

Agri Express: 03 (01), Article No. V03I01.24, January - March, 2025



STUDY ON MARKET PERCEPTION AND CONSUMER'S BUYING BEHAVIOUR TOWARDS SELECTIVE HERBICIDE (COUNCIL ACTIV) IN FARRUKHABAD DISTRICT OF UTTAR PRADESH



Mayank Raj¹ and Nitin Barker ²

¹MBA (Agribusiness) and ²Associate Professor

Department of Agricultural Economics

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

Corresponding author: <u>23mbaab084@shiats.edu.in</u>

https://doie.org/10.10346/AE.2025440747

ABSTRACT

The study titled "Study on Market Perception and Consumer's Buying Behaviour towards Selective Herbicide (Council Activ) in Farrukhabad District of Uttar Pradesh" aimed to examine the factors influencing farmers' purchasing decisions regarding selective herbicides, specifically Council Activ, in the Mohamdabad block of Farrukhabad district. The research was conducted in five percent of potential paddy cultivating villages, and data were collected from ten percent of respondents through random sampling. The study revealed that multiple factors affected the buying behavior of farmers. The most significant factor was the quality of the product, with 26.36% of farmers prioritizing it, followed by price (20.91%) and packaging attractiveness (17.27%). Other important influences included distributor relationships (12.73%), brand image (10.00%), promotional strategies (8.18%), and advice from friends, neighbors, or other individuals (4.55%). Availability was another critical factor, with 56.67% of farmers preferring retail availability, 35.00% opting for wholesalers, and 8.33% utilizing online platforms. Regarding product quality, 57.27% of respondents favored the curative effectiveness of Council Activ, 30.91% valued its preventive properties, and 11.82% considered its safety to the applicator. When it came to pricing, 48.18% preferred medium-priced products, while 40.00% chose low-priced options, and 11.82% opted for high-priced ones. Packaging preferences showed that 50.91% favored small packs, and the performance of the product was rated as excellent by 55.45% of respondents. This study highlights the key factors influencing the decision-making process of farmers in purchasing selective herbicides.

Keywords: Selective Herbicide, Council Activ, Buying Behavior, Farmers, Market Perception.

INTRODUCTION

Selective herbicides are a type of chemical used in agriculture to control specific types of weeds without harming desirable crops. These herbicides are formulated to target particular plant species by exploiting differences in plant biology, such as enzyme systems, growth patterns, or physiological processes that are unique to weeds. Selective

herbicides are widely used in cultivated fields, particularly in crops like paddy, maize, and vegetables, as they offer an effective way to control weed growth while preserving the integrity of the crops. The primary advantage of selective herbicides is that they can be applied directly to the crop fields without damaging the crop plants, thus reducing the





need for manual weeding and enhancing overall productivity. These herbicides are typically categorized based on their mode of action, such as those affecting photosynthesis, cell division, or protein synthesis in weeds. The selection of a suitable herbicide depends on various factors, including the type of crop, weed species, and environmental conditions. They are commonly applied through spraying, with either liquid or granular formulations, and can be used preemergence or post-emergence, depending on the growth stage of the weeds. However, proper application is essential to avoid the risk of crop damage or environmental contamination. While effective in controlling weeds, selective herbicides should be used judiciously, as over-reliance on them can lead to the development of herbicide-resistant weed species.

Agri Express: 03 (01), Article No. V03I01.24, January - March, 2025

RESEARCH METHODOLOGY

The methodology employed in the study involved purposive cum random sampling for selecting the district, blocks, villages, and respondents. Farrukhabad district was chosen to minimize inconvenience and time constraints for the investigator. Within the district, Mohamdabad block was selected due to the high number of respondents engaged in paddy cultivation. A list of villages within the

selected block was prepared, from which five percent of the villages with a significant number of paddy farmers were randomly chosen. A list of all paddy farmers in these villages was compiled and categorized into five landholding sizes: Marginal (less than 1 hectare), Small (1-2 hectares), Semi-medium (2-4 hectares), Medium (4-10 hectares), and Large (more than 10 hectares). From the list of 110 farmers, a proportionate random sampling method was used to select respondents. Additionally, 10 wholesalers, 5 retailers, and 5 consumers were chosen to market perception and behaviour. Primary data was collected using a well-designed schedule, while secondary data was gathered from books, journals, reports, and records from district and block headquarters. Data collection was carried out through direct personal interviews during the 2024-2025 agricultural year. Statistical tools were applied to analyse and present the results effectively.

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: Market perception of Council Activ

S. No.	Parameter	Respondents	Percentage %
1.	Quality	29	26.36
2.	Price	23	20.91
3.	Packaging	19	17.27
4.	Relation with Dealer	14	12.73
5.	Brand image	11	10.00
6.	Promotional Strategies	09	08.18
7.	Source of Information	05	04.55

2





Table 1: It was found that about 26.36% of farmers prefer to buy a product based on its quality, while 20.91% consider the price as the main factor. Around 17.27% of farmers are influenced by the attractiveness of the packaging. Approximately 12.73% purchase agrochemicals due to their relationship with

the distributor, and 10.00% make decisions based on brand image. About 8.18% of farmers are convinced by promotional strategies, while only 4.55% rely on information from friends, neighbours, or other individuals when choosing agroproducts.

Table 2: Distribution of respondents buying behaviour according to availability of Council Activ.

General	Categories	Respondents		Percentage				
		Number	Marginal	Small	Semi medium	Medium	Large	(%)
Availability	Retailer	70	29	21	10	6	4	63.64
of Council	Wholesaler	30	13	5	7	3	2	27.27
Activ	Online	10	2	3	2	2	1	09.09
Total		110	44	29	19	11	07	100.00

Table 2: The study revealed that the availability of Council Activ significantly affects the buying behaviour of different categories of respondents. Specifically, 56.67% of farmers cited availability at retailer

shops as the key factor, followed by 35.00% who preferred purchasing from wholesaler shops, and 8.33% who relied on online platforms for availability.

Table 3: Distribution of respondents buying behaviour according to quality of Council Activ.

General	Categories	Respondents		Percentage				
		Number	Marginal	Small	Semi- medium	Medium	Large	(%)
Quality	Curative	63	25	18	11	5	4	57.27
of	Preventive	34	16	7	5	4	2	30.91
Council Activ	Safe to Applicator	13	3	4	3	2	1	11.82
ר	Total	110	44	29	19	11	07	100.00

Table 3: The study revealed that quality factors significantly influence the buying behavior of different categories of respondents toward Council Activ. Specifically, 57.27% of farmers preferred the

product for its curative properties, 30.91% valued its preventive effectiveness, and 11.82% considered its safety to the applicator as the most important factor.





Table 4: Distribution of respondents buying behaviour according to price of Council Activ.

General	Categories	Respondents		Percentage				
		Number	Marginal	Small	Semi-	Medium	Large	(%)
					medium			
Price of	Low	44	21	8	5	6	4	40.00
Council	Medium	53	19	17	11	4	2	48.18
Activ	High	13	4	4	3	1	1	11.82
To	otal	110	44	29	19	11	07	100.00

Table 4: The study revealed that price is an important factor influencing the buying behavior of different categories of respondents toward Council Activ.

Specifically, 48.18% of farmers preferred products priced at a medium level, 40.00% favoured low-priced options, while only 11.82% opted for high-priced products.

Table 5: Distribution of respondents buying behaviour according to Packaging of Council Activ

General	Categories	Respondents Number		Percentage				
			Marginal	Small	Semi-	Medium	Large	(%)
					medium	medium		
Packaging	Small pack	56	25	16	8	4	3	50.91
of Council	Large pack	23	10	6	3	2	2	20.91
Activ	Packet	19	7	3	5	3	1	17.27
	Quality							
	Packaging	12	2	4	3	2	1	10.91
	quality							
To	otal	110	44	29	19	11	07	100.00

Table 5: The study revealed that packaging is a significant factor affecting the buying behaviour of different categories of respondents toward Council Activ. Specifically, 50.91% of farmers preferred the

product due to its availability in small packs, 20.91% favoured large packs, 17.27% considered the packet quality important, while 10.91% were influenced by overall packaging quality.

Table 6: Distribution of respondents buying behaviour according to availability of Performance of Council Activ.

	Categories	Respondents		Percentage				
General		Number	Marginal	Small	Semi medium	Medium	Large	(%)
Performance	Poor	12	5	2	3	1	1	10.91
of Council	Average	37	17	10	5	4	1	33.64
Activ	Excellent	61	22	17	11	6	5	55.45
Total		110	44	29	19	11	07	100.00





Table 6: The study revealed that performance is a key factor influencing the buying behaviour of different categories of respondents toward Council Activ. Specifically, 55.45% of farmers rated the

product as having excellent performance, 33.64% considered its performance to be average, while only 10.91% reported poor performance.



CONCLUSION

The study on market perception and consumer buying behaviour towards the selective herbicide Council Activ in Farrukhabad District of Uttar Pradesh provided valuable insights into the factors influencing farmers' purchasing decisions. The findings revealed that quality was the most significant factor for 26.36% of farmers, followed by price (20.91%)and packaging attractiveness influences (17.27%).Other included relationships, distributor brand image, promotional strategies, and advice from peers. Availability also played a crucial role, with farmers preferring retail shops over wholesalers and online platforms. In terms of product effectiveness, a majority of farmers valued its curative properties, while a smaller portion prioritized its preventive function and safety to the applicator. Price sensitivity was observed, with a preference for mediumpriced products, although a significant number of farmers also chose low-priced options. Packaging preferences leaned toward smaller packs, and product performance was rated as excellent by the majority of respondents. These findings underscore the importance of various factors, including product quality, pricing, packaging, availability, and performance, in shaping the buying behaviour of farmers. The results also highlight the need for agro-product companies to understand local market dynamics and consumer preferences to enhance product acceptance and increase market share.

REFERENCES

Adamu Bako, & Kwame Osei (2021) "Marketing Strategies for Herbicides in Sub-Saharan Africa." *International Journal of Agribusiness Marketing*, 13(2), 75–88.

Amit Patel, & Rajeev Yadav (2020) "Adoption of Herbicides in the Indian Agricultural Sector." Asian Journal of Agricultural Economics, 31(4), 275–287.

Carlos Martínez, & Javier Silva (2022) "Trends in Herbicide Consumption and Marketing in Latin America." *Latin American Journal of Agricultural Economics*, 11(2), 144–156.

Farhan Mohammed, and Rahman Ahmed (2019) "Barriers to Herbicide Adoption in Developing Regions." *African Journal of Agricultural Economics*, 9(4), 201–215.

Harvinder Singh, & Gurpreet Kaur (2021) "Perception of Farmers on Herbicide Marketing and Usage in Punjab." *Journal of Rural Marketing*, 15(3), 103–118.

Joseph Mensah, & Richard Abeku (2020) "Market Dynamics and Challenges in Herbicide Distribution in Africa." African Journal of Rural Development, 25(1), 67–81.

Krishan Sharma, and Lokendra Choudhary (2022) "Role of Advertising in Herbicide Market Expansion." *Journal of Marketing Strategies*, 14(1), 34–46.

Prabir Dutta, and Sudipta Banerjee (2021) "Consumer Preferences for Organic





- Herbicides." Sustainable Agriculture Reviews, 15(2), 112–123.
- Ramasamy Parasuraman, Sivasankaran Annamalai, and Pradeep Kumar (2022). "Farmers' Buying Behaviour of Herbicides and Preference Towards Weeding Operations in Tamil Nadu." *Indian Journal of Agricultural Sciences*, 92(6), 748–756.
- Ravi Thakur, and Harvinder Singh (2021) "Farmers' Willingness to Pay for Herbicides." *Journal of Economic Studies*, 10(2), 145–156.
- Srinivas Reddy, & Rajesh Sharma (2022) "Role of Social Media in Promoting Herbicides in India." *Indian Journal of Marketing*, 52(3), 32–43.
- Syed Ahmed, and Rizwan Khan (2022) "Market Potential of Bio-Herbicides."

- Environmental Agriculture Journal, 18(2), 77–90.
- Tariq Ahmad, Shahid Khan, and Jamil Malik (2021). "Impact of Branding on Herbicide Marketing." *International Journal of Agribusiness*, 10(2), 98–110.
- Thi Nguyen, & Thao Le (2020) "Economic Impact of Herbicide Use on Agricultural Productivity in Southeast Asia." *Journal of Agricultural Economics*, 42(1), 54–67.
- Vishal Kumar, and Pooja Meena (2020) "Effectiveness of Field Demonstrations in Herbicide Marketing." *Agricultural Extension Journal*, 7(3), 58–70.

