

Original Research Article

**A STUDY ON CONSUMER BUYING BEHAVIOUR OF
INSECTISIDE IN PRAYAGRAJ UTTAR PRADESH**

Abstract:

Insecticides are the substances which are used to kill insects are called insecticides. Insecticides have a wide application in the field of medicine, agriculture, and industry. It has been revealed during the study that there is availability factor which are affecting buying behaviour of Takaf by different categories of respondents are availability at wholesaler shop (29.16%), availability at retailer shop (58.33%) and availability on online platform (12.50%) respectively. It has been revealed during the study that there is quality factor which are affecting buying behaviour of TAKAF by different categories of respondents are preventive (33.33%), curative (37.50%) and Safe to applicator (29.16%) respectively. It has been found during the study that the major constraint in marketing of TAKAF was the high cost of transportation with 30 respondents response ranked I, followed by shortage of trading ranked II, followed by Price fluctuation with 18 respondents response ranked III, followed by High cost storage with 16 respondents response ranked IV, followed by High prices with 15 respondent response ranked V, followed by storage with 14 respondents response ranked VI and lastly delayed sales with 6 respondent response ranked VII.

Keywords: Buying behaviour, Constraints, Suitable measures.

Introduction:

Insecticides are chemical compounds that are designed to kill or control insect populations. While they have been widely used for decades to protect crops, homes, and public spaces from insect damage, there is growing concern about their potential negative impact on the environment and human health. It is important to use insecticides responsibly and to explore alternative approaches to pest control, such as integrated pest management and the development of less harmful insecticides. According to a report by ResearchAndMarkets.com, the Indian insecticide market is expected to grow at a compound

annual growth rate (CAGR) of around 6.5% during the forecast period of 2021-2026. The market is dominated by chemical insecticides, which account for more than 80% of the total market share. The major players in the Indian insecticide market include companies such as Bayer Crop Science, Syngenta, BASF, UPL, and Dhanuka Agritech. ADAMA Ltd. is one of the world's leading crop protection companies. They understand farming is much more than just a business, it's a way of life. They strive to Listen> Learn> Deliver. Takaf is a unique combination product with two different modes of action. Takaf inhibits mitochondrial ATP synthase leading to paralysis of the pest simultaneously effects the central and peripheral nervous system by interfering with sodium channel gating. Takaf can be used as a solution for effective control of whiteflies.

Research Methodology:

1: Selection of District:

There are 75 District and 18 division in Uttar Pradesh state. Out of these Prayagraj district of Uttar Pradesh was selected purposively study based on maximum area under chilli cultivation.

2: Selection of Block:

There are 23 blocks in the district. Out of these Soraon was selected purposively for the study. The agro condition of the block is suitable for the cultivation of chilli.

3: Selection of Village:

There are total 113 village in Soraon block obtained from the block development office. Thereafter these villages were arranged in order based on area of cultivation. Thus, out of total villages 5% villages was selected randomly for the present study.

4: Selection of Respondents:

From the selected village list of all the chilli cultivator was obtained from the block development office in each selected village. Ascending order on the basis of size of their land holding for the selection of cultivators from families was listed and farmers was randomly selected from each village.

5: Selection of Market and Market Functionaries:

A) Market:

Two types of market were selected purposively for the present study.

Primary market- The primary market (Soraon mandi etc) was selected purposively.

Secondary market- Regulated market was selected purposively.

B) Market Functionaries:

The market functionaries were considered for data collection regarding and other marketing charges in different marketing channel list of all market functionaries was prepared with the help of primary and secondary market offices then out of total number of market functionaries like 10 wholesalers, 5retailers etc., market functionaries were selected purposively for present study.

Analytical Tools:

- **Standard deviation**

To calculate the standard deviation, use the following formula -

$$\sigma = \sqrt{\frac{\sum(x_i - \mu)^2}{N}}$$

- **Likert Scale**

A Likert scale is a rating scale used to assess opinions, attitudes, or behaviour. To collect data, you present participants with Likert-type questions or statements and a continuum of possible responses, usually with 5 or 7 items. Each item is given a numerical score so that the data can be analysed quantitatively.

- **Garrett ranking**

$$\text{Per cent position} = 100 (R_{ij} - 0.5) / N_j$$

Where,

R_{ij} = rank given for i^{th} factor by j^{th} individual

N_j = number of factors ranked by j^{th} individual

Result And Discussion:

To analyse different factor impacting on buying behaviour of Takaf.

Table 1. Availability of TAKAF

(n=120)

General	Categories	Respondents Number	Respondents					Percentage
			Marginal	Small	Semi medium	Medium	Large	
Availability of Takaf	Wholesaler	35	3	16	7	4	5	29.16%
	Retailer	70	9	18	15	23	5	58.33%
	Online	15	3	4	3	3	2	12.5%
Total		120	15	38	25	30	12	100%

Table 1 reveals that during the study that there is availability factor which are affecting buying behaviour of Takaf by different categories of respondents are availability at wholesaler shop (29.16%), availability at retailer shop (58.33%) and availability on online platform (12.50%) respectively.

Table 2. Quality of TAKAF

(n=120)

General	Categories	Respondents Number	Respondents					Percentage
			Marginal	Small	Semi- medium	Medium	Large	
Quality	Preventive	40	5	14	5	14	2	33.33%

y of TAKA F	Curative	45	7	17	16	3	2	37.5%
	Safe to Applicato r	35	3	7	4	13	8	29.16%
Total		120	15	38	25	30	12	100%

Table 2 reveals that during the study that there is quality factor which are affecting buying behaviour of TAKAF by different categories of respondents are preventive (33.33%), curative (37.50%) and Safe to applicator (29.16%) respectively.

Table 3. Price of TAKAF

(n=120)

General	Categories	Respondents Number	Respondents					Percentage
			Margin al	Sma ll	Semi- mediu m	Mediu m	Larg e	
Price of TAKA F	Low	55	3	22	13	15	2	45.83%
	Medium	50	9	12	10	12	7	41.66%
	High	15	3	4	2	3	3	12.5%
Total		120	15	38	25	30	12	100%

Table 3 reveals that during the study that there is price factor which are affecting buying behaviour of TAKAF by different categories of respondents are low price (45.83%) , medium price (41.66%) and high price (12.50%) respectively.

Table 4. Packaging of TAKAF:

(n=120)

General	Categories	Respondents Number	Respondents					Percentage
			Margin al	Sma ll	Semi- mediu m	Mediu m	Larg e	
Packagi ng of	Small pack	55	6	19	11	15	4	45.83%

TAKAF	Large pack	10	2	3	3	1	1	8.33%
	Bottles Quality	45	5	12	10	12	6	37.5%
	Packaging quality	10	2	4	1	2	1	8.33%
Total		120	15	38	25	30	12	100%

Table 4 reveals that during the study that there is packaging factor which are affecting buying behaviour of TAKAF by different categories of respondents are availability in small pack (45.83%), availability at large pack (8.33%), bottle quality(37.50%) and packaging quality (8.33%) respectively.

To find out the constraint in Consumers buying and suggest suitable measures.

Table 5. Constraints in marketing of TAKAF

S.No.	Constraints	Frequency	Ranking
1.	High cost of transportation	30	I
2.	Price fluctuation	18	III
3.	Delayed sales	6	VII
4.	Shortage of trading	21	II
5.	High prices	15	V
6.	Storage problems	14	VI
7.	High-cost storage	16	IV
Total		120	

It has been found during the study that the major constraint in marketing of TAKAF was the high cost of transportation with 30 respondents response ranked I, followed by shortage of trading ranked II, followed by Price fluctuation with 18 respondents response ranked III, followed by High cost storage with 16 respondents response ranked IV, followed by High prices with 15 respondent response ranked V, followed by storage with 14 respondents response ranked VI and lastly delayed sales with 6 respondent response ranked VII.

SUGGESTIONS

- Field staff should be well educated and having good sense of humour and sharp mind.

- Number of staffs should be enough for each level of work.
- Strategy should be made to fulfil all the recommendation of farmers.
- Field staff should keep in mind that our consumers are the giver.
- Company should give the appraisal to the staff for their good work.
- Field work is the most necessary part and it should be done with great potential.
- Company should also focus on medium and small land holding farmers to make its grip strong in the market.
- Quality of products, its packaging supply should be good.

Conclusion:

It has been revealed during the study that there is availability factor which are affecting buying behaviour of Takaf by different categories of respondents are availability at wholesaler shop (29.16%), availability at retailer shop (58.33%) and availability on online platform (12.50%) respectively. It has been revealed during the study that there is quality factor which are affecting buying behaviour of TAKAF by different categories of respondents are preventive (33,33%), curative (37.50%) and Safe to applicator (29.16%) respectively. It has been revealed during the study that there is price factor which are affecting buying behaviour of TAKAF by different categories of respondents are low price (45.83%), medium price (41.66%) and high price (12.50%) respectively. It has been revealed during the study that there is price factor which are affecting buying behaviour of TAKAF by different categories of respondents are low price (45.83%), medium price (41.66%) and high price (12.50%) respectively. It has been found during the study that the major constraint in marketing of TAKAF was the high cost of transportation with 30 respondents response ranked I, followed by shortage of trading ranked II, followed by Price fluctuation with 18 respondents response ranked III, followed by High cost storage with 16 respondents response ranked IV, followed by High prices with 15 respondent response ranked V, followed by storage with 14 respondents response ranked VI and lastly delayed sales with 6 respondent response ranked VII.

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