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STUDY ON BRAND PROMOTION AND CONSUMER'S PERCEPTION TOWARD PRE-EMERGENCE HERBICIDE (TAGHIT) IN MUZAFFARPUR DISTRICT OF BIHAR

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ABSTRACT

The study on brand promotion and consumer perception toward the pre-emergence herbicide Taghit in Muzaffarpur district of Bihar focused on understanding the factors influencing brand awareness and farmers' purchasing decisions. The study was conducted in the Mushahari block, where five percent of paddy-cultivating villages were selected, and respondents were randomly chosen from these villages. The findings revealed that the most significant factor affecting brand awareness was the performance and quality of Taghit, cited by 26% of respondents, followed by availability at 20%. Marketing efforts and advertising contributed to 12%, while product packaging and design influenced 11% of respondents. Other factors included brand reputation (10%) and price/value proposition (9%). Distribution and social media presence had smaller impacts, accounting for 7% and 5%, respectively. In terms of purchasing decisions, 25% of farmers were influenced by their relationship with the distributor, 21% prioritized quality, and 20% focused on price. Brand image (15%) and promotional strategies (9%) were also significant, while 6% relied on peer recommendations and 4% on packaging. These results underline the importance of distributor relationships, product quality, and price sensitivity in shaping farmers' decisions in the agrochemical market.

Keywords: Taghit herbicide, brand awareness, consumer perception, agrochemical market, farmers' purchasing decisions

INTRODUCTION

Pre-emergence herbicides were a category of herbicides that were applied to the soil before the targeted weeds had emerged, aiming to prevent their growth by inhibiting seed germination. These herbicides played a crucial role in integrated weed management by providing effective control over a wide range of weed species, particularly annual weeds, before they could compete with crops for vital resources such as water, nutrients, and sunlight. The application of pre-emergence herbicides typically occurred shortly after planting but before weed seeds had germinated. They worked by being absorbed by the weed seeds and disrupting their ability to germinate and grow. These herbicides were especially valuable in crops like cereals, vegetables, and other row crops, where early weed competition could significantly reduce yields. Over the years, pre-emergence herbicides had become a staple in modern agriculture, offering a more efficient, cost-effective, and less labor-intensive method of weed control compared to manual weeding. However, their usage also raised concerns related to environmental impact, such as potential contamination of water resources and harm to non-target plants.

Additionally, over-reliance on pre-emergence herbicides could lead to the development of herbicide-resistant weed species, creating further challenges for farmers. Despite these concerns, pre-emergence herbicides remained an essential tool in managing weed populations and enhancing crop productivity, especially in areas where weed infestations posed a significant threat to agricultural yields.

RESEARCH METHODOLOGY

The methodology for selecting the district, blocks, villages, and respondents was based on a combination of purposive and random sampling techniques. Muzaffarpur district was chosen for the study to avoid any inconvenience and time constraints. Among the blocks within the district, Mushahari block was selected due to its high concentration of paddy cultivation. A list of villages in the selected block was compiled, from which five percent were randomly chosen, ensuring that a majority of respondents were engaged in paddy farming. In each village, farmers were categorized into five landholding size groups: Marginal size (less than 1 hectare), Small size (1-2 hectares), Semi-medium size (2-4 hectares), Medium size (4-10 hectares), and Large size (more than 10 hectares). A total of 100 paddy farmers were selected using proportionate random sampling. Additionally, 10 wholesalers, 5 retailers, 5 consumers, and 5 producers were selected to study brand promotion and consumer perception in the area. Primary data were collected through a specially designed schedule, while secondary data were sourced from books, journals, reports, and records from district and block headquarters. Data collection involved direct personal interviews with respondents. Statistical tools were employed to analyze the data, and the study focused on the agricultural year 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 better to worse.

RESULTS AND DISCUSSION

Table 1: Brand Awareness of Taghit in the study area.

Categories	Respondents Number	Respondents					Percentage (%)
		Marginal	Small	Semi-medium	Medium	Large	
Performance and Quality	26	9	7	4	3	3	26.00
Availability	20	7	5	3	4	1	20.00
Marketing and Advertising	12	4	3	2	2	1	12.00
Product Packaging and Design	11	4	2	2	1	2	11.00
Brand Reputation	10	3	3	2	1	1	10.00
Price and Value Proposition	9	2	2	2	2	1	9.00
Distribution	7	2	2	1	1	1	7.00
Social Media Presence	5	1	1	2	1	0	5.00
Total	**100**	**32**	**25**	**18**	**15**	**10**	**100.00**

Table 1: Revealed several factors affecting brand awareness of Taghit in the study area, as perceived by different categories of respondents. The most influential factor was performance and quality, cited by 26% of respondents, followed by the availability of the herbicide at 20%. Marketing and advertising efforts contributed to 12% of brand awareness, while product packaging and design played a role for 11% of respondents. Brand reputation was a factor for 10%, and price and value proposition for 9%. Additionally, distribution in the area and social media presence had smaller impacts, at 7% and 5%, respectively. These results highlight the multifaceted nature of brand awareness, with performance and availability being the most significant determinants.

Table 2: Consumer's Perception of Taghit

S. No.	Parameter	Respondents	Percentage (%)
1.	Relation with Dealer	25	25.00
2.	Quality	21	21.00
3.	Price	20	20.00
4.	Brand image	15	15.00
5.	Promotional Strategies	9	9.00
6.	Source of Information	6	6.00
7.	Packaging	4	4.00
	Total	**100**	**100.00**

Table 2: The study identified several key factors influencing farmers' purchasing decisions for agrochemicals. A notable 25% of farmers made purchases primarily based on their relationship with the distributor, indicating the importance of distributor-farmer connections. Quality was the second most significant factor, with 21% of farmers prioritizing it when selecting agrochemicals. Price sensitivity was also evident, as 20% of farmers focused on the cost of the product. Furthermore, 15% of farmers were influenced by brand image, while 9% responded to promotional strategies. A smaller group of 6% relied on information from peers, such as friends or neighbors, and 4% were attracted by the product's packaging. These findings underline the complex range of considerations that shape farmers' decisions in the agrochemical market.

CONCLUSION

The study concluded that several factors significantly influenced the brand promotion and consumer perception of pre-emergence herbicide Taghit in Muzaffarpur district, Bihar. The most prominent factor contributing to brand awareness was performance and quality, as cited by 26% of respondents, followed by the herbicide's availability at 20%. Marketing efforts and advertising played a notable role, contributing 12% to brand awareness, while product packaging and design were important for 11% of respondents. Other factors, such as brand reputation and price-value proposition, had a moderate influence, accounting for 10% and 9%, respectively. Distribution and social media presence had relatively smaller

impacts, with 7% and 5%, respectively. Regarding purchasing decisions, the study found that farmers were most influenced by their relationship with the distributor, with 25% of farmers prioritizing this factor. Quality and price followed as key considerations, with 21% and 20% of farmers emphasizing these aspects. Brand image, promotional strategies, and peer recommendations were also significant, guiding 15%, 9%, and 6% of the respondents, respectively. The findings highlighted the multifaceted nature of farmers' purchasing decisions, revealing that factors such as quality, distributor relationships, price, and brand image were crucial in shaping their preferences for agrochemical products like Taghit.

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