International Journal of Creative and Open Research in Engineering and Management
ISSN: 3108-1754 (Online)
Volume 02 Issue 10 October-2026 | Impact Factor: 3.5



Dealer-Anchored Field Marketing of Bio-Agricultural Inputs: A Practitioner Field Study from Maharashtra, India

Sarvesh Sanjay Pote, Faculty Mentor**: Dr. Varsha Murhe**

School of Business, Indira University, Pune, Maharashtra, India

Corresponding author email: sarveshpote5@gmail.com

How to Cite this Article:

Pote, S. S. (2026). Dealer-Anchored Field Marketing of Bio-Agricultural Inputs: A Practitioner Field Study from Maharashtra, India. International Journal of Creative and Open Research in Engineering and Management, 02(10), 1-9. https://doi.org/10.55041/ijcope.v2i10.154

License:

This article is published under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and the source are credited.

© The Author(s). Published by International Journal of Creative and Open Research in Engineering and Management.







https://doi.org/10.55041/ijcope.v2i10.154

Abstract

Biological agricultural inputs such as biofertilizers, biopesticides and microbial seed-treatment products are widely positioned as a growth segment of Indian agriculture, yet their adoption depends on farmer knowledge, dealer advice and visible field proof rather than on price or availability alone. This paper examines how a Maharashtra-based manufacturer of microbial bio-agricultural inputs develops its market through dealer-anchored field marketing, in which the local input dealer acts as the commercial gateway to dispersed farmers, and company-supported farmer visits, meetings, field days and demonstrations convert that access into understanding and trust. The study draws on a three-month participant-observation engagement (25 May to 25 August 2026) as a field sales representative in Maharashtra, with practical exposure to roughly 40–45 dealers and nearly 1,000 farmers. A descriptive and exploratory design combines dealer and farmer interactions, field observation, structured activity records and secondary sector and academic literature. No formal questionnaire was administered and no quantitative effect is claimed. The paper builds a conceptual framework linking dealer relationship management, farmer-facing field activity and crop-calendar timing to dealer confidence, farmer trust and market development, and documents the main implementation frictions. It concludes with recommendations on dealer growth planning, demonstration-led marketing, dealer training and follow-up tracking, and sets out a survey-based agenda for future research.

Keywords: agri-input marketing, bio-agricultural inputs, biofertilizers, dealer relationship management, field marketing, farmer engagement, rural marketing, crop-calendar marketing, Maharashtra

1. Introduction

India's agricultural-input sector is under pressure to produce more with fewer chemical inputs, and biological products (biofertilizers, biopesticides, biofungicides and microbial consortia) are increasingly presented as part of the answer. The Indian Council of Agricultural Research (ICAR, 2025) reports that published estimates of the Indian biofertilizer and biopesticide markets differ widely by source and definition, but that their direction is consistently positive: biofertilizer estimates cited range from roughly USD 100–243 million in base years to about USD 165–400 million at the end of the forecast period, with reported growth rates of approximately 8.7% to 12% a year, and biopesticide estimates show similar upward movement. These figures are best read as indicators of direction rather than audited market values.

Growth potential, however, does not translate automatically into sales. Biological inputs are knowledge-intensive: performance depends on crop stage, application method, storage, soil and weather conditions, and the benefits may be slower or less visible than those of a conventional chemical. The marketer's problem is therefore not only distribution but the creation of understanding and trust among a dispersed farming population that already buys from familiar brands.



In practice, most farmers meet this category at the local agri-input dealer, who stocks products, advises on what to use and when, and often shapes the first trial. A manufacturer that wishes to build a market must therefore work through the dealer while also reaching the farmer directly. This paper examines that arrangement, referred to as dealer-anchored field marketing, using a three-month field engagement with a manufacturer of microbial bio-agricultural inputs in Maharashtra. In keeping with academic-integrity and confidentiality requirements, the sponsoring organisation is not named, no dealer-wise commercial terms or financial data are disclosed, and the case is treated as a replicable example of rural agri-input marketing practice.

1.1 Conceptual Anchor: The Dealer as Gateway in a Business-to-Business-to-Farmer Channel

Research on rural distribution in India stresses that firms must fit their distribution model to local infrastructure and rely on intermediaries to reach dispersed buyers (Aithal et al., 2018; Adhikary & Chatterjee, 2023). In agri-inputs, the dealer is the natural intermediary: a local, trusted point of access and advice. The channel can be described as business-to-business-to-farmer (B2B2F), in which the company sells to the dealer but succeeds only if the farmer adopts and repeats the purchase.

In channel terms the model is a hybrid. Working through and supporting the dealer is a push strategy, whereas farmer meetings, field days and demonstrations build demand directly with the end user and therefore carry elements of a pull strategy. The central argument of this paper is that, for technical biological products, neither layer is sufficient on its own.

2. Literature Review

2.1 Sector Growth and Constraints

ICAR (2025) documents positive growth expectations for organic fertilizers, biofertilizers and biopesticides while pointing to the importance of farmer awareness, quality control and policy support. The sector is regulated through the Fertiliser (Control) Order for applicable biofertilizer grades and through the Central Insecticides Board and Registration Committee for biopesticide and biofungicide products, so that quality, registration and microbial viability are part of the marketing proposition and not merely compliance matters.

2.2 Farmer Buying Behaviour and Biofertilizer Adoption

Kumar and Kapoor (2017) show that farmers buying agri-inputs in India follow an extended process in which information sources and interaction with sellers matter before purchase. Jain and Rathore (2023), studying major agri-inputs in Fazilka district, Punjab, highlight product quality, price, brand and advertising as influences on purchase. Studies specific to biofertilizers point in a consistent direction: Paliwal et al. (2021) emphasise farmer awareness, training and field demonstrations in western Maharashtra; Wankhade et al. (2025) identify limited technical knowledge, availability and financial constraints among farmers in Amravati district, Maharashtra; Niteesh et al. (2025) report technical knowledge, price, timely availability and quality concerns as perceived constraints in Siddipet district, Telangana; and Chavda et al. (2026) find that dealer advice and fellow farmers are major information sources in Kachchh district, Gujarat, alongside product performance and quality.

Taken together, these studies suggest that technical knowledge and trusted advice, rather than price alone, are the main gatekeepers of adoption, which places both the dealer and field-level education at the centre of the marketing task.

2.3 Dealer Relationships and Channel Theory

Anderson and Narus (1990) model the working partnership between distributor and manufacturer firms and show that cooperation and trust develop together in channel relationships. Morgan and Hunt (1994) place trust and commitment at the centre of relationship marketing, arguing that they drive cooperative behaviour among exchange partners. For agri-input firms these ideas imply that the dealer should be managed as a long-term partner, through regular contact, joint planning and problem resolution, rather than as an order-taking point.



2.4 Demonstration, Diffusion and Proof

Rogers (2003) characterises the adoption of innovations as depending on perceived advantage, compatibility, complexity, trialability and observability. Biological inputs score modestly on observability and carry a learning burden, which explains why demonstration plots and field days feature in the adoption literature (Paliwal et al., 2021) and why they can reduce perceived risk before a farmer commits to trial.

2.5 Research Gap

The literature separately establishes the knowledge barriers to biological-input adoption, the importance of dealer advice, and the logic of relationship marketing in channels. There is little practitioner-level documentation of how these elements are combined and sequenced in the daily work of a field sales team, including the timing, follow-up and coordination problems that arise. This paper addresses that gap using first-hand field experience from a live, territory-based programme in Maharashtra.

3. Research Objectives

The study has four objectives:

- To study the marketing strategies used by a bio-agricultural input manufacturer to develop its market.
- To understand the role of dealer relationship management and farmer engagement in developing sales and market potential.
- To identify practical opportunities for strengthening field marketing, dealer development and market expansion.
- To analyse the practical challenges encountered and recommend improvements.

The study is guided by five research questions: (RQ1) How do dealer relationships influence sales development? (RQ2) What role do farmer visits, meetings and field days play in product promotion? (RQ3) How can existing dealers be supported to improve market development? (RQ4) What factors matter in identifying potential new dealers? (RQ5) How can season-specific field marketing strengthen market potential?

4. Conceptual Framework

Building on the literature above, the framework treats dealer-anchored field marketing as three activity streams feeding two intermediate states and, through them, market outcomes, with contextual frictions moderating the whole chain.

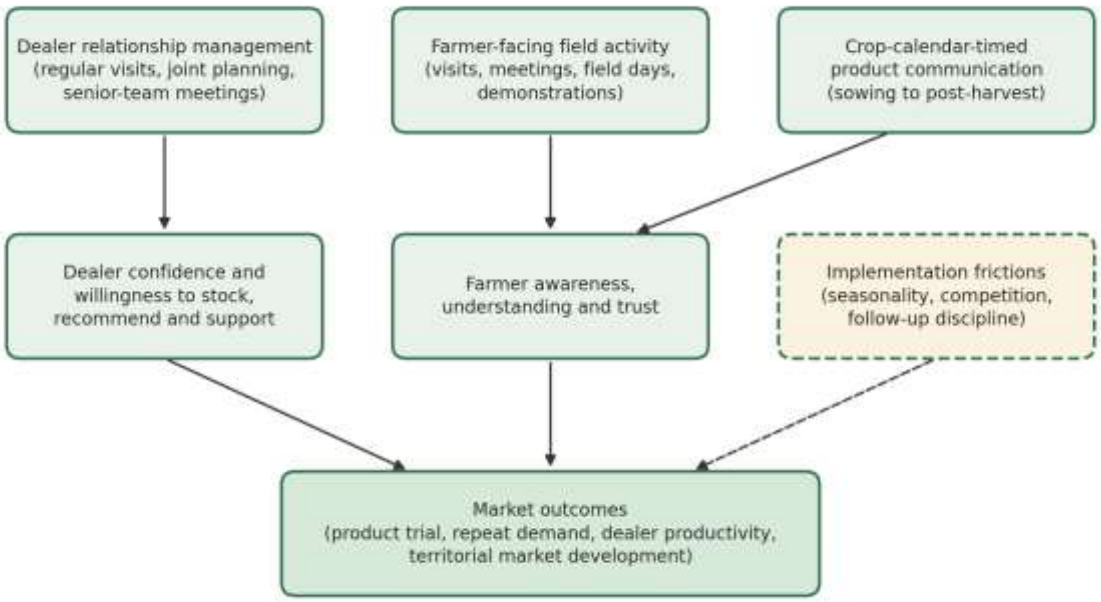

Figure 1. Conceptual framework of dealer-anchored field marketing and its hypothesised effects on dealer confidence, farmer trust and market development.



Five propositions follow. They are offered for future testing and are not hypotheses tested in this study.

- **P1.** Greater depth of dealer relationship management (regular contact, joint planning) is associated with greater dealer willingness to stock, recommend and host field activity.
- **P2.** For technical biological products, farmer-facing field activity builds understanding and trust beyond what dealer recommendation alone achieves.
- **P3.** The dealer and farmer layers are complementary: availability without understanding yields weak demand, and awareness without availability leaks to competitors.
- **P4.** Communication aligned to crop-calendar decision windows is more relevant and more likely to convert than untimed promotion.
- **P5.** Follow-up discipline moderates whether field activity converts into repeat demand.

5. Research Methodology

5.1 Setting and Duration

The study covers a three-month on-the-job engagement from 25 May to 25 August 2026 with a Maharashtra-based manufacturer of microbial bio-agricultural inputs whose portfolio spans biofertilizers, biocontrol agents (including Trichoderma-, Beauveria- and Metarhizium-based products), microbial consortia, a decomposer culture and a seed-treatment consortium. The company has operated for over two decades, offers roughly eighteen products and serves seven states. The author worked as a field sales representative across Maharashtra, with primary responsibility for territory in Ahilyanagar and Chhatrapati Sambhajinagar districts, and also took part in campaigns in other districts and in company-level meetings elsewhere in the state.

Table 1. Field engagement profile

Particular	Detail
Period	25 May to 25 August 2026
Role	Field sales representative (participant observer)
Geographic scope	Maharashtra (primary territory: Ahilyanagar and Chhatrapati Sambhajinagar districts; campaigns and meetings in other districts)
Dealer exposure	Approximately 40–45 dealers
Farmer exposure	Nearly 1,000 farmers, including group interactions
Research design	Descriptive and exploratory, field-based
Formal questionnaire	Not administered

5.2 Research Design

The study follows a descriptive and exploratory design. The descriptive element documents activities, stakeholder interactions and marketing practices as they occurred; the exploratory element identifies market-development opportunities and the factors that shape them. The design suits a study that is at once an academic investigation and an operational sales engagement, where the aim is depth of understanding rather than statistical generalisation.

5.3 Interaction Frame and Size

No probability sampling was used. Field exposure was purposive and activity-based, determined by the assigned territory, dealer availability, scheduled meetings and field activities. The interaction frame comprised existing dealers, prospective dealers, farmers connected to dealer markets and farmers met through field activities. Dealers were the principal unit of analysis for channel questions, and individual farmers or farmer groups for field-marketing questions. The figures of 40–45 dealers and nearly 1,000 farmers describe the scale of practical exposure and must not be read as a statistical sample.



5.4 Data Collection and Analysis

Primary experiential data came from direct interaction with dealers and farmers, field observation, dealer visits and discussions, farmer meetings and field days, and informal discussions with sales and marketing colleagues. Structured activity records supported follow-up and later reflection: dealer activity records (requirement, discussion, opportunity, next action), prospective-dealer records, farmer and field-day records (location, crop context, participants, topic, feedback), product-promotion records and follow-up records. Secondary data came from the company's brochure and website, ICAR publications and the academic literature reviewed in Section 2.

Because no survey was conducted, analysis is qualitative and activity-based. Field notes and records were organised by activity type and then interpreted thematically against the framework in Section 4 and objective by objective. The paper deliberately reports no respondent percentages, significance tests or sales-conversion figures, since none were systematically recorded.

5.5 Researcher Position and Ethics

The author was simultaneously a participant and an observer. This gives access to day-to-day detail but may colour interpretation: dealers may have been courteous to a company representative, and the author may be inclined to view the firm's practices favourably. Findings are therefore stated cautiously. No confidential dealer-wise commercial terms, proprietary customer data or financial information are disclosed, and the sponsoring firm and its products are described generically.

6. Findings and Discussion

6.1 Phases of Field Engagement

The fortnightly activity log shows a progression from orientation to dealer mapping, farmer-facing promotion and finally consolidation.

Table 2. Phases of the field engagement

Phase	Approximate period	Principal activities
Orientation	Late May	Company and sector induction; study of portfolio and business model
Dealer mapping and season planning	June	Dealer meetings with the regional manager; shop visits and market surveys; planning for a delayed monsoon; arranging farmer meetings
Demonstration-led promotion	Late June to mid July	Campaigns and field days; product demonstrations; field visits and demonstration-plot monitoring; farmer and dealer meetings
Consolidation and expansion	Late July to August	Digital-marketing planning; coordinated sales campaigns; consultation with an external firm; dealer recognition event; campaigns in other districts; review meetings

6.2 Dealer Relationship Management and Sales Development

The clearest observation was that dealer management is more than order collection. The work involved regular contact, understanding each dealer's requirements and local conditions, discussing sales growth, planning marketing activity jointly and following up between visits. This is consistent with relationship-marketing logic (Morgan & Hunt, 1994) and with the partnership view of channels (Anderson & Narus, 1990), and it offers field support for P1.



Table 3. Dealer-management practices and their implications

Observed practice	Marketing implication
Regular dealer contact	Sustains relationship continuity and two-way information flow
Sales-growth discussion	Shifts interaction from order-taking towards account development
Joint marketing planning	Links dealer activity to farmer demand generation
Senior-team dealer meetings	Strengthens dealer confidence and strategic alignment
New-dealer identification	Extends territorial reach and future potential
Structured follow-up	Reduces loss of opportunities between visits

Two cautions apply. First, a dealer discussion does not automatically become business; conversion depended on agreeing a clear next action and returning to it. Second, a single visit rarely sufficed to understand a dealer's requirements, so continuity mattered more than any individual meeting.

6.3 Farmer Engagement and Field Marketing

Farmer visits, meetings and field days performed distinct roles. Individual visits allowed discussion of a specific crop and problem; meetings enabled group-level communication and questions; and field days and demonstrations offered practical proof. For products whose value depends on correct use, this direct contact was where hesitation was addressed and application was explained, which is the mechanism implied by P2 and by the adoption literature (Paliwal et al., 2021; Wankhade et al., 2025). Connecting the layers mattered as well: dealer-plus-farmer activity linked availability at the counter to demand in the field, supporting P3. These observations are experiential; no farmer-level outcome was measured.

6.4 Seasonality and Crop-Calendar Marketing

The engagement coincided with the sowing period, which made seed treatment and sowing-related products especially relevant, and a seed-treatment consortium product received particular practical attention. Delayed rainfall during the period shifted sowing schedules and farmer purchase decisions and required strategies to be adapted. The lesson is that a technically sound product still needs to reach the farmer at the correct crop stage; promotion that arrives late misses the decision window. This supports P4 and suggests that crop-stage planning should govern dealer stocking, visit scheduling and farmer communication.

Table 4. Seasonal windows and marketing implications

Seasonal factor	Marketing implication
Sowing window	Prioritise seed-treatment and sowing-related communication
Vegetative growth	Promote relevant nutrition and disease-management solutions
Pest and disease pressure	Increase field diagnosis and product-specific guidance
Post-harvest and residue stage	Promote decomposition and soil-health solutions where relevant

6.5 Portfolio Communication and Cross-Selling

A portfolio of about eighteen products creates cross-selling opportunity but also a communication burden. Product explanations worked best when tied to a crop, a problem or a growth stage rather than presented as a catalogue. This suggests organising the portfolio into crop- and problem-based solution sets that dealers can recall and recommend.

6.6 New-Dealer Development

Identifying prospective dealers emerged as a distinct market-development task. A prospect is worth evaluating on territorial coverage, farmer reach, agri-input experience, interest in biological products, business capability and



willingness to support field activity. The process resembles a funnel: market mapping, prospect identification, initial contact, need assessment, product discussion, senior-team involvement where needed, follow-up and commercial development. Because no audited conversion data were kept, no conversion rate is claimed.

6.7 Implementation Challenges

Table 5. Challenges and responses observed in the field

Challenge	Practical impact	Response adopted or suggested
Dispersed dealer network	Travel time limits contact frequency	Prioritised visits, group activities, planned follow-up
Converting discussion into business	Dealer conversations do not automatically yield orders	Explicit next actions and regular follow-up
Farmer availability	Meetings depend on crop schedules	Scheduling around local agricultural calendars
Technical communication	Biologicals need correct explanation	Simple crop- and problem-based language, technical support
Seasonality and weather	Short demand windows; delayed rains shift sowing	Pre-season dealer preparation and flexible plans
Competition and trust	Farmers favour familiar chemical or rival biological brands	Field evidence, demonstrations, relationship building
Team coordination	Alignment needed across sales, marketing, dealers and senior staff	Confirmed responsibilities and follow-up owners

7. Key Findings

- Dealer-anchored field marketing is a practical way to reach dispersed farming communities, with the sales representative acting as a two-way link: products and plans move towards the market, while dealer and farmer feedback moves back to the company.
- Dealer management works best as continuing account development (contact, joint planning, follow-up) rather than order-taking.
- Farmer-facing activity is an important demand-generation tool where adoption depends on understanding and trust, and it complements rather than replaces the dealer's role.
- Timing against the crop calendar, including weather-driven shifts, strongly affects the relevance of promotion.
- A broad portfolio supports solution-based selling only when mapped to crops and problems.
- Existing-dealer development and new-dealer identification work together to expand coverage.
- Follow-up discipline is a recurring weak point that determines whether activity becomes repeat demand.

These findings are qualitative and experiential. They are consistent with the propositions in Section 4 but do not test them.

8. Managerial and Practical Implications

- **Plan by crop calendar.** Prepare territory-wise crop-stage calendars that map products to decision windows and drive dealer stocking and visit schedules.



- **Build structured dealer growth plans.** Give priority dealers a monthly plan covering target crops, product focus, farmer activities, stock considerations and follow-up.
- **Invest in demonstration-led marketing.** Run small, documented demonstration plots and field days in priority territories, and use the evidence in later meetings.
- **Train dealers.** Hold short, periodic sessions on product selection, application timing and communication points to improve recommendations at the counter and reduce misuse.
- **Segment dealers.** Classify dealers by territory potential, sales capability and farmer reach to focus resources.
- **Localise farmer education.** Use short Marathi-language videos, messaging-app content and crop-stage explainers to sustain recall between physical visits.
- **Track activity and follow up.** Maintain a simple CRM or activity sheet for visits, meetings and next actions, and contact dealers and farmers after each event.
- **Develop local field references.** Document successful field experiences, with permission, to build locally credible proof.
- **Cross-sell by crop and problem.** Define solution sets so that dealers can recommend complementary products.

9. Limitations

- The engagement lasted three months and covered one sowing-period window, so observations may not represent a full agricultural cycle.
- Territory coverage was limited and purposive, concentrated in a few districts of Maharashtra; findings should not be generalised to all company markets or to other regions.
- No formal questionnaire was used, so no statistical estimate of farmer attitudes, satisfaction or adoption can be made.
- Farmer exposure included group interactions, and individual-level responses were not systematically recorded.
- No audited financial or sales-register data were used, so the study cannot assess turnover, profit or return on activity.
- The author's dual role as participant and observer, and possible courtesy bias among dealers, may influence interpretation.

10. Scope for Future Research

A useful next step is a structured survey of dealers and farmers across several districts of Maharashtra and other states, using a statistically valid sampling plan. Such a study could measure awareness, purchase drivers, price sensitivity, brand preference, the influence of dealer advice and demonstrations, repeat-purchase intention and satisfaction, and could test propositions P1 to P5 directly. Dealer sales-register data, tracked for one to two months after field events and across a full annual cycle, would show whether activity translates into real stocking and repeat demand. Comparative work across regions and crops would show whether the model's effectiveness varies with local farming systems and competitive intensity.

11. Conclusion

This paper has examined dealer-anchored field marketing as a way of developing the market for bio-agricultural inputs, drawing on a three-month field engagement in Maharashtra. The experience indicates that successful marketing in this category is relationship-driven, field-oriented and season-sensitive. Dealers provide access, availability and local credibility; farmer meetings, field days and demonstrations create the understanding and proof that technical products require; and crop-calendar timing and disciplined follow-up decide whether the effort is converted. A strong product portfolio alone is not enough. Confirming these patterns with survey and sales data remains an important next step, but the framework and propositions developed here offer a replicable basis for evaluating similar agri-input marketing models.



References

Adhikary, M., & Chatterjee, M. (2023). Obstacles of service distribution channels of FMCG products in emerging rural markets: An Indian perspective. *World Academic Journal of Management, 11*(4).

Aithal, R. K., Satyam, & Maurya, H. (2018). Distribution challenges in emerging markets: Evaluating alternate distribution strategies for FMCG firms in rural India. In *Strategic marketing issues in emerging markets*. Springer.

Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing, 54*(1), 42–58.

Chavda, R. R., Vahoniya, D. R., & Bagda, B. (2026). Farmers' awareness and purchasing behaviour towards biofertilizers: A case study from Kachchh District, Gujarat, India. *International Journal of Plant & Soil Science, 38*(8), 722–729. https://doi.org/10.9734/ijpss/2026/v38i86254

Indian Council of Agricultural Research. (2025, December). Market growth of organic inputs. *Indian Farming*.

Jain, A., & Rathore, R. (2023). Farmer buying behaviour toward major agri-inputs: Findings from Fazilka district of Punjab. *Economic Affairs, 68*(3), 1373–1378.

Kumar, N., & Kapoor, S. (2017). Extensiveness of farmers' buying process of agri-inputs in India: Implications for marketing. *Journal of Agribusiness in Developing and Emerging Economies, 7*(1), 35–51. https://doi.org/10.1108/JADEE-02-2015-0013

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20–38.

Niteesh, S., Thakkar, M. G., & Sharma, S. S. (2025). Perceived constraints in buying biofertilizers: A study of farmers in Siddipet district, Telangana. *International Journal of Agriculture Extension and Social Development, 8*(7), 720–724. https://doi.org/10.33545/26180723.2025.v8.i7j.2208

Paliwal, M., Nistala, N., & Bhagat, S. (2021). *A study on adoption behaviour of farmers towards biofertilizers in western Maharashtra*. Vaikunth Mehta National Institute of Cooperative Management (VAMNICOM).

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Wankhade, H. S., Warade, S. V., Kadu, P. R., & Shende, N. V. (2025). Adoption of farmers towards bio-fertilizers and constraints faced by farmers while purchasing of biofertilizers in Amravati District. *International Journal of Agriculture and Food Science, 7*(8), 31–34. https://doi.org/10.33545/2664844X.2025.v7.i8a.590