

International Journal of Agriculture Extension and Social Development

Volume 9; Issue 2; February 2026; Page No. 367-370

Received: 08-12-2025
Accepted: 15-01-2026

Indexed Journal
Peer Reviewed Journal

Marketing strategies adopted by pesticide companies in Chhattisgarh

¹Teekendra Kumar Sahu and ²Hulas Pathak

¹Ph.D. Research Scholar, Department of Agri-business and Rural Management, Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, India

²Professor, Department of Agri-Business and Rural Management, Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, India

DOI: <https://www.doi.org/10.33545/26180723.2026.v9.i2e.3088>

Corresponding Author: Teekendra Kumar Sahu

Abstract

This study investigates the effectiveness of marketing strategies adopted by pesticide companies in Chhattisgarh, with a focus on insights gathered from 100 input retailers, who serve as key intermediaries between companies and farmers. The research evaluates five core marketing dimensions: product, price, place, promotion, and people, based on retailers' observations and experiences. The findings reveal that product strategies such as quality certification and trust marks (75%), attractive and informative packaging (66%), and brand positioning (60%) are highly effective in influencing farmer preferences. Pricing strategies, like flexible credit terms (70%), competitive pricing (57%), penetration pricing (57%), and volume discounts (57%) are widely seen as effective in driving sales and maintaining farmer loyalty. Regarding place strategies, exclusive dealership agreements (61%) and multi-level distribution systems (57%) remain the most trusted by retailers for ensuring timely product availability. Promotional strategies such as field demonstrations (70%) and sales incentives like free samples and gifts (60%) are reported to have strong influence on farmers' buying decisions. People-based strategies, including support from dedicated agronomists (70%), regular farmer engagement, mobile apps, loyalty programs, and helpline services, are also gaining popularity for enhancing customer relationships. In conclusion, the study emphasizes that pesticide companies must adopt a balanced mix of traditional and modern marketing strategies, tailored to local conditions. Retailers, being on the frontlines of the agri-input market, play a crucial role in the success of these strategies and act as key drivers of farmer behavior and brand success.

Keywords: Pesticide marketing, product strategy, price strategy, place strategy, promotion strategy, people strategy, input retailers, farmer behavior, quality certification, agronomist support, digital marketing, Chhattisgarh agriculture, distribution channels, field demonstrations, flexible credit, packaging effectiveness

Introduction

Pesticide companies in India, especially in farming states like Chhattisgarh, use both traditional and modern marketing methods to grow their business. Marketing strategies play a crucial role in the pesticide industry by helping companies connect with farmers, promote product use, and stay competitive. Since pesticides are technical products, farmers rely more on practical demonstrations, trusted advice, and product performance than advertisements. In India, where most farmers have small landholdings, effective and farmer-friendly marketing is essential.

Pricing also depends on the company's size. Big brands charge more due to their strong reputation, while others use low prices and discounts to attract farmers. Companies also offer credit and flexible payment options to support farmers and dealers.

To reach more villages, pesticide firms use a network of distributors and local dealers. They also train dealers and give them rewards. Some companies now use mobile vans and rural centers to reach remote farmers.

Promotions include field demonstrations, farmer meetings, leaflets in local languages, and digital platforms like

WhatsApp and YouTube. Some companies even select well-known farmers to promote their products.

Companies also hire field staff and crop experts to guide farmers, give technical help, and collect feedback. They also partner with NGOs, cooperatives, and government departments to reach more farmers and promote safe pesticide use.

Finally, digital tools are becoming more popular. Many companies have mobile apps for farmer advice, dealer information, and pest detection. Some use drones, satellite data, and online sales platforms to stay modern and efficient.

In short, pesticide companies in Chhattisgarh use a mix of smart products, strong dealer support, farmer-friendly promotions, partnerships, and digital tools to succeed in a competitive market.

Methodology

Nature and Source of Data

Primary data

Primary data was gathered directly from 100 input retailers to understand the marketing strategies adopted by pesticide companies.

Secondary data

Secondary data was collected from research papers, books, journals, and reports from government and non-government agencies to support and complement the findings.

Analytical tools

The study employed percentage and arithmetic mean methods to analyze the data.

Percentage Method

The percentage method was used to standardize data, allowing comparison across categories by expressing values as a portion out of 100.

$$\text{Percentage (\%)} = (X / N) \times 100$$

Where

X is the number of respondents in a category, a

N is the total number of respondents.

Arithmetic Mean

The arithmetic mean was used to calculate the average value of observations.

$$\text{Mean } (\bar{X}) = \sum X_i / n,$$

Where

$\sum X_i$ is the sum of all values

N is the number of observations.

Results and Discussion

Marketing strategies adopted by pesticide companies in Chhattisgarh

Pesticide companies use various marketing strategies to capture market share, influence farmer behavior, and maintain brand loyalty in a highly competitive and regulated market.

Classification of marketing strategies into five core areas

1. Product Marketing Strategies
2. Price Marketing Strategies
3. Place (Distribution) Marketing Strategies
4. Promotion Marketing Strategies
5. People Marketing Strategies

Product marketing strategies

Product marketing strategies highlights how effective different product marketing strategies are for pesticide companies. Quality certification and trust marks (75%) are considered the most effective, followed by attractive and informative packaging (66%), and brand positioning (60%). Product innovation (56%) is also highly valued. Very few respondents found these strategies ineffective, showing that trusted quality, clear branding, and packaging play a key role in farmers' buying decisions.

Table 1: Product marketing strategies adopted by pesticide companies

Effectiveness	Product Innovation (New Tech/Formulas) (%)	Brand Positioning and Differentiation (%)	Quality Certification & Trust Marks (%)	Attractive & Informative Packaging (%)
Not Effective	7	5	0	2
Low Impact	10	8	0	4
Moderate Used	12	13	10	9
Used Effective	15	14	15	19
Very Effective	56	60	75	66
Total	100%	100%	100%	100%

Source: Analysis of Primary Data

Price marketing strategies

The table highlights the effectiveness of various price marketing strategies used by pesticide companies. Flexible credit terms (70%), competitive pricing (57%), penetration pricing (57%), and volume discounts (57%) are seen as very

effective by most respondents, showing strong preference for affordability and credit support. Premium pricing has mixed feedback—47% find it very effective, but 12% see low impact. Overall, strategies that offer financial ease and affordability are most successful in the pesticide market.

Table 2: Price marketing strategies adopted by pesticide companies

Effectiveness	Competitive pricing (%)	Penetration pricing (%)	Premium pricing	Volume discounts or offers (%)	Flexible credit terms for dealers/ (%)
Not Effective	2	1	4	4	0
Low Impact	4	4	12	2	0
Moderate Used	14	16	4	23	8
Used Effective	23	22	33	14	22
Very Effective	57	57	47	57	70
	100%	100%	100%	100%	100%

Source: Analysis of Primary Data

Place (distribution) marketing strategies

The effectiveness of place (distribution) strategies used by pesticide companies, exclusive dealership agreements (61%) and multi-level distributors (57%) are considered the most effective in reaching farmers. Direct selling has mixed

results, with 39% finding it ineffective, though 30% still view it as effective. E-commerce and online sales are gaining traction, rated very effective by 35%, but still face limitations, with 30% finding them ineffective. Overall, traditional and exclusive channels remain the most trusted.

Table 3: Place marketing strategies adopted by pesticide companies

Effectiveness	Use Of Multi-Level Distributors (%)	Direct Selling to Farmers (%)	E-Commerce and Online Sales (%)	Exclusive Dealership Agreements (%)
Not Effective	4	39	30	4
Low Impact	2	10	4	3
Moderate Used	14	5	19	9
Used Effective	23	30	12	23
Very Effective	57	16	35	61
Total	100%	100%	100%	100%

Analysis of Primary Data

Promotion marketing strategies

Promotion marketing strategies explains how well different promotional marketing strategies are working for pesticide companies. Most farmers found field demonstrations (70%)

and sales promotions like free samples and gifts (60%) very useful. Many also liked farmer training, mass media ads, and digital marketing, showing that companies are using many ways to connect with farmers effectively.

Table 4: Promotional marketing strategies adopted by pesticide companies

Effectiveness	Field Demonstrations and Trials (%)	Farmer Training and Awareness Programs (%)	Mass Media Advertising (TV, Radio, Print) (%)	Digital And Social Media Marketing	Sales Promotions (Samples, Gifts, Discounts) (%)
Not Effective	6	6	3	9	3
Low Impact	4	8	9	7	9
Moderate Used	5	12	17	4	12
Used Effective	15	16	14	35	16
Very Effective	70	58	57	45	60
Total	100%	100%	100%	100%	100%

Source: Analysis of Primary Data

People marketing strategies

The study highlights the effectiveness of people-centric marketing strategies used by pesticide companies. Dedicated agronomists and farmer engagement activities are rated

highly effective by 70% and 45% of respondents, respectively. Mobile apps, loyalty programs, and support centers also show strong impact, indicating growing trust in personalized and digital services.

Table 5: People marketing strategies adopted by pesticide companies

Effectiveness	Dedicated Agronomists and Field Staff (%)	Customer Helpline and Support Centers (%)	Regular Farmer Engagement Activities (%)	Loyalty Programs and Incentives (%)	Mobile Apps and Digital Support Tools (%)
Not Effective	6	6	14	3	9
Low Impact	5	4	8	5	12
Moderate Used	5	20	14	16	10
Used Effective	14	16	19	19	18
Very Effective	70	54	45	57	51
Total	100%	100%	100%	100%	100%

Source: Analysis of Primary Data

Conclusion

Pesticide companies in India use a range of marketing strategies to reach and influence farmers effectively. Among product strategies, quality certification and trust marks (75%) and attractive packaging (66%) are highly effective, followed by brand positioning (60%) and product innovation (56%), showing the importance of trust and clarity in product presentation.

In price strategies, flexible credit terms (70%), competitive pricing, penetration pricing, and volume discounts (each 57%) are most effective, highlighting farmers' preference for affordability and financial ease.

Premium pricing received mixed feedback. Regarding place (distribution) strategies, exclusive dealership agreements (61%) and multi-level distributors (57%) are the most trusted.

Direct selling and e-commerce have limited success, with many farmers still relying on traditional channels.

Promotional strategies such as field demonstrations (70%) and sales promotions (60%) are highly appreciated.

Farmer training, mass media, and digital platforms also play a key role in spreading awareness. Lastly, people-centric strategies like dedicated agronomists (70%) and farmer engagement activities (45%) are considered effective.

The use of mobile apps, loyalty programs, and support centers further shows the growing value of personalized and digital farmer support.

References

1. Chakraborty S, Banerjee T. Rural communication strategies for pesticide marketing. *International Journal of Rural Marketing Communication*. 2016;5(2):90-97.
2. Chand S, Narwal M. Indian pesticide industry: A marketing perspective. *Gyan Management Journal*. 2009;3(1):25-42.
3. Kumar V, Mehta A. Innovative marketing practices in

- pesticide industry: An Indian context. *International Journal of Marketing Strategies*. 2015;3(2):66-73.
4. Meena RP, Sharma SK. Marketing behaviour of agrochemical companies in Rajasthan. *Agricultural Marketing*. 2015;58(3):25-31.
 5. Patel B, Desai H. A study on pesticide marketing strategy and farmer satisfaction in Gujarat. *Agricultural Economics Research Review*. 2017;30(1):58-65.