

Marketing Behaviour of Tomato Growers in West Khasi Hills District of Meghalaya

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ABSTRACT

The study was carried out in West Khasi Hills district of Meghalaya during the year 2017-18. Following the purposive random sampling, 120 respondents were selected from 10 villages under Mairang and Mawthadraishan C & RD Blocks. The data was elicited through personal interview method. Results revealed that 31.66 per cent of the respondents belonged to the age group of 41-50 years old, 41.66 per cent studied up to primary school and 42.5 per cent having large size family. Majority of them (53.33 %) had marginal land holding, 27.5 per cent had high level of annual income and majority of the growers (62.50%) had no extension contact. Majority of the respondents (60.83%) had medium economic motivation and 55.83 per cent of them had low training. About 66.66 per cent marketed their tomato through village traders and 33.33 per cent sold directly to wholesaler. A per cent age of 66.66 sold immediately after harvest with pre-determined price whereas 33.33 per cent sold their tomato to local weekly market in whatever price may be. The findings presented that cent per cent claimed that the reason for selling at a particular period was highly perishable followed by financial urgency (90.00%). Majority had medium level of marketing behaviour (73.33%) followed by 16.66 per cent had high level. Results also revealed that price trend irrespective of the marketing channel practiced shows that price of tomato sold through village trader could fetch a higher price from 2013 till 2016. Marketing constraints were non availability of cold storage facilities (85.00%) followed by fluctuations in market price (81.66%).

Key words: Village traders; Price trend; Weekly market; Marketing behavior; Cold storage;

Agriculture is the main occupation of the people of Meghalaya. Of the total agricultural land in Meghalaya, 62 per cent is used for food grains, 25 per cent for cash crops, 9 per cent for horticultural crops and the rest 4 per cent is used for raising miscellaneous crops. The state offers scope for cultivation of a wide variety of agricultural crops because of highly diversified topography, altitude and climatic conditions. Meghalaya has an area about 1274 hectare under tomato crop with a production of 23744 metric tonnes and an average yield of 18.63 t/ha as reported in the year 2017-18. (Anon, 2019). West Khasi Hills District lies in the central part of the state of Meghalaya and is situated between approximately 25 degrees 10' and 25 degrees 51' N Latitude, and between 90 degrees 44' and 91 degrees 49' E Longitude. It is bounded on the North-West by Kamrup District of Assam, on the North-East

by RiBhoi district, on the east by East Khasi Hills District, on the south by Bangladesh and South West Khasi Hills district, the erstwhile Mawkyrwat Civil Sub-Division, on the west by East Garo Hills and South Garo Hills districts. The district comprises an area of about 5,247 sq km which is 23 per cent of the total area of the state. Nongstoin, covering an area of about 76.00 sq. Km, is the Headquarter of the district. In West Khasi Hills district of Meghalaya, tomato is grown extensively in cluster villages under Mawthadraishan C & RD Block of Myriaw area where farmers could even export to neighbouring state. Under the present circumstances, there is need for development of efficient marketing system along with efficient production management in the wide range of marketing activities including post-harvest technologies like avoiding distress sale at the time of harvest, processing, grading, value addition,

product development, storage, packaging, transportation techniques, distribution, product standardization, number of intermediaries etc. Further, agricultural marketing system should have provision for price information, marketing technology transfer, forward and backward linkages for increasing market access. This requires intensified efforts on marketing policy research, market intelligence and trade programme mission, centres of excellence, mode of operations and new approaches to generate appropriate marketing technologies (NarayanaSwamy et al., 2000).

The problems of farmers are numerous; however, lack of market infrastructure and price fluctuation seems to be major bottleneck in the sustained development of tomato production. Presently, development of marketing infrastructure to solve the problems of farmers in rural areas is the primary concern of the government. Intensified efforts are needed to identify the specific problems related to tomato marketing. Hence, the present investigation was undertaken with the following objectives to investigate the marketing behavior practiced by the tomato growers in the district and to list the problems faced by the tomato growers.

METHODOLOGY

The study was conducted in West Khasi Hills district of Meghalaya in the year 2017-18. Following the purposive random sampling, respondents were selected from ten tomato growing villages namely Mawkamoit, Massar, Mawthohbeh, Mawkade, Mawkatad, Mawsynnam, Phudbah, Mawlumkohkhrang, Nongthliew and Pydengumiong of Mawthadraishan and Mairang C&RD blocks in the district which constituted of 120 respondents. The marketing behaviour practiced by the tomato growers in the district were collected by contacting tomato growers personally with the help of pretested semi-structured interview schedule. For quantitative analysis, mean and standard deviation and marketing behaviour dimensions to be studied are inspired by Santosh Kumar (2008) was used.

RESULTS AND DISCUSSION

A perusal on Table 1 indicated that that 31.66 per cent of the farmers belonged to the age group (41-50 yrs) followed by 26.66 per cent under 21-30 years which shows that individual indulged more in agriculture activities when his family members started increasing

Table 1. Profile characteristics of the respondents (N=120)

Variable	Category	No.	%
Age	21-30	32	26.66
	31-40	25	20.83
	41-50	38	31.66
	51-60	20	16.66
	61-70	5	4.16
Marital status	Married	107	89.16
	Unmarried	13	10.83
Education	Illiterate	8	6.66
	Primary (Class I-III)	50	41.66
	Medium (Class IV-VI)	35	29.16
	High School (VII-X)	18	15
	Intermediate (X-XII)	9	7.5
Family size	Small size (1 - 3)	19	15.83
	Medium size (4 - 6)	50	41.66
	Large size (7 and above)	51	42.5
Land holding	Landless	19	53.33
	Marginal (0.1-1.0 ha)	64	15.83
	Small (1.1-2.0 ha)	24	20
	Semi-medium (2.1-4.0 ha)	10	8.3
	Medium (4.1-10.0 ha)	3	2.5
Income (Agri. +livestock)	Low (up to Rs.17,000)	24	20
	Semi-medium (Rs.17,001-34,000)	31	25.83
	Medium (Rs.34,001-51,000)	33	27.5
	High (above Rs.51,000)	32	26.66
	Extension contact	Never	75
Social participation	Regularly	10	8.33
	Occasionally	35	29.16
	No member	80	66.66
Economic motivation	Member of one organization	20	16.66
	Member of 1< organization	7	5.83
	Office bearer	13	10.83
Risk Orientation	Low (<22.8)	7	5.83
	Medium (22.8-24.2)	73	60.83
	High (>24.2)	40	33.33
Livestock possession	Low (<18.9)	40	33.33
	Medium (18.9-23.3)	20	16.66
	High (>23.3)	60	50
Training	No livestock	6	5
	Poultry	5	4.16
	Piggery	5	4.16
	Poultry + Piggery	83	69.16
	Poultry + piggery+ cattle	18	15
No training	Poultry+piggery+fish farming	5	4.16
	Regularly	67	55.83
	Occasionally	10	8.33
		43	35.83

to meet the family demands. Majority of them were married (89.16%) and 42.5 per cent of them had large size family which revealed that early marriage is still prevalent in the district in which the findings were in line with the research results of *Fakoyaet al.(2003)* and *Manay and Farzana (2000)*, while 41.66 per cent studied up to primary school. This situation might have arisen due to low financial position of the respondents and non-realization on importance of education. Majority of the farmers (53.33%) had marginal land holding followed by small land holders (20%) and it was happened due to lack of ancestral property, family property and increase in family size. A per cent age of 60.83 per cent tomato growers had medium level of annual income followed by 26.66 per cent high annual income which was due to the adoption of tomato cultivation in the area where they could supply to local market and neighbouring state of Assam during off-season with high price even though majority of the farmers (62.5%) had no extension contact. Majority of the farmers (60.83%) had medium economic motivation and 33.33 per cent of them had high risk orientation and this occurred due to higher returns received from tomato cultivation. A large per cent age of 69.16 per cent had livestock possession of both poultry + piggery as the farmers depend on these livestock for farm manure for crop cultivation and also majority of them cannot afford to buy manures and fertilizers. Majority of them (55.83%) had no training, as more than 41.66 per cent had education up to primary school.

The data presented in Table 2 revealed that majority of the tomato growers (66.66%) marketed their tomato through village traders in this form Producer → village trader → Commission agent → wholesaler → Retailer → Consumer as *Channel I* followed by 33.33 per cent of the growers marketed directly to wholesaler in this form Producer → Wholesaler → Retailer → Consumer as *Channel II*. The primary reason for selling through village traders was huge production of tomato by the farmers (66.66%) produced in cluster villages which attracted the village traders to come directly to their village for buying tomato. Another reason was the nearest distance (62.50%) for marketing of tomato and immediate payment (60.00%) and the other reason was to realize higher profit (59.16%). Marginal farmers could reduce cost of marketing such as transportation and be engaged in their farming activities by selling their small

Table 2. Marketing behaviour practiced by the tomato growers (N=120)

Items	No.	%
<i>Marketing channel adopted by the growers</i>		
Producer → village trader → Commission agent → wholesaler → Retailer → Consumer- <i>Channel I</i>	80	66.66
Producer → Wholesaler → Retailer → <i>Consumer- Channel II</i>	40	33.33
<i>Where do you sell the produce</i>		
In the village	80	66.66
In the nearby weekly market	50	41.66
In the distant market	20	16.66
<i>Whom do you sell the produce</i>		
Directly to the consumer	5	4.16
To the wholesaler through village trader	80	66.66
Directly To the wholesaler	40	33.33
<i>When do you sell the produce</i>		
Immediately after the harvest with pre-determined price	80	66.66
Immediately after the harvest whatever the prices may be	40	33.33
<i>Reason for selling at a particular period</i>		
Highly perishable	120	100.00
Financial urgency	108	90.00
Non availability of cold storage facilities	102	85.00
Others	30	25.00
<i>Reasons for selling to village trader</i>		
Huge production	80	66.66
Nearest distance for market	75	62.5
Immediate payment	72	60.00
Can realize higher profit	71	59.16
Engaged in other farming activities	64	53.33
<i>Reasons for selling directly to wholesaler</i>		
Weekly market	40	33.33
Nearby distance	40	33.33
Less crop production	33	27.50
No other alternatives	27	22.50
<i>Sources of market information</i>		
Village trader	80	66.66
Personally visiting the market	50	41.66
Others visiting the market	40	33.33

quantity of tomato directly to village traders and also they are paid immediately after selling of the produce. The present findings are in accordance with the results of *Badodiya (2009)*.

From Table 2, it showed that 33.33 per cent of the

tomato growers sold their produce to wholesaler which happened because of weekly market (33.33%) and nearby distance of the market followed by less crop production (27.50%).

Table also depicted that 66.66 per cent of the respondents sold their tomato immediately after the harvest with pre-determined price followed by 33.33 per cent of them sold immediately after the harvest whatever the prices may be. This happened due to the fact that village traders used to access into the cluster villages for buying tomato provided when these cluster villages could produce tonnes of tomato whereas these 33.33 per cent of the respondents sold their tomato to the local weekly market in whatever price may be because they had no other alternatives. This finding was in agreement with the findings of Kumar (2015).

Table also presented that cent per cent (100.00%) of the respondents claimed that the reason for selling at a particular period was highly perishable of tomato followed by financial urgency (90.00%) and non availability of cold storage facilities (85.00%). It was also reported that 66.66 per cent of the growers gathered their information from village traders followed by personally visiting the market (41.66%) and 33.33 per cent of the growers gathered their information from others visiting the market

Table 3. Distribution of respondents according to their overall marketing behavior (N=120)

Category	No.	%	Mean	S.D.
Low (<12.25)	12	10.00	13.5	1.25
Medium (12.25-14.75)	88	73.33		
High (>14.75)	20	16.66		

Table 3 presented that the majority of the respondents had medium level of marketing behaviour (73.33%) followed by 16.66 per cent of the respondents had high level of marketing behaviour and only 10.00 per cent of respondent had low level of marketing behaviour.

Table 4. Price trend of tomato received by the growers for the last five years

Year	Channel I	Channel II	Price margin (Rs)
2013	Rs 13/ kg	Rs 8/kg	Rs 5
2014	Rs 13/ kg	Rs 8/kg	Rs 5
2015	Rs 13/ kg	Rs 10/kg	Rs 3
2016	Rs 15/kg	Rs 10/kg	Rs 5
2017	Rs 18/kg	Rs 20/kg	Rs 2

Table 4 presented the price trend received by the tomato growers and price margin for the last five years irrespective of the marketing channel practiced by the growers which clearly shows that the price of tomato sold through village trader could fetch a higher price from 2013 till 2016. But the price of tomato in the last year 2017 was higher when they are sold directly to wholesaler which occurred due to the fact that the price of tomato fluctuated from time to time. Furthermore, the farmers also expressed their satisfaction to sell through village traders (Channel I) in their own village even though the market price is less than Channel II because they were selling their tomato produces with pre determined price and could get immediate payment soon after selling. They were also free from transportation cost and could engage themselves in other farming activities.

Table 5. Constraints faced by the tomato growers in marketing and their suggestions

Marketing constraints	No.	%	Rank
Non availability of cold storage facilities	102	85.00	I
Fluctuations in market price	98	81.66	II
Lack of market information	84	70.00	III
Exploitation by the middleman	36	30.00	IV
Absence of processing facilities	21	17.50	V
Faulty system of weighing	19	15.83	VI
Poor transportation facilities	15	12.5	VII
<i>Suggestions</i>			
Providing cold storages	102	85.00	I
Minimum support price for tomato	98	81.66	II
Providing access to market info.	84	70.00	III
Introducing electronic weighing machine	49	40.83	IV
Provide lodging and boarding facilities	19	15.83	V
Reduce commission rates	15	12.50	VI
Separate market for major produce	5	4.16	VII

Regarding marketing constraints, it was observed from Table 5 that the major problems faced by the tomato growers were non availability of cold storage facilities (85.00%), followed by fluctuations in market price (81.66%), lack of market information (70.00%), exploitation by the middleman (30.00%), absence of processing facilities (17.50%), faulty system of weighing (15.83%) and poor transportation facilities (12.50%). It might be due to the fact that majority of growers were selling their produce through village traders, who determine the price of tomato. Moreover, prices are dependent on produce arrival in the market at a time and demand from consumers. The findings were in line

with the results of *Lakshmi et al. (2000)*. Majority of the respondents had suggested to provide cold storages (85.00%) followed by Minimum Support Price for tomato crop (81.66%) based on production cost providing access to market information (70.00%), introducing electronic weighing machine (40.83%), provide lodging and boarding facilities at market place (15.83%), reduce commission rates (12.50%) and establishing separate market for major produce (4.16%) were the suggestions given by tomato growers to overcome marketing problems.

CONCLUSION

The study revealed that the tomato growers in the district need to cooperate and coordinate among them in such a way that they could form a Commodity Interest Group (CIG) only for tomato crop so that they could determine their crop price and even control it, to be free from the clutches of middlemen. Through this group, they could approach the State Government to develop and regulate marketing policies like Minimum Support Price, provision for cold storage facilities, wholesale market for specific crops etc.

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