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### Purchase behaviour and satisfaction level of paddy farmers towards post-emergence herbicides in Ahmedabad District of Gujarat

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#### Abstract

Paddy cultivation plays a significant role in Gujarat agriculture; however, weed infestation remains one of the major constraints affecting crop productivity. The increasing scarcity and cost of labour have encouraged farmers to adopt herbicide-based weed management practices. In this context, this empirical research study, utilizing the published theoretical literature and descriptive cross-sectional research design, was conducted to analyse the purchase behaviour and satisfaction level of paddy farmers towards post-emergence herbicides in Ahmedabad district of Gujarat. Primary data were collected from 150 paddy farmers through a structured interview schedule using multistage sampling technique. The study examined socio-economic characteristics, purchase behaviour, satisfaction level and constraints perceived by farmers. The findings revealed that most farmers were middle-aged (43%), had more than 20 years of farming experience (32%), and belonged to the small landholding category (38%). All respondents practiced conventional farming. Among the farmers, 63 per cent preferred post-emergence herbicides and 86 per cent of them used Novlect herbicide. Local agro-dealers were the primary source of purchase, while company representatives and farmer meetings were major sources of information. Product quality, performance and dealer influence significantly affected purchasing decisions. Farmers expressed higher satisfaction towards product effectiveness and weed control performance. However, high product price, lack of technical knowledge, fear of adulteration and availability issues were identified as major constraints. The study suggests strengthening dealer networks, conducting field demonstrations and improving farmer awareness programmes to increase adoption and satisfaction levels.

**Keywords:** Agrochemicals, constraints, farmer satisfaction, herbicides, purchase behaviour, paddy

#### Introduction

Agriculture is a vital sector of the Indian economy, contributing approximately 18.3 per cent to the Gross Value Added (GVA) and providing livelihood support to a large proportion of the rural population. Despite significant progress in agricultural production, farmers continue to face challenges such as fragmented landholdings, labour shortages, rising cultivation costs, and increasing weed infestations. To overcome these challenges and improve crop productivity, the adoption of modern crop protection technologies, particularly herbicides, has become increasingly important (IBEF, 2024).

Paddy (*Oryza sativa* L.) is one of the most important food grain crops in India and serves as a staple food for a majority of the population. India is the second-largest rice producer in the world, producing about 137.8 million tonnes of rice during 2023–24. However, weed infestation remains one of the major constraints in paddy cultivation, causing substantial yield losses through competition for nutrients, moisture, sunlight, and space. Effective weed management is therefore essential for maintaining productivity and profitability in paddy cultivation (Ministry of Agriculture

and Farmers Welfare, 2024).

Traditionally, farmers relied on manual weeding practices; however, increasing labour scarcity and rising wage rates have accelerated the adoption of herbicides. Among the various weed management options, post-emergence herbicides have gained considerable importance due to their effectiveness in controlling emerged weeds, reducing labour requirements, and improving operational efficiency. The growing use of herbicides has also contributed to the rapid expansion of the agrochemical industry in India, which is among the largest agrochemical producers globally (Grand View Research, 2024) [9].

Further, farmers' purchasing decisions regarding herbicides are influenced by several factors such as product quality, price, availability, dealer recommendations, credit facilities, and previous product experience. Similarly, satisfaction with product performance plays a crucial role in repeat purchase behaviour and brand loyalty. Understanding farmers' purchase behaviour and satisfaction level is essential for agrochemical companies, extension agencies, and policymakers to formulate effective marketing and extension strategies. Therefore, the present study was

undertaken to analyse the purchase behaviour and satisfaction level of paddy farmers towards post-emergence herbicides in Ahmedabad district of Gujarat.

### Review of Literature

Murthi, Thakkar and Sharma (2025) <sup>[18]</sup> in their landmark study conducted in Kurnool district of Andhra Pradesh with a sample of 200 farmers, reported that the major five constraints faced by farmers include high prices of insecticides, poor product quality, lack of discounts, fear of adulteration, and limited product availability. These challenges indicate ongoing concerns regarding affordability, authenticity, and access to reliable agricultural inputs. Actionable recommendations of enhancing dealer networks, promoting peer learning, building trust of farmers and ensuring consistent product performance can positively impact farmer decision-making. Simultaneously, addressing key barriers such as pricing, quality assurance, and timely availability is essential to encourage wider adoption and effective usage of insecticides. The insights from this research can inform agrochemical companies, policymakers, and extension services in developing farmer-centric strategies that support sustainable and efficient agricultural practices.

Bhalodiya and Thakkar (2024) <sup>[3]</sup> assessed brand preferences and satisfaction levels of 150 cotton farmers and 30 pesticide dealers using a multistage sampling method in Rajkot district of Gujarat. The findings showed that farmers' preferences were mainly influenced by dealer recommendations, followed by pricing and past experience, while advertisements had minimal impact. Dealers preferred brands offering better margins, timely availability, and credit facilities. Farmers were generally satisfied with product availability and yield benefits but expressed concerns about high costs, adulteration, and limited technical knowledge. Higher prices and fear of adulteration were found to be the main constraints perceived by farmers in the purchase of cotton pesticides. The study highlighted the strong influence of dealers and emphasized the need for better dealer engagement and farmer training to improve adoption and trust.

Dabhi and Thakkar (2024) <sup>[5]</sup> in their pioneering study on "Awareness, Buying Behaviour and Constraints of Farmers for Fungicides in Botad District of Gujarat"; found that dealer recommendation followed by past experience and price were the most influencing factors for purchase of fungicides in the study region. They also suggested that the companies should therefore emphasize on dealer relationships and strongly recommended the companies to focus on having dealer oriented sales promotion schemes, as they have been the prime influencers for the farmers. Using past positive experiences and keeping competitive pricing of the products were also emphasized.

Thakur (2024) <sup>[23]</sup> studied the relationship between socio-economic factors and input use in paddy cultivation using NSS data. The study revealed that irrigation, education, landholding size, and access to credit significantly influenced farmers' input expenditure and adoption behaviour.

Jain and Rathore (2023) <sup>[12]</sup> examined farmers' buying behaviour towards agricultural inputs in Punjab. The study found that dealers and retailers were the major information

sources, while product quality, price, brand, and advertisements significantly influenced purchase decisions. Calha *et al.* (2023) <sup>[4]</sup> investigated weed management practices among rice farmers in Portugal. The findings revealed that herbicide resistance and limited herbicide diversity were major concerns, while adoption of alternative weed management practices remained low due to economic and technical constraints.

Basu *et al.* (2022) <sup>[2]</sup> studied paddy farmers' buying behaviour towards agricultural inputs during the COVID-19 pandemic. The study reported that product efficacy, price sensitivity, dealer credibility, and input availability significantly influenced purchasing decisions.

Kour *et al.* (2022) <sup>[13]</sup> evaluated farmer satisfaction towards a post-emergence herbicide mixture in direct-seeded rice. The results indicated high satisfaction due to effective weed control, increased crop yield, broad-spectrum weed management, and reduced labour costs.

Wankhade *et al.* (2021) <sup>[27]</sup> analyzed the socio-economic status of paddy growers in Maharashtra. The study found that landholding size significantly influenced farmers' income, risk-bearing ability, and adoption of improved agricultural technologies including herbicides.

Haidery *et al.* (2021) <sup>[10]</sup> explored the impact of COVID-19 on paddy farmers' agri-input buying behaviour in Chhattisgarh. The findings revealed that peer groups, family members, and village leaders were major influencers in farmers' purchase decisions.

Kundu *et al.* (2021) <sup>[14]</sup> examined factors influencing agri-input purchase behaviour of paddy farmers. The study concluded that reference groups, local leaders, and peer influence played a significant role in shaping farmers' purchasing decisions.

Tiwari *et al.* (2021) <sup>[24]</sup> studied the socio-economic profile of paddy farmers in Madhya Pradesh. The results showed that most farmers were middle-aged, possessed medium farming experience, and relied heavily on input dealers as a primary source of agricultural information.

Gavali *et al.* (2020) <sup>[7]</sup> investigated factors affecting farmers' satisfaction towards herbicide brands. The study revealed that weed control effectiveness, crop safety, and post-sales support were the major determinants of farmer satisfaction and brand loyalty.

Yadav *et al.* (2018) <sup>[28]</sup> identified major constraints faced by paddy farmers in Haryana. The study reported that high herbicide prices, counterfeit products, and lack of technical knowledge regarding product selection and dosage were the key constraints.

Uplanchiwar (2018) <sup>[25]</sup> examined herbicide purchasing behaviour among paddy growers in Maharashtra. The findings indicated that product effectiveness, retailer recommendations, and availability of credit facilities were the major factors influencing purchase decisions.

Patel *et al.* (2017) <sup>[19]</sup> studied constraints faced by paddy growers in Gujarat regarding herbicide use. The study found that high product prices, inadequate technical guidance, and non-availability of desired brands were the major challenges affecting herbicide adoption.

Rathod *et al.* (2017) <sup>[20]</sup> investigated purchasing behaviour of rice farmers for herbicides in Karnataka. The results showed that product quality, effectiveness, dealer recommendations, previous experience, and accessibility of

local agro-dealers significantly influenced farmers' purchase behaviour.

### Methodology

Present study was conducted in Ahmedabad district of Gujarat, which was selected purposively due to its significant area under paddy cultivation. Descriptive cross-sectional research design was adopted to analyse the purchase behaviour and satisfaction level of paddy farmers towards post-emergence herbicides. Both primary and secondary data were used for the study. Primary data were collected from 150 paddy farmers through personal interviews using a structured interview schedule, while secondary data were obtained from research papers, journals, company reports, websites, and other published sources.

Multistage sampling technique was employed for the selection of respondents. In the first stage, Dholka, Bavla, and Sanand talukas were selected purposively due to the larger area under paddy cultivation. In the second stage, 15 villages were selected randomly from each of the selected talukas. In the final stage, 10 paddy farmers were selected randomly from each village, resulting in a total sample size of 150 respondents.

The collected data were analysed using statistical tools such as frequency distribution, percentage analysis, mean score analysis, tabular analysis, and graphical analysis. Rank analysis was also used to identify the major factors influencing purchase behaviour, satisfaction level, and

constraints perceived by farmers towards post-emergence herbicides.

### Results and Discussion

#### Socio-Economic Characteristics of Paddy Farmers

The socio-economic profile of the respondents revealed that all the respondents were male farmers. The majority of farmers (43%) belonged to the age group of 41–50 years, followed by 29 per cent above 50 years. Regarding education, 39 per cent of farmers had education below SSC, while 30 per cent completed SSC education. All the farmers practiced conventional farming. About 32 per cent of the respondents had more than 20 years of farming experience, followed by 26 per cent with 15–20 years of experience. Farming was the primary occupation of 53 per cent of respondents, whereas 31 per cent were engaged in farming along with animal husbandry. The majority of farmers (38%) were small farmers having landholdings between 1–2 ha, followed by semi-medium farmers (27%). Irrigated farming was practiced by 61 per cent of farmers, and all irrigated farmers used surface irrigation methods. Regarding annual family income, 29 per cent of respondents earned between ₹1,00,001 and ₹3,00,000 annually. Further, 38 per cent of farmers cultivated paddy on up to 1 ha area. With respect to herbicide use, 63 per cent of farmers preferred post-emergence herbicides, 26 per cent preferred pre-emergence herbicides and 11 per cent used both categories of herbicides.

**Table 1:** Socio-Economic Characteristics of Paddy Farmers (n = 150)

| Variable              | Parameter                  | Frequency | Percentage (%) |
|-----------------------|----------------------------|-----------|----------------|
| Gender                | Male                       | 150       | 100.00         |
|                       | Female                     | 0         | 0.00           |
| Age Group             | 21–30 years                | 12        | 8.00           |
|                       | 31–40 years                | 30        | 20.00          |
|                       | 41–50 years                | 64        | 43.00          |
|                       | Above 50 years             | 44        | 29.00          |
| Education Level       | Illiterate                 | 21        | 14.00          |
|                       | Below SSC                  | 59        | 39.00          |
|                       | SSC                        | 45        | 30.00          |
|                       | HSC                        | 19        | 13.00          |
|                       | Graduate                   | 5         | 3.00           |
|                       | Post Graduate              | 1         | 1.00           |
| Farming System        | Conventional               | 150       | 100.00         |
|                       | Organic Farming            | 0         | 0.00           |
| Farming Experience    | Less than 5 years          | 6         | 4.00           |
|                       | 5–10 years                 | 22        | 15.00          |
|                       | 10–15 years                | 35        | 23.00          |
|                       | 15–20 years                | 39        | 26.00          |
|                       | More than 20 years         | 48        | 32.00          |
| Occupation            | Farming                    | 79        | 53.00          |
|                       | Farming + Animal Husbandry | 47        | 31.00          |
|                       | Farming + Service          | 10        | 7.00           |
|                       | Farming + Business         | 14        | 9.00           |
| Landholding Size (ha) | Marginal (up to 1 ha)      | 28        | 19.00          |
|                       | Small (1–2 ha)             | 58        | 38.00          |
|                       | Semi-medium (2–4 ha)       | 40        | 27.00          |
|                       | Medium (4–10 ha)           | 11        | 7.00           |
|                       | Large (Above 10 ha)        | 13        | 9.00           |
| Type of Farming       | Irrigated                  | 91        | 61.00          |

|                                   |                      |    |        |
|-----------------------------------|----------------------|----|--------|
|                                   | Rainfed              | 59 | 39.00  |
| Method of Irrigation              | Surface Irrigation   | 91 | 100.00 |
|                                   | Drip Irrigation      | 0  | 0.00   |
|                                   | Sprinkler Irrigation | 0  | 0.00   |
| Annual Family Income (₹)          | Below 1,00,000       | 18 | 12.00  |
|                                   | 1,00,001–3,00,000    | 43 | 29.00  |
|                                   | 3,00,001–5,00,000    | 40 | 27.00  |
|                                   | 5,00,001–8,00,000    | 32 | 21.00  |
|                                   | Above 8,00,000       | 17 | 11.00  |
| Area under Paddy Cultivation (ha) | Up to 1 ha           | 57 | 38.00  |
|                                   | 1–2 ha               | 42 | 28.00  |
|                                   | 2.01–4 ha            | 27 | 18.00  |
|                                   | 4.01–10 ha           | 19 | 13.00  |
|                                   | More than 10 ha      | 5  | 3.00   |
| Type of Herbicide Used            | Pre-emergence        | 39 | 26.00  |
|                                   | Post-emergence       | 95 | 63.00  |
|                                   | Both                 | 16 | 11.00  |

### Factors Considered by Farmers While Purchasing Novlect Post-emergence Herbicide

**Table 2:** Factors Considered by Farmers While Purchasing Novlect Post-emergence Herbicide (n = 82)

| Factors                     | HI (5)   | I (4)    | N (3)   | SI (2)  | UI (1)  | CS  | Mean | Rank |
|-----------------------------|----------|----------|---------|---------|---------|-----|------|------|
| Price                       | 20 (100) | 18 (72)  | 15 (45) | 14 (28) | 15 (15) | 260 | 3.17 | VI   |
| Dealer influence            | 30 (150) | 28 (112) | 15 (45) | 9 (18)  | 0 (0)   | 325 | 3.96 | I    |
| Credit facility             | 18 (90)  | 20 (80)  | 22 (66) | 15 (30) | 7 (7)   | 273 | 3.33 | IV   |
| Past experience             | 15 (75)  | 20 (80)  | 25 (75) | 12 (24) | 10 (10) | 264 | 3.22 | V    |
| Progressive farmers opinion | 28 (140) | 25 (100) | 14 (42) | 10 (20) | 5 (5)   | 307 | 3.74 | II   |
| Product quality             | 25 (125) | 22 (88)  | 18 (54) | 10 (20) | 7 (7)   | 294 | 3.58 | III  |

Highly Important (HI): 5, Important (I): 4, Neutral (N): 3, Somewhat Important (SI): 2, Unimportant (UI): 1

Cumulative Score (CS) =  $\Sigma$  Maximum Scale  $\times$  Number of Farmers

Mean = Cumulative Score (CS) / Total Number of Farmers

There are different factors considered by farmers while purchasing Novlect post-emergence herbicide. Among these factors, dealer influence (3.96) secured the first rank, followed by progressive farmers' opinion (3.74), product quality (3.58), credit facility (3.33), past experience (3.22), and price (3.17). Hence, it can be concluded that dealer influence was the most important factor affecting the

purchase behaviour of farmers towards Novlect post-emergence herbicide, whereas price was the least influential factor.

### Paddy Farmers' Satisfaction Level towards Post-Emergence Herbicides

**Table 3:** Satisfaction Level of Farmers towards Post-Emergence Herbicide (n = 82)

| Parameters          | HS (5)   | S (4)    | N (3)   | D (2)   | HDS (1) | CS  | Mean | Rank |
|---------------------|----------|----------|---------|---------|---------|-----|------|------|
| Quality             | 30 (150) | 25 (100) | 18 (54) | 5 (10)  | 4 (4)   | 318 | 3.88 | I    |
| Packaging size      | 20 (100) | 18 (72)  | 15 (45) | 12 (24) | 17 (17) | 258 | 3.15 | V    |
| Dealer support      | 32 (160) | 20 (80)  | 10 (30) | 10 (20) | 10 (10) | 300 | 3.66 | III  |
| Availability        | 25 (125) | 20 (80)  | 15 (45) | 10 (20) | 12 (12) | 282 | 3.44 | IV   |
| Price               | 15 (75)  | 12 (48)  | 20 (60) | 20 (40) | 15 (15) | 238 | 2.90 | VI   |
| Product performance | 28 (140) | 25 (100) | 14 (42) | 9 (18)  | 6 (6)   | 306 | 3.73 | II   |

Highly Satisfied (HS): 5, Satisfied (S): 4, Neutral (N): 3, Dissatisfied (D): 2, Highly Dissatisfied (HDS): 1

Cumulative Score (CS) =  $\Sigma$  Maximum Scale  $\times$  Number of Farmers

Mean = Cumulative Score (CS) / Total Number of Farmers

There are different parameters considered for measuring the satisfaction level of farmers towards Novlect post-emergence herbicide. Among these parameters, quality (3.88) secured the first rank, followed by product performance (3.73), dealer support (3.66), availability (3.44), packaging size (3.15), and price (2.90). Hence, it can be concluded that farmers were highly satisfied with the

quality and performance of Novlect post-emergence herbicide. However, the price of the product received the lowest mean score, indicating comparatively lower satisfaction regarding product pricing. Overall, farmers expressed a positive level of satisfaction towards Novlect post-emergence herbicide in terms of quality, performance, dealer support, and availability.

## Constraints faced by Paddy Farmers in the Purchase of Post-emergence Herbicides

**Table 4:** Constraints faced by Paddy Farmers in the Purchase of Post-emergence Herbicides (n=82)

| Parameters                                 | HA (5)   | A (4)    | N (3)   | D (2)   | HD (1)  | CS  | Mean | Rank |
|--------------------------------------------|----------|----------|---------|---------|---------|-----|------|------|
| Higher Price                               | 35 (175) | 20 (80)  | 15 (45) | 10 (20) | 2 (2)   | 322 | 3.93 | I    |
| Inappropriate Packaging Size               | 28 (140) | 22 (88)  | 18 (54) | 10 (20) | 4 (4)   | 306 | 3.73 | III  |
| Lack of Timely Availability of the Product | 25 (125) | 20 (80)  | 16 (48) | 12 (24) | 9 (9)   | 286 | 3.49 | IV   |
| Poor Product Quality                       | 15 (75)  | 12 (48)  | 10 (30) | 20 (40) | 25 (25) | 218 | 2.66 | VI   |
| Fear of Adulteration                       | 20 (100) | 18 (72)  | 15 (45) | 14 (28) | 15 (15) | 260 | 3.17 | V    |
| Lack of Technical Knowledge                | 30 (150) | 25 (100) | 15 (45) | 8 (16)  | 4 (4)   | 315 | 3.84 | II   |

Highly Agree (HA): 5, Agree (A): 4, Neutral (N): 3, Disagree (D): 2, Highly Disagree (HD): 1

Cumulative Score (CS) =  $\Sigma$  Maximum Scale  $\times$  Number of Farmers

Mean = Cumulative Score (CS) / Total Number of Farmers

There are various constraints perceived by farmers in the purchase of Novlect post-emergence herbicide. Among the identified constraints, higher price (3.93) secured the first rank, followed by lack of technical knowledge (3.84), inappropriate packaging size (3.73), lack of timely availability of the product (3.49), fear of adulteration (3.17), and poor product quality (2.66). Hence, it can be concluded that higher price was the most important constraint faced by farmers while purchasing Novlect post-emergence herbicide. Lack of technical knowledge and inappropriate packaging size were also major constraints affecting farmers. Overall, the study revealed that economic factors, knowledge-related issues, and packaging concerns were the primary barriers influencing the purchase behaviour of paddy farmers towards Novlect post-emergence herbicide.

### Suggestions

The study revealed that higher price was the most significant constraint perceived by paddy farmers in the purchase of post-emergence herbicide. Therefore, the companies should focus on developing suitable pricing strategies to make the product more affordable for farmers. Special promotional schemes, seasonal discounts, quantity-based offers, and loyalty programmes can be introduced during the peak cropping season. Since a large proportion of farmers belong to the small and semi-medium landholding categories, affordable pricing will encourage greater adoption and improve market penetration.

Lack of technical knowledge was identified as another major constraint among farmers. Therefore, the companies should strengthen its extension and educational activities by organizing regular farmer training programmes, village meetings, field demonstrations, crop seminars, and awareness campaigns. These programmes should focus on the correct dosage, timing of application, method of spraying, weed identification, and safety measures associated with herbicide use. Providing technical guidance in local language through pamphlets, videos, and mobile-based advisory services would further improve farmers' knowledge and confidence.

The study indicated that dealer influence was the most important factor affecting the purchase decision of farmers. Hence, the companies should strengthen its relationship with dealers and retailers by providing product training, technical support, promotional materials, and attractive incentive schemes. Well-trained dealers can effectively communicate product benefits and provide appropriate recommendations to farmers. Strengthening dealer networks

will not only increase product awareness but also improve farmers' trust in the product.

Company representatives and farmers' meetings were found to be the major sources of information regarding post-emergence herbicide. Therefore, the companies should increase the frequency of field visits by company representatives and organize more farmer interaction programmes. Demonstration plots should be established in major paddy-growing villages to showcase the effectiveness of the herbicide under actual field conditions. Such practical demonstrations can significantly influence farmers' purchase decisions and increase product adoption.

The findings also revealed that inappropriate packaging size was an important constraint faced by farmers. Therefore, the companies should introduce herbicide packs in different sizes according to the requirements of marginal, small, medium, and large farmers. Availability of small packs at affordable prices would encourage trial purchases, while larger packs would be beneficial for farmers cultivating larger areas under paddy.

Lack of timely availability of the product was another important issue identified during the study. The companies should improve its distribution and supply chain management system to ensure that the product is readily available at local retail outlets during the peak demand period. Proper inventory planning, forecasting, and coordination with dealers can help avoid stock shortages and improve customer satisfaction.

The study further indicated that farmers were highly satisfied with the quality and performance of Novlect herbicide. Therefore, the company should continue maintaining high quality standards and consistent product performance. Continuous monitoring of product effectiveness and collection of farmer feedback should be undertaken to ensure sustained customer satisfaction and brand loyalty.

Fear of adulteration was also reported as a concern among farmers. To address this issue, the companies should introduce tamper-proof packaging, authentication labels, QR-code verification systems, and farmer awareness programmes regarding identification of genuine products. These measures will help protect farmers from counterfeit products and enhance their confidence in the brand.

Overall, the companies should adopt a farmer-oriented marketing approach that combines affordable pricing, strong dealer support, effective extension services, timely product availability, and continuous quality improvement. Such efforts will not only improve the satisfaction level of

existing users but also enhance the adoption of post-emergence herbicide among paddy farmers in Ahmedabad district of Gujarat.

### Conclusion

The empirical investigation highlights the key socio-economic characteristics, purchase behaviour, satisfaction level, and constraints of paddy farmers towards post-emergence herbicides in Ahmedabad district of Gujarat. All respondents were male, with 43 per cent belonging to the age group of 41–50 years and 32 per cent having more than 20 years of farming experience, indicating an experienced farming community. Most farmers (39%) had education below SSC level, while 38 per cent were small farmers possessing 1–2 hectares of land. All respondents practiced conventional farming, and 61 per cent cultivated crops under irrigated conditions using surface irrigation methods. Most farmers had annual family income between ₹1,00,001 and ₹3,00,000 and cultivated paddy during the Kharif season.

Regarding herbicide usage, 63 per cent of farmers preferred post-emergence herbicides, while 26 per cent used pre-emergence herbicides. Among post-emergence herbicide users, 86 per cent preferred Novlect herbicide, which was purchased entirely through local dealers. The most important sources of information were company representatives and farmers' meetings. Most farmers preferred credit payment while purchasing Novlect herbicide. Dealer influence was found to be the most important factor affecting purchase decisions, followed by progressive farmers' opinion and product quality. In terms of satisfaction, the highest ratings were given to product quality and product performance, while price received the lowest satisfaction score. Farmers faced several constraints in purchasing Novlect herbicide, among which higher price ranked first, followed by lack of technical knowledge and inappropriate packaging size. The findings suggest that strengthening dealer networks, improving farmer awareness programmes, ensuring timely product availability, and adopting suitable pricing strategies would enhance farmer satisfaction and increase the adoption of post-emergence herbicides among paddy farmers.

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