources and facilities in the area before cultivation of crops. However, the respondent tomato growers sometime received marketing information through sources like television (55.67 per cent), farmers in village (51.34 per cent), and radio (51.33 per cent). In decision making behaviour it was noticed that the respondent tomato growers sometime decides management of market source (48.33 per cent), followed by 45.00 per cent never make advance decision regarding area allocation of crops and 41.33 per cent sometime make advance decision of which crop and variety to be grown. Further, 48.33 per cent of the respondent tomato growers always took decision by selfintuition, whereas 47.67 per cent consulted family member while taking decision. Under the aspect of marketing activities performed, it was observed that 44.00 per cent of the respondent tomato growers sometime sale their farm produce in distant market, whereas, 40.33 per cent sale their produce in local market and 37.33 per cent always sale their produce in regulated markets. Further, 47.66 per cent of the respondent tomato growers always sold their produce within district, 44.00 per cent sometime sold their produce within state and 42.33 per cent always sold their produce within tahsil. Followed by 51.33 per cent of the respondent tomato growers sometime followed packing of farm produce by improved method.

However, 44.00 per cent of the respondent tomato growers sometime carried their farm produce by private vehicle, 41.00 per cent sometime used own vehicle as a mode of transport of farm produce. Followed by, 39.33 per cent of the respondent tomato growers never used public vehicles as a mode of transport of farm produce. While, 47.33 per cent of the respondent tomato growers always sold their farm produce by themselves, whereas 38.67 per cent and 38.00 per cent of the respondent tomato growers sometime sold their farm produce through commission agents and co-operative agencies, respectively.

Conclusion:

A majority of respondents had medium level of knowledge about recommended cultivation practices which requires remarkable efforts from state extension agencies and NGO's involved in process of transfer of technology through trainings, field days, Agricultural exhibition, mass media and other similar location specific extension strategies. The present study revealed high technology gap in use of growth regulators, irrigation and nutrient management and plant protection so, it is suggested to organize result demonstration and field visits for minimizing technological gap by State Agricultural Department. A majority of the respondents had medium level of marketing behaviour, this calls for special efforts from government agencies, to establish separate markets for tomato crop at tahsil and district level in tomato cultivating pocket.

Authors' affiliations:

VIRESH ANDHARI AND P.G. KHALACHE, Department of Extension Education, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA

REFERENCES

Bhairamkar, M.S., Sawant, P.A. and Tawade, N.D. (2005). Technological gap in cashew cultivation. *Indian J. Extn. Edu.*, 1:7–75.

Gupta V., Mankar, D. and Sunderaswami, S. (2001). Knowledge of farmers about improved cultivation practices of rice in Jammu. *Maharashtra J. Extn. Edu.*, **20**:74-76.

Hayami, Y., Kikuchi, M., Bambo, J.M. and Marciano, E.B.

(1990). Transformation of layuna villagein the two decades of green revolution. IRRI Research Paper Series No.142 :21.

J. Singh, S.N., Vijayraghvan, K. and Haque, T. (1991). Transfer of technology to small farms : An analysis of constraints and experiences, concept, Publication, New Delhi :18-21.

******** *****