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MARKET POTENTIAL, BRAND PROMOTION EFFECTIVENESS, AND FARMERS' ADOPTION BEHAVIOUR OF ORGANIC FERTILIZERS (OORJA) IN SHAHJAHANPUR DISTRICT OF UTTAR PRADESH

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ABSTRACT

The present study examined the market potential, effectiveness of brand promotion, and adoption behaviour of farmers regarding Oorja organic fertilizer in Shahjahanpur district of Uttar Pradesh. A combination of purposive and random sampling techniques was employed to select the study area and respondents. A total of 120 paddy farmers, along with selected wholesalers, retailers, and consumers, were included in the study. Primary data were collected through structured interviews, while secondary data were obtained from relevant published sources and official records. The findings indicated that 38.33 per cent of farmers were regular users of Oorja organic fertilizer, while 26.67 per cent used it occasionally, reflecting a moderate level of adoption. However, a considerable proportion of farmers were either aware but non-users or completely unaware, indicating gaps in awareness and acceptance. The study further revealed that farmer awareness and perceived soil health benefits were the major factors influencing market potential. Promotional strategies such as field demonstrations and training programmes were found to be more effective than conventional media, as they provided practical exposure to farmers. Additionally, long-term soil fertility and improvement in crop productivity emerged as key determinants influencing farmers' perception and adoption behaviour. Factors such as availability of inputs, affordability, and extension support also played a significant role, whereas ease of application and compatibility with existing practices had relatively lesser influence. The study concluded that organic fertilizers have considerable potential in the study area; however, their wider adoption depends on strengthening awareness, improving extension services, and adopting more interactive promotional approaches.

Keywords: Organic Fertilizers, Market Potential, Brand Promotion, Farmers' Adoption, Soil Health.

INTRODUCTION

Organic fertilizers refer to naturally derived substances that enhance soil fertility and plant growth without the use of synthetic chemicals. These fertilizers are obtained from plant, animal, or mineral sources such as compost, farmyard manure, green manure, bone meal, and biofertilizers. They

improve soil structure, increase water-holding capacity, and promote the growth of beneficial microorganisms, thereby contributing to long-term soil health. Unlike chemical fertilizers, organic fertilizers release nutrients slowly, ensuring a sustained supply of essential elements like nitrogen, phosphorus, and potassium to crops. This gradual nutrient release minimizes the risk of nutrient leaching and environmental pollution, making them environmentally sustainable. The use of organic fertilizers has gained importance in recent years due to increasing awareness about sustainable agriculture, soil degradation, and health concerns associated with chemical inputs. They also play a significant role in improving crop quality, taste, and nutritional value. However, their adoption among farmers is influenced by factors such as availability, cost, awareness, and perceived effectiveness compared to chemical fertilizers. Despite certain limitations like lower nutrient concentration and slower action, organic fertilizers are considered a key component of eco-friendly farming systems and integrated nutrient management practices. Their use supports biodiversity, reduces dependency on chemical inputs, and contributes to sustainable agricultural development. Thus, organic fertilizers are essential for maintaining soil fertility, ensuring environmental protection, and promoting sustainable crop production in the long run.

RESEARCH METHODOLOGY

The methodology adopted for the selection of the district, blocks, villages, and respondents was based on a combination of purposive and random sampling techniques. Shahjahanpur district was purposively selected to minimize logistical difficulties and time limitations faced by the investigator. Among all the blocks within the district, Tilhar block was chosen due to the higher concentration of farmers engaged in paddy cultivation. A comprehensive list of villages in the selected block was prepared, from which five per cent of the villages with a relatively higher number of paddy growers were randomly selected. Subsequently, a list of paddy farmers from the selected villages was compiled and classified into five categories based on landholding size: marginal (below 1 hectare), small (1–2 hectares), semi-medium (2–4 hectares), medium (4–10 hectares), and large (above 10 hectares). From this frame, a total of 120 farmers were selected using proportionate random sampling. In addition, 10 wholesalers, 5 retailers, and 10 consumers were selected to examine market potential, effectiveness of brand promotion, and factors affecting farmers' adoption and perception of Oorza organic fertilizers in the study area. Primary data were collected through a well-structured schedule using direct personal interviews. Secondary data were obtained from books, journals, reports, and official records available at district and block headquarters. The collected data were analyzed using appropriate statistical tools to derive meaningful results. The study pertained to the agricultural year 2025–2026.

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: Adoption Status of Organic Fertilizer Usage among Farmers in the Selected Area

Sr. No.	Usage Category	Total Respondents	Marginal	Small	Semi-medium	Medium	Large	Percentage (%)
1.	Regular Users	46	9	12	11	9	5	38.33
2.	Occasional Users	32	6	9	7	7	3	26.67
3.	Aware but Non-users	25	5	7	6	5	2	20.83
4.	Not Aware of Usage	17	3	4	3	4	3	14.17
	Total	**120**	**23**	**32**	**27**	**25**	**13**	**100.00**

Table 1: The table presents the extent of awareness and utilization of Oorja organic fertilizer among various categories of farmers. Out of 120 respondents, a significant proportion (38.33%) reported regular use of the fertilizer, reflecting a fairly good level of adoption. Around 26.67 per cent of farmers used it on an occasional basis, indicating partial acceptance with scope for further expansion. Approximately 20.83 per cent of the respondents were aware of Oorja organic fertilizer but had not adopted it, suggesting the existence of certain barriers or reluctance. In contrast, 14.17 per cent of the farmers had no awareness of the product, highlighting the necessity for enhanced awareness campaigns and promotional efforts..

Table 2: Key Factors Influencing the Market Potential of Oorja Organic Fertilizer in the Study Area.

Sr. No.	Factor/ Determinant	Total Respondents	Marginal	Small	Semi-medium	Medium	Large	Percentage (%)
1.	Farmer Awareness	28	6	8	6	5	3	23.33
2.	Local Market Availability	20	4	6	5	3	2	16.67
3.	Affordability of Price	18	3	5	4	4	2	15.00
4.	Perceived Benefits for Soil Health	24	5	6	6	5	2	20.00
5.	Rising Interest in Organic Farming	16	3	4	3	4	2	13.33
6.	Influence of Dealers and Extension Services	14	2	3	3	4	2	11.67
	Total	**120**	**23**	**32**	**27**	**25**	**13**	**100.00**

Table 2: The table highlights the key factors influencing the market potential of Oorja organic fertilizer among 120 farmers from different farm size groups. The findings reveal that farmer awareness was the most significant factor, reported by 23.33 per cent of respondents. This was followed by perceived benefits to soil health (20.00%), indicating that farmers value its role in improving soil fertility. Availability in local markets was noted by 16.67 per cent of respondents, emphasizing the importance of easy access. Price affordability influenced 15.00 per cent of farmers, while 13.33 per cent considered the growing demand for organic farming as a key factor. Recommendations from dealers or extension workers had the least impact, reported by 11.67 per cent of respondents.

Table 3: Determinants Influencing the Effectiveness of Promotional Strategies for Oorja Organic Fertilizer

Sr. No.	Promotional Activity	Total Respondents	Marginal	Small	Semi-medium	Medium	Large	Percentage (%)
1.	Field-based Demonstrations	26	5	7	6	5	3	21.67
2.	Farmer Meetings and Training Sessions	22	4	6	5	5	2	18.33
3.	Suggestions from Dealers/Retailers	20	4	6	4	4	2	16.67
4.	Advertisements through Print Media	16	3	4	4	3	2	13.33
5.	Distribution of Promotional Materials (Leaflets, etc.)	18	4	5	4	3	2	15.00
6.	Discounts and Free Sample Offers	18	3	4	4	5	2	15.00
	Total	**120**	**23**	**32**	**27**	**25**	**13**	**100.00**

Table 3: The table outlines the effectiveness of different brand promotion activities in influencing farmers toward Oorja organic fertilizer among 120 respondents across various farm size categories. The findings show that field demonstrations emerged as the most impactful method, as reported by 21.67 per cent of respondents. This was followed by farmer meetings and training programmes (18.33%), which enhanced farmers' understanding through practical exposure. Recommendations from dealers or retailers accounted for 16.67 per cent, highlighting the role of trusted sources in decision-making. Both distribution of promotional materials and provision of discounts or free samples were reported by 15.00 per cent of respondents each. Print media advertisements were found to be the least effective, influencing only 13.33 per cent of farmers. Overall, interactive and experience-based promotional strategies proved more influential than conventional media approaches

Table 4: Factors Shaping Farmers' Adoption and Perception of Oorja Organic Fertilizer.

Sr. No.	Factor/Aspect	Total Respondents	Marginal	Small	Semi-medium	Medium	Large	Percentage (%)
1.	Awareness of Organic Farming Techniques	14	3	4	3	3	1	11.67
2.	Perceived Increase in Crop Productivity	18	4	5	4	3	2	15.00
3.	Benefits for Long-term Soil Fertility	21	5	6	4	4	2	17.50
4.	Simplicity in Application	12	2	3	3	3	1	10.00
5.	Availability of Organic Farming Inputs	16	3	5	3	3	2	13.33
6.	Confidence in Organic Fertilizer Brands	13	2	3	3	3	2	10.83
7.	Impact of Training and Demonstration Programs	17	3	4	4	4	2	14.17
8.	Suitability with Existing Agricultural Practices	9	1	2	3	2	1	7.50
	Total	**120**	**23**	**32**	**27**	**25**	**13**	**100.00**

Table 4: The table presents the factors affecting farmers' adoption and perception of Oorza organic fertilizers among 120 respondents from different farm size groups. The findings indicate that long-term improvement in soil health was the most significant factor, reported by 17.50 per cent of respondents. This was followed by enhancement in crop yield (15.00%), reflecting farmers' concern for productivity. Training and demonstration activities influenced 14.17 per cent of respondents, highlighting the role of extension services in encouraging adoption. Availability of organic inputs was reported by 13.33 per cent of farmers. Additionally, knowledge about organic farming practices (11.67%) and trust in organic fertilizer brands (10.83%) also contributed to adoption decisions. Factors such as ease of application (10.00%) and compatibility with existing practices (7.50%) were found to have comparatively less influence.

CONCLUSION

The present study revealed that organic fertilizers, particularly Oorja, had achieved a moderate level of acceptance among farmers. About 38.33 per cent of respondents were regular users, while 26.67 per cent used the product occasionally, indicating a gradual but encouraging adoption pattern. Nevertheless, 20.83 per cent of farmers were aware of the product but had not adopted it, and 14.17 per cent remained unaware, pointing to clear gaps in awareness and utilization that require focused extension interventions. The findings further showed that farmer awareness (23.33%) and perceived improvements in soil health (20.00%) were the most significant determinants of market potential, followed by factors such as product availability and price affordability, highlighting the combined importance of knowledge and economic feasibility. In terms of promotional strategies, participatory methods like field demonstrations (21.67%) and training programmes (18.33%) proved to be the most effective, whereas print media had comparatively limited impact, underscoring the value of direct and practical engagement with farmers. Additionally, long-term soil fertility (17.50%) and enhanced crop productivity (15.00%) were identified as key factors shaping farmers' perception and adoption behaviour, supported by training exposure and input availability. In contrast, aspects such as ease of application and compatibility with existing practices had relatively lower influence. Overall, the study indicated that although organic fertilizers possess strong potential in the region, their wider adoption depends on increasing awareness, improving extension services, ensuring accessibility, and emphasizing more interactive and field-based promotional approaches

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