

Research Paper

# Strategies for Upscaling the Marketing Behaviour of Vegetable growers of Ranga Reddy District

V.V.S.S. Anusha\*<sup>1</sup> and S.R. Padma<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Agriculture Extension and Rural Sociology, AC&RI, TNAU - CBE, Telangana, India

<sup>2</sup>Assistant Professor (Agriculture Extension) Office of Dean Agriculture, AC&RI, TNAU, CBE, Telangana, India

\*Corresponding author: anushavelamuri12@gmail.com (ORCID ID: 0000-0002-0781-3763)

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## ABSTRACT

Vegetable production was recorded highest in Ranga Reddy district of Telangana (2019-2020). This study highlights the marketing aspect of vegetable growers. The marketing behaviour was studied under four components - planning, decision-making, implementation and review. The responses were quantified using descriptive statistics. The results depicted that only 30.67 per cent of respondents consider the preferences of consumers in choosing vegetables and 28.67 percent of them collect information regarding the demand, supply, prices prevailing at the time of planning. Decisions regarding area kept for vegetables (62.00%), vegetables to be grown (59.33%) were taken based on self-intuition (100.00%) and considering family personnel (79.33%). The sale of produce is at the regulated market, within the district (90.00%), through commission agents (88.67%). Performance of cleaning (98.66%) and grading (97.34%) was not according to standards. Finally, the review of marketing actions was sparsely done. Based on the observed behaviour, suggestions like infrastructure (storage) facilities, training on post-harvest handling procedures, capacity building, export promotion, FPO formation, ICT's for market information were given substantiating their impact.

## HIGHLIGHTS

- ① The study observed lesser involvement and attention of vegetable growers in planning, decision-making aspects of their marketing behaviour.
- ② In implementation aspect, regulated markets that are within the district were preferred and through commission agent as soon as after harvest.
- ③ Post-harvest practices – cleaning and grading (non-standardised), storage and processing (not practiced).

**Keywords:** Behaviour, market, Ranga Reddy, suggestions, vegetable growers

In agriculture, marketing is the terminating process that fetches income for farmers. Vegetables are the key diversifying component generating continuous income but are mainly practiced for subsistence purposes rather than commercializing. Vegetables have everyday utility creating demand throughout the year. This creates scope for the farmers to increase their production that contributes to the rise in income.

The farmer's income is directly dependent on marketing components such as market intelligence,

which aids in crop planning based on demand and supply, market knowledge, which aids in selecting the best location and time for sale, and preferred marketing channels. Phukan *et al.* (2018) analyzed the marketing behaviour of the Northeast region (Sikkim) vegetable farmers where 48.00 per cent of farmers sold the vegetable soon after the harvest

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irrespective of prices as vegetables are perishable (40.00%) and non-availability of cold storage facilities (25.00%). The sale was through village level middle mam (44.00%) at weekly markets (36.00%) as it fetches better price (42.00%).

Ranga Reddy district is rich in horticulture crops leading in total acreage under vegetables and total production. For 2019-2020 the total production was 3,85,135 MTS covering an area of 58,318 acres. Major vegetables grown were - tomatoes, leafy vegetables, carrots. Following them - brinjal, green chilli, okra, beans, ridge gourd, cabbage, onion, beetroot, bitter, and bottle gourd (RangaReddy district, 2021). It created a need to understand the marketing behaviour of vegetable growers, different components considered by the vegetable growers, and advocate suggestions to upscale it to improve production, the productivity of vegetables, income that contribute to the livelihood of farmers.

## METHODOLOGY

### Description of the study area

The study area Ranga Reddy district is a peri-urban area close to the state's capital Hyderabad. Agriculturally, it falls in Southern Telangana Zone predominantly with red soils. It receives an annual rainfall of 846.2 mm (Telangana State Development Planning Society, 2020). Drip irrigation facilitates taking up vegetables in all three agriculture seasons- Kharif, Rabi, and Summer. It has nine Agriculture Market Committees out of 192 in Telangana state and four rythu bazars (farmers market), allowing the farmers for direct sale of vegetables to end consumers.

### Sampling method and Procedure

Telangana state was conveniently selected by the researcher for being the resident of the area and acquainted with local situations and language ease the accessing of respondents in the study area. Ranga Reddy district of Telangana leads in area and production of vegetables (RSSS data 2018-19, 2019-2020), therefore purposively selected for the study. The study included blocks and villages with leading areas under vegetable production based on the purposive selection. The top three blocks were Chevella, Ibrahimpatnam, and Shabad, and from each mandal, three leading villages under

the area of vegetables were selected. From a total of nine villages 150 respondents were selected proportionately to collect appropriate responses.

### Scales and Method of Data collection

An interval scale constructed by Nirban (2004) and followed by Sapte (2018) to study the marketing behaviour includes four components *viz.*, planning, decision-making, implementation, and review. This scale was adopted in the present study to have an in-depth analysis of the market situation of vegetable growers. The researcher held the survey after pre-testing the interview schedule in a non-sample area and made necessary corrections.

## METHOD OF DATA ANALYSIS

The data was collected and tabulated accordingly using Descriptive statistics (Frequency and Percentage). Based on the results obtained, the researcher formulated necessary suggestions to upscale the marketing behaviour of vegetable growers.

## RESULTS AND DISCUSSION

Marketing behaviour defined as a set of actions from the time of harvest to the sale focuses only on the implementation aspect of the individual. Planning, decision-making, and review of that specific behaviour give a wholesome understanding of the vegetable grower.

### (A) Planning

It is operationally defined as a pre-determined plan drawn by every vegetable grower regarding future activities. When enquired about various planning activities majority of respondents did not collect information about institutions/ persons engaged in the marketing of produce (99.33%) and ignored understanding the distribution of vegetable produce (98.67%) as tabulated in Table 1.

The majority of them opted 'Never' regarding selecting institutions or persons (88.00%) and marketing channel selection (83.37%) based on the profit. Similarly, 66.00 per cent of them never studied the available resources and facilities in the planning stage. It could be interpreted from the above that respondents disregard the planning stage of vegetable production. Their farming expertise,

**Table 1:** Planning component of marketing behaviour (n = 150)

Sl. No.	Marketing Activities	Response		
		Always No. (%)	Sometimes No. (%)	Never No. (%)
<b>Planning</b>				
1	Study available resources and facilities in the area before cultivation of vegetables	35 (23.33)	16 (10.67)	99 (66.00)
2	Understand the needs of consumer before choosing the vegetables	46 (30.67)	29 (19.33)	75 (50.00)
3	Understand the distribution of vegetable produce	0 (0.00)	2 (1.33)	148 (98.67)
4	Collect information about institutions/ persons engaged in marketing of produces	0 (0.00)	1 (0.67)	149 (99.33)
5	Decide marketing channel which fetches maximum profit	8 (5.33)	17 (11.33)	125 (83.37)
6	Select institution or person which brings maximum profit through sale of vegetables	5 (3.33)	13 (8.67)	132 (88.00)
7	Collect required information about markets (Ex-demand, Prices, Quality, etc.)	43 (28.67)	28 (18.66)	79 (52.67)
8	Use various sources to collect market information			
	Newspaper	32 (21.33)	19 (12.67)	99(66.00)
	Radio	0 (0.00)	0 (0.00)	150 (100.00)
	Television	44 (29.33)	27 (18.00)	79 (52.67)
	Agricultural Produce Marketing Committee (APMC's)	0 (0.00)	0 (0.00)	150 (100.00)
	Farmers in the village	128 (85.33)	16 (10.67)	6 (4.00)
	Internet	22 (14.67)	10 (6.67)	118 (78.67)
	Marketers	0 (0.00)	0 (0.00)	150 (100.00)

acquaintance with the package of practices, routine marketing practices made planning for vegetable cultivation unessential.

Sapate's (2018) research on the horticultural crop pomegranate highlighted respondents' participation in planning. Pomegranate could be understood as an orchard crop that takes 4-5 years to yield the economic part and has a 120-130 day gap between pickings. As a result, it may have demanded meticulous preparation of marketing operations.

Table 1 also highlights that only 30.67 per cent of vegetable growers 'Always' appraised the needs of consumers before selecting the vegetables and about 28.67 per cent 'Always' acquired market information as - demand, prices, quality.

When asked about the sources of collecting market information, 85.33 per cent of them mentioned about the farmers in the village as 'Always' next to which were T.V (29.33%) and Newspaper (21.33%) but lesser significant than the first. About 14.67 per cent of them always accessed the internet for market information. A noteworthy point was APMC's and

Marketers (100.00% 'Never') are not at all consulted in the planning stage.

**(B) Decision-making:** It is selecting a course of action after considering different alternatives. As decision-making stands as the core of planning the vegetable growers were interviewed about their action plan and the results have been tabulated underneath in Table 2.

Allocation of the area under vegetable production (62.00%) and vegetables (varieties) to be grown (59.33%) are two such economic decisions that are 'Always' taken by respondents whereas, capital management was ignored (82.00% opted 'Never'). In discussions respondents stated that major farm decisions were made considering the seasonality and the availability of inputs (seeds) and resources (labour, water).

Respondents when asked about the sources they rely on making decisions all 150 of them claimed self-intuition extended to family personnel (79.33%) and progressive farmers (57.33%). It was observed that extension personnel were barely contacted

**Table 2:** Decision-making component of marketing behaviour (n = 150)

Decision-making / Action Plan		Response		
		Always No. (%)	Sometimes No. (%)	Never No. (%)
<b>Activities decided after planning</b>				
1	Vegetables (what all) and varieties to be grown	89 (59.33)	26 (17.34)	35 (23.33)
2	Management of markets	19 (12.67)	23 (15.33)	108 (72.00)
3	Area allocation for each vegetable	93 (62.00)	30 (20.00)	27 (18.00)
4	Cultivation technology to be followed	6 (4.00)	19 (12.67)	125 (83.33)
5	Sources and methods of procuring inputs	18 (12.00)	11 (7.33)	121 (80.67)
6	Capital management	5 (3.33)	22 (14.67)	123 (82.00)
<b>Sources consulted while taking decisions</b>				
1	Progressive farmers	86 (57.33)	40 (26.67)	24 (16.00)
2	Self-intuition	150 (100.00)	0 (0.00)	0 (0.00)
3	Successful marketers	0 (0.00)	0 (0.00)	150 (100.00)
4	Family personnel	119 (79.33)	14 (9.34)	17 (11.33)
5	Extension personnel	4 (2.67)	5 (3.33)	141 (94.00)
6	APMC personnel	0 (0.00)	0 (0.00)	150 (100.00)

(2.67%) following it APMC personnel and successful marketers were not at all involved in the decision-making process. Farming was considered as a personal activity by the vegetable growers thereby restrict the decision-making to self and localite sources. These results were on par with Rawal and Ansari (2020).

Respondents claimed that extension personnel were approached for availing subsidies procuring inputs, issuance of deeds for government procurement of cereals, pulses, cotton, and insurance settlements rather than involving in the marketing aspect of vegetables.

**(C) Implementation:** It consists of the execution part of the marketing behaviour. As the results from Table 3 shows only 24.67 percent of respondents only cultivate the vegetables (varieties) as decided. The unavailability of resources, crop failure due to vagaries in the environment act as constraints for the implementation of the plan. As the involvement of extension personnel in decision making, management of markets was insignificant reflected the same in implementation.

Vegetable (carrot, beetroot, tomato) growers preferred the regulated markets (90.00%) followed by local markets (28.00%). It was reasoned that the regulated markets ensure the sale of huge quantities yielded in preliminary harvests. At later pickings/harvest when the quantum of yield is low, nearby

local markets are trusted. The results observed from table 3 underlined that retail markets were a market source practiced by vegetable growers ('Sometimes' by 18.67%).

Exports and inter-state marketing was not practiced (100.00% 'Never') by the vegetable growers confining themselves completely to within state (100.00% 'Always'). The lower yields due to the lesser acreage kept for vegetable production along with low credit access restricted them to commercialize the vegetable production.

About 95.00 per cent of respondents always marketed within the district 32.00 and 18.67 percent in mandal and village markets respectively. The transport facilities, the distance of markets, prevailing prices were the factors considered before the choice of marketplace.

The cleaning and grading operations were done mandatorily ('Always'- 98.66, 97.34%) but not according to any standards. These results are in concordance with Soni *et al.* (2018). Other post-harvest operations like Storage, Processing, and Packaging were not exercised by respondents (100.00% - 'Never').

Private sources (Trucks, Tempos) were 'Always' preferred source by 86.00 per cent of vegetable growers. The study area (peri-urban) was accessible with public transport but road facilities were sparsely opted for it (6.00, 10.00% - 'Always',

**Table 3:** Implementation component of marketing behaviour (n = 150)

Implementation of action plan	Response		
	Always No. (%)	Sometimes No. (%)	Never No. (%)
<b>1. Steps in implementation of action plan</b>			
Cultivate vegetables and varieties as decided	37 (24.67)	45 (30.00)	68 (45.33)
Seek advice of extension Personnel for solving field problems	2 (1.33)	5 (3.34)	143 (95.33)
Follow marketing systems as decided	0 (0.00)	0 (0.00)	150 (100.00)
<b>2. Market activities performed</b>			
(a) Type of market selected to sell vegetable produce			
Regulated market	135 (90.00)	10 (6.67)	5 (3.33)
Wholesale market	12 (8.00)	21 (14.00)	117 (78.00)
Local market	42 (28.00)	23 (15.33)	85 (56.67)
Retail market	(0.00)	28 (18.67)	122 (81.33)
(b) Place of market			
Within village	28 (18.67)	36 (24.00)	86 (57.33)
Within mandal	48 (32.00)	38 (25.33)	64 (42.67)
Within district	135 (90.00)	8 (5.33)	7 (4.67)
Within state	150 (100.00)	0 (0.00)	0 (0.00)
Outside state	0 (0.00)	0 (0.00)	150 (100.00)
Export	0 (0.00)	0 (0.00)	150 (100.00)
(c) Cleaning of produces	148 (98.66)	1 (0.67)	1 (0.67)
(d) Grading of vegetables	146 (97.34)	2 (1.33)	2 (1.33)
(e) Place of storage			
Cold storage	0 (0.00)	0 (0.00)	150 (100.00)
Own godown	0 (0.00)	0 (0.00)	150 (100.00)
(f) Selling vegetables after processing	0 (0.00)	0 (0.00)	150 (100.00)
(g) Packing of vegetables by improved methods	0 (0.00)	0 (0.00)	150 (100.00)
(h) Mode of transport			
Own vehicle	12 (8.00)	6 (4.00)	132 (88.00)
Public transport	9 (6.00)	15 (10.00)	126 (84.00)
Private transport	129 (86.00)	5 (3.33)	16 (10.67)
(i) Time of sale			
When prices are high	15 (10.00)	9 (6.00)	136 (84.00)
When in need of money	29 (19.33)	16 (10.67)	105 (70.00)
Immediately after harvest	150 (100.00)	0 (0.00)	0 (0.00)
Indebtedness to trader	3 (2.00)	1 (0.67)	146 (97.33)
(j) Weighing of the produce at the time of sale	150 (100.00)	0 (0.00)	0 (0.00)
(k) Agency for sale of vegetables			
Self	26 (17.33)	15 (10.00)	109 (72.67)
Through cooperatives	0 (0.00)	0 (0.00)	150 (100.00)
Through commission agent	133 (88.67)	6 (4.00)	11 (7.33)
To government agencies - hostels	0 (0.00)	0 (0.00)	150 (100.00)
Others: Retail market (Reliance, More)	0 (0.00)	28 (18.67)	122 (81.33)

‘Sometimes’). It was justified that markets need to be reached early in the mornings when major transactions happen. With public transport not available in those early hours and frequent stops still delay reaching the market.

Considering the perishable nature vegetables were sold immediately after harvest (100.00% - Always) without waiting for better prices (84.00%). Weighment of the produce at the time of sale was definitely (100.00% ‘Always’) executed and the agency chosen for marketing is mostly commission agents (88.67%). The credibility of the agents and immediate cash requirements contributed to this behaviour. Lack of time for direct sale to the end-users stated by the respondents displayed these kinds of results. These results were in line with Srinivas *et al.*, (2016) and Kumar *et al.*, (2018). Only 18.67 per cent sometimes considered the retail agencies. The non-existence of Cooperatives ruled out the chance of it as an agency for marketing of vegetables along with a Government agency (100.00% ‘Never’).

**(D) Review:** Any activity is completed only after the review. The respondents were asked about the evaluation of their farm activities and the results are recorded in Table 4. Documentation of marketing experiences was executed sometimes by only 19.33 per cent of the respondents. About 22.00 per cent of vegetable growers analyzed the changes of market situation sometimes and 24.00 per cent of them came up with a new action plan.

On a holistic view, it could be generalized that vegetable growers did not carry out the review which could be attributed to their lack of planning.

**Suggestions for upscaling the marketing behaviour of vegetable growers in the study area**

**At Village level**

1. Farmer Producer Organizations (FPOs) are defined as a group of farmers who organise a

registered entity to handle agriculture-related economic activities for the benefit of members who are also shareholders. It facilitates in the management of day-to-day issues such as seed procurement, increased labour and transportation costs, and price volatility. The Government of India has set out ₹ 6,865 crores for the establishment of 10,000 new FPOs (financial assistance of ₹ 18.00 lakh per FPO for a period of 03 years). Non-participation of vegetable growers in group activities can be attended by local leaders to register their groups and conduct economic operations. In the long run, an organisation can use its own resources to build infrastructure (transport vehicles, cold storage, and processing units), thereby enabling better state of farmers.

2. Fragmenting the market and setting up sub-market yards nearer to the farmers with prices similar to primary market will help to reduce transport cost that indirectly raises farm income.

3. Mobilization of retail agencies to link with farmers directly to build trust and rely on it as complimenting market system. Retail agencies can provide specific trainings to vegetable growers regarding quality standards preferred by them.

**At Department / KVK’s level**

1. Intrinsic motivation encourages people to be self-sufficient, which is thought to be the ideal way to achieve the desired outcome. The survey revealed that respondents were unaware of the importance of planning, decision-making, and review in commercial farm management. Extension personnel can assist farmers in planning farm activities and capital management by motivating them to transition from subsistence to commercial vegetable production.

2. Extension personnel is farmer’s personal cosmopolite who assist them from seed to market (market-led extension). Nevertheless, participants were unable to capitalize from their services

**Table 4:** Review component of marketing behaviour (n= 150)

Review	Always	Sometimes	Never
1 Documentation of marketing experiences	6 (4.00)	29 (19.33)	115 (76.67)
2 Analysis of changes in the marketing situation	11 (7.33)	33 (22.00)	106 (70.67)
3 Preparation of new action Plan	9 (6.00)	36 (24.00)	105 (70.00)

and confined themselves to localite sources. To promote vegetable growers market orientation, extension personnel should be involved in selecting vegetables based on demand, price estimates, and providing market knowledge (prevailing pricing).

3. Training is the process of imparting specific abilities or behaviours in trainees. The lack of processing activities and standardised grading was highlighted in this study. This necessitates the organisation of training programmes on value-added vegetables and post-harvest management of vegetables, such as cleaning, grading, and packaging, by local KVKs.

4. In this study, the percentage of vegetable growers who used the internet to gather market information was less significant. Since pandemic emphasised the importance of digital connectivity, academicians must collaborate with IT experts to develop information and communication technologies such as SMS, mobile apps, and web portals that cater to the information needs of vegetable growers. Price forecasts, as well as information on demand and supply of vegetables, aid in the planning of farm activities for vegetable growers.

### At Government level

1. Lack of cold storage facilities was visible in the study area. It was considered as significant cause of immediate sale of produces, at nearby markets through commission agents to avoid post-harvest loss. Storage of vegetables also averts price risk therefore need arises in the infrastructure (storage facilities) development by the government in the study area.

2. The study area is close to Hyderabad's Rajiv Gandhi International Airport, making it ideal for exports. Ranga Reddy district is a prominent producer of vegetables; the Telangana government may provide special economic zone status to a few areas in the study area, increasing market prospects for vegetable growers. As a result, the government and cooperatives can take steps to capitalise on the study area's export potential by increasing export orientation among farmers and involving private companies in infrastructure development.

## CONCLUSION

Vegetables are an important source of nutrition and are consumed as mandatory in every individual's diet. Produce that has demand throughout the year, suffer from fluctuating prices leaving the farmer at a losing end. The marketing behaviour of vegetable growers in the study area is static at subsistence level without exploring new marketing systems, inter-state trades, and exports. An encouraging income drives the farmers to produce more therefore this study suggests training, capacity building, infrastructure creation, involvement of extension personnel in marketing activities, including ICT's and F.P.O formations for the betterment of marketing situation.

## REFERENCES

- Kumar, S., Roy, M. and Mukherjee, A. 2018. Marketing behaviour of vegetable growers in Uttarakhand hills. *J. Community Mobilization and Sustainable Dev.*, **13**(1): 68-74.
- Nirban, Ashok, K. and Jai, K. 2004. Analysis of Agriculture Produce market committees in Konkan and West Maharashtra with reference to their potential role in Agriculture Marketing Extension. Thesis Ph.D.(Ag.). Mahatma Phule Krishi Vidyapeeth, Department of Extension Education, Rahuri, MH, India.
- Phukan, P., Avasthe, R., Lepcha, B. and Singh, R. 2018. Marketing behaviour of vegetable growers in East Sikkim. *J. Krishi Vigyan*, **6**(2): 157-162.
- Rawal, J. and Ansari, M.A. 2020. Attitude of Vegetable Growers of Hilly Areas Towards Extension Services. *Int. J. Agric. Sci.*, **12**(8): 9748-9752.
- Ranga Reddy District. 2021. Mandal wise horticulture area in acres for the year -2019-20 (*Kharif & Rabi*). <https://rangareddy.telangana.gov.in/horticulture-sericulture/> (Last Accessed on 16<sup>th</sup> October,2021)
- Government of Telangana. 2019. Area under vegetables RSSS data 2018-19 (Ranga Reddy district). *Rythu Samagra Samachara Sekara (RSSS)*. Telangana, India.
- Sapate, A.U. 2018. Marketing Behaviour of Pomegranate growers. Thesis M.Sc.(Ag.). Mahatma Phule Krishi Vidyapeeth, Department of Extension Education, Rahuri, M.H, India.
- Soni, Arti, N., Verma, P.D. and Dipal N Soni. 2018. Adoption of fruits and vegetable preservation technology by tribal farm women of tapi district. *Gujrath J. Ext. Edu.*, **29**(1): 9-15.
- Srinivas, M.V., Reddy, B.L. and Reddy, Y.V. 2016. Marketing behaviour of vegetable growers. *Agric. Update*, **11**(4): 434-437.

