

STUDY ON BRAND AWARENESS AND CONSUMER'S BUYING BEHAVIOUR OF FIPRONIL INSECTICIDE IN LAKHIMPUR KHERI DISTRICT OF UTTAR PRADESH

Cheteshwar Singh¹ and Jayant Zechariah²

¹MBA (Agribusiness) and ²Assistant Professor

Department of Agricultural Economics

Sam Higginbottom University of Agriculture, Technology and Sciences, Naini, Prayagraj

Corresponding author: singhtushar690@gmail.com

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ABSTRACT

This study focused on the brand awareness and consumer's buying behaviour of Fipronil insecticide in Lakhimpur Kheri District of Uttar Pradesh. A sample of 120 respondents from 3 randomly selected villages were selected for the study. The study revealed several factors influencing in consumer buying behaviour and brand awareness of Fipronil in the study area such as marketing and advertising, product packaging and design, performance and quality, brand reputation, distribution of insecticides, availability of insecticides, price and value proposition, and social media presence. The study found that around 20.83% of farmers prefer buying a product based on availability, 15.84% on performance and quality, and 13.34% on brand reputation, 12.5% on price and value proportion, and followed by farmers prefer Fipronil over factors like distribution, social media presence etc. Based on the availability factor, 55.83% of respondents indicated availability at retail shops. Under the quality factor, 50.00% of respondents indicated that Fipronil is curative in nature. Under-price factor, 56.66% of respondents indicated that the price of the Fipronil is medium as compared to the other insecticide available in the area. Under the packaging category, most respondents (43.34%) indicated small pack. Under performance category, 38.34% respondents indicated that the performance of the insecticide was excellent.

Keywords: Brand Awareness and Consumer's Buying Behaviour

INTRODUCTION

Over 70% of India's population is employed in or dependent upon the agricultural industry, which is vital to the country's economy. Increasing industrial output and productivity requires the use of Insecticide, which include fungicides, rodenticides, molluscicides, nematicides, and plant growth regulators (Ajay 2019). Due to its effects, organochlorine (OC) Insecticide—which

were once widely used to treat typhoid and malaria—have been banned or subject to limitations in many industrialised countries; in contrast, their usage is less than 1 kilogramme per acre in nations like the US and Japan. There are obstacles in reducing food crop losses, which now stand at 35–45% as a result of pests, illnesses, and inadequate storage facilities (Bharttacharya 2018).



These constraints include limited knowledge, resources, and available land. With 13th-place exports and fourth-place agrochemical production after the US, Japan, and China, India has become a major participant (Anwar, 2019). In 2020, the Indian herbicide market was estimated to be worth ₹ 232 billion. Applying Insecticide to seeds, soil, irrigation water, and crops at recommended dilution levels is essential for managing pests, weeds, and diseases. India's reliance on agriculture and its ability to produce and export pesticides highlight the need for better storage, efficient weed control, and methods to reduce food grain waste. These factors led to the conducting of a study titled "Study on Brand Awareness, and Consumer Buying Behaviour of Insecticide (Fipronil) in Lakhimpur Kheri District, Uttar Pradesh" with four main goals: identifying the socioeconomic profile of insecticide users among farmers; analysing factors influencing consumer purchasing decisions; assessing barriers in insecticide marketing; and examining the insecticide market and brand awareness. This two-month study was carried out in a few villages in the Lakhimpur block in Lakhimpur Kheri district of Uttar Pradesh.

RESEARCH METHODOLOGY

The methodology used to select the district, the blocks, the villages and the respondents was purposively cum random sampling. The district of Lakhimpur Kheri was selected in order to avoid the inconvenience and time constraints on the investigator. All the blocks falling within the district of Lakhimpur Kheri were selected, and the block of Lakhimpur

was selected based on the majority of respondents involved in sugarcane cultivation. A separate list of villages was prepared for the selected block, and two percent of the villages from the selected block with a high number of respondents cultivating sugarcane were randomly selected. From the villages, a list of all Sugarcane cultivating farmers was prepared and then broken down into five size categories based on their land holding size. Marginal (less than 1 hectare), Small (1-2 hectares), Semi-medium (2-4 hectares), Medium (4-6 hectares), and Large (more than 10 hectares) were the size groupings. Using proportional random selection, 120 farmers who were cultivating sugarcane were chosen at random from the list. From the wholesalers/traders/retailers, 5 each were selected to study brand awareness and consumer buying behaviour in the study area. Primary data was collected through a suitably designed schedule. Secondary data was collected from books/journals/reports/records of the district/block headquarters. Data from respondents were collected through survey methods via direct personal interviews. Statistical tools were used to analyse the data and present the results. The data pertained to the agricultural year of 2024-2025.

Analytical Tools

Likert scale

Likert scale (2, 4, 5, or 7) is a common classification format used in studies. Respondents rank a product or service's quality (data) from highest to lowest, and from best to worst.



RESULT AND DISCUSSION

Table 1: Brand awareness of Fipronil in the study area.

Categories	Respondents Number	Respondents					Percentage (%)
		Marginal	Small	Semi- medium	Medium	Large	
Availability	25	10	7	3	4	1	20.83
Performance and Quality	19	5	4	4	3	3	15.84
Brand	16	5	5	2	2	2	13.34
Reputation	15	2	4	5	2	2	12.5
Price and Value	15	5	3	2	3	2	12.5
Proposition	12	4	2	3	2	1	10.00
Marketing and Advertising	11	4	1	2	2	2	09.16
Distribution	07	1	1	2	2	1	5.83
Product Packaging and Design	120	36	27	23	20	14	100
Social Media Presence							
Total							

Table 1: demonstrates that various factors, as reported by various categories of respondents, influence the degree of brand awareness of Fipronil in the study area. These factors include availability (20.83%), performance and quality (15.84%), brand reputation (13.34%), price and value proportion (12.5%), marketing and advertising (12.5%), distribution of insecticide (10.00%), product packaging and design (09.16%), and social media presence (05.83%).

Table 2: The breakdown of respondents based on Fipronil availability.

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi- medium	Medium	Large	
Availability of Fipronil	Retailer	67	24	17	15	5	6	55.83
	Wholesaler	46	12	9	6	13	6	38.33
	Online	07	0	1	2	2	2	05.84
	Total	120	36	27	23	20	14	100.00

Table 2: indicates that the availability of Fipronil at retailer shops (55.83%), wholesaler shops (38.33%), and online platforms (05.84%) was found to be a factor influencing the purchasing Behaviour of respondents across various categories during the study.



Table 3: Fipronil Quality Distribution

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi-medium	Medium	Large	
Quality of Fipronil	Curative	60	18	14	13	7	8	50
	Preventive	36	12	6	6	8	4	30
	Safe to Applicator	24	6	7	4	5	2	20
	Total	120	36	27	23	20	14	100.00

Table 3: shows that the study's findings on the quality factors influencing respondents' decisions to purchase Fipronil in three separate categories—curative (50%), preventive (30%), and safe to apply (20%)—were made.

Table 4: How respondents are ranked based on Fipronil price

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi-medium	Medium	Large	
Price of Fipronil	Low	32	10	11	5	4	2	26.67
	Medium	68	21	13	15	12	7	56.66
	High	20	5	3	3	4	5	16.67
Total		120	36	27	23	20	14	100.00

Table 4: shows that the study's findings indicate that price has an impact on respondents' purchasing decisions for Fipronil in three separate categories: low price (26.67%), medium price (56.66%), and high price (16.67%).

Table 5: Packaging of Fipronil breakdown of respondents.

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi-medium	Medium	Large	
Price of Fipronil	Small pack	52	17	11	11	9	4	43.34
	Large pack	31	12	6	5	4	4	25.83
	Packet Quality	27	5	7	6	5	4	22.50
	Packaging quality	10	2	3	1	2	2	08.33
Total		120	36	27	23	20	14	100

Table 5: indicates that the study's findings about the impact of packaging factors on respondents' purchasing decisions across many categories include availability in small packs (43.34%), large packs (25.83%), packet quality (22.50%), and package quality (08.33%) correspondingly.

Table 6: Number of respondents based on Fipronil Performance availability.

General	Categories	Respondents	Respondents					Percentage (%)
		Number	Marginal	Small	Semi medium	Medium	Large	
Performance of Fipronil	Poor	35	11	9	8	5	2	29.16
	Average	39	12	8	7	6	6	32.5
	Excellent	46	13	10	8	9	6	38.34
	Total	120	36	27	23	20	14	100.00

Table 6: According to the study, there are performance factors that influence the purchasing decisions made by respondents in different categories. These factors include

CONCLUSION

Currently, and in the near future, Insecticides have a promising future because the need for Insecticides is increasing year by year. The farmers rely on Insecticides which shows the increasing need for Insecticides. Farmers don't want to spend time in the field. They want easy solutions to any problem in the field. Therefore, they effectively use the Insecticides. The use of Insecticides and PGR helps the farmers to produce more crops. Therefore, they continue to use the Insecticides & PGR. The effectiveness of the Insecticides is due to the fact that they kill the target insects in less time. Maximum farmers are using the excessive number of Insecticides. Some farmers claim that excessive insecticide use harms the field and they only use it when it is absolutely necessary for the crop. According to farmers, Insecticides are essential for the growth of the crop because without Insecticides, the crop cannot grow effectively. All stages of the plant, including leaves and stems, are attacked by Insecticides. Therefore, Insecticides are necessary for farming purposes. Every farmer wants to get high yield for low investment. To get high yield, PGR is used. PGR provides all micro nutrients to Sugarcane and controls the

poor performance (29.16%), average performance (32.5%), and excellent quality (38.34%) of the product.

growth of the relevant plant. Lakhimpur Kheri is one of the top sugarcane-producing district. Sugarcane growers use agrochemicals from various companies like Syngenta, Dow, Bayer, Sumitomo, Dhanuka, UPL, Nichino etc.

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