

Promotional Strategy For Biofertilizers in Tarai Region of State Uttarakhand, India

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Abstract:

Agribusiness sector revolves around input supply, processing, manufacturing and distribution. Input supply is most important sector among these, which includes pesticides, seeds, fertilizers etc. Fertilizer use is essential practice in agriculture for getting proper yield from the crop. Excess use of chemical fertilizers has led to the pollution soil and contamination of the water. Now farmers are looking for more eco-friendly options. Bio-fertilizers, to some extent are alternatives for the ecological problems emerged by chemical fertilizers. Bio-fertilizers are eco-friendly fertilizers, which improve the quality and fertility of the soil, They are beneficial to the soil without any damage to soil and environment. An increasing number of farmers are using these fertilizers, and the numbers of manufacturing units have also grown considerably. But still market for them not well developed, and the industry has not had the growth that was anticipated. The use of bio-fertilizers has still not spread uniformly although because lack of awareness and proper promotion. This paper explores the farmer's perspective about bio fertilizers, its usage status and existing promotional strategy in the area. This study will also recommend a proper promotional strategy for adoption of bio fertilizers in area studied. The research was carried out in Tarai region of state Uttarakhand which is an organic state. Descriptive research was done to explore farmer's perspective with the help of structured questionnaire.

Keywords: Bio-fertilizers, Hariyali kisan bazaar, Kisan Mela

1. INTRODUCTION

Agriculture is the core of Agribusiness sector. Four sectors which revolve around agriculture are input supply, processing, manufacturing and distribution. Input supply is most important sector among all four. It includes pesticides, seeds, fertilizers etc. And among these fertilizers are the crucial one. Population of India has shown a high growth in last 25 years but the cultivable land remained limited. Various measures have been taken from time to time to meet the increasing demand for food. Scientists also have suggested that we can meet out the food demand by increasing the productivity and this idea led to the Green Revolution in the 60's. But by increasing the productivity alone cannot solve the problem; because already existing problem of diseases, soil degradation and soil infertility became a matter of greater concern. Using fertilizer is essential practice in agriculture in present scenario for getting good quality yield from the crop. Among fertilizers chemical fertilizers are most commonly used fertilizers by the farmers. Fertilizers were welcomed with open arms, because of its immediate effect on yield of crops. But their excessive use has done an irreparable damage to the environment. Excessive use of chemical fertilizers has created the problem of pollution and contamination of the soil. It has destroyed micro-organisms and friendly insects and also polluted water basins. It also reduced soil fertility. Now farmers are looking for more eco-friendly options. Bio-fertilizers have provided an answer to the soil contamination to some extent. Bio-fertilizers are eco-friendly fertilizers, which are used to improve the fertility and quality of the soil. Bio-fertilizers do not contain any chemicals because they are made from biological wastes and are good for soil. They enrich the soil with micro-organisms which help in producing organic nutrients. The green revolution brought gains in food production but concern for sustainability was ignored. Now It is well known that excessive use of agrochemicals have created number of problems to environment, soil and water degradation. Dependence on chemical fertilizers in future means possibilities of more water contamination, loss in soil quality and burden on the fiscal system. The Government of India is trying to promote an improved practice with involvement of bio fertilizers along with other fertilizers. The government aims to encourage their use in agriculture as well

as to promote private initiative for its production. So there is need of proper promotion of biofertilizers which can be done through a good promotional strategy.

2. REVIEW OF LITERATURE

Boxer and Wensely (1986) have advocated that managers within an organization must develop the organization's promotional strategy in response to the competitive environment and organizational performance.

Levlanc and Nguyen (2001) has established that corporate image is established by elements of the company's identity, reputation, physical facilities, service quality, price offered and delivering the service. **Philip et al (2009)**, the upshot is many consumer packaged goods companies feel they are forced to use more sales promotions than they wish.

3. IMPORTANCE OF THE STUDY

This study would help-

- To identify the areas where the biofertilizers already used in the season.
- To identify the stage or time of crops when biofertilizers are used.
- To identify the advantages of biofertilizers.
- To compare the cost of biofertilizers with other chemical fertilizers.
- To identify the problems of use of biofertilizers in different crops.
- To identify the strong media and combine them for making an effective use of it.

4. PROBLEM STATEMENT

Biofertilizers are seen as an alternative technology, since the negative effect of chemical fertilizers has become well known. The use of the chemical fertilizers has led to considerable damage to environmental. Bio-fertilizers do not pollute the soil and do not disturb the ecological balance.. An increasing number of farmers are using bio-fertilizers, and the many bio-fertilizer manufacturing units have also grown considerably.

However, the market for bio-fertilizers is still not very well developed, and the bio-fertilizer industry has not grown much. Though there has been a rise in use of biofertilizers by farmers, but still its use has not spread uniformly

There are many companies are producing bio fertilizers but still there is use of biofertilizers has not been widely adopted. As we know that marketing of any product there are 4 P's price, place, promotion and product. Though All 4 are equally important but in case of biofertilizers promotion should be given more emphasis. For good promotion we need to find the media which is economical as well as higher reach.

5. Objectives

The present study was proceeded with following three important objectives

- To study psychographic and demographic of the farmers
- To evaluate preferences and attitudes of farmers about bio fertilizers
- To recommend promotional strategies for increased adoption of bio fertilizers

6. RESEARCH METHODOLOGY

Descriptive research was used for the study, as the research focuses on assessing the impact of advertisements and sales promotion in prescribed areas The project was carried out in tarai region of state Uttarakhand. In Tarai region, production of crops like wheat and rice is much higher than other parts of Uttarakhand so use of fertilizers are much higher than other region of Uttarakhand. For representation of Tarai region three block Kashipur, Bazpur and Kicha were selected for sampling. Total 150 respondent were taken for survey. Face-to-face interviews were conducted to collect data with the help of structured questionnaires. Data for study was taken from secondary as well as primary sources. Primary data was collected by survey method, using a structured questionnaire as a research instrument for farmers. Majority of farmers in tarai region use fertilizers so all types of farmers was taken for survey. Convenience sampling method adopted for farmers.

FORMULATION OF PROMOTIONAL STRATEGY

Following steps were followed for formulation of Promotional strategy

Step 1: Research on target market

Step 2 Evaluate and pick the best event to meet target market

Step 3 Choose the right promotional activity suitable for target market

Step 4 Plan a distribution program for promotional items during the event

Step 5 Create a system for organization of all the gathered information

7. RESULTS AND DISCUSSIONS

7.1 FARMER'S PROFILE

This project has been done with various objectives and study of psychographics and demographics of farmers is one of them. In survey following results has been found.

Majority of the farmers (82%) were engaged solely on farming occupation for their livelihood, only 18 percent of farmers earn their primary income from occupation other than the farming. In survey area mostly farmers are marginal farmers which have land holding between 2-5 acre and rest were large and small farmers. Literacy level of respondent was high mostly farmers were literate.

Literate farmers generally read the material provided along with the packets. They read the pamphlets which were consulting to their agricultural crops or which were helpful to increase their crop yield. Large numbers of farmers were of medium age group (35 to 45 years old) followed by the age group of 45-55 yrs which comprises 32% of total surveyed farmers (20%). Only 10% were young farmers (20-35 yrs) and remaining 6% were of old people who are above 55 yrs Young and medium age farmers have ability to take risk, were more innovative and had high motivation level; they generally did the innovation by using the new things in their fields. The old farmers were stick to their traditional agricultural practices. Wheat and rice were the main crops which were grown by all the farmers in this area. The other main crops were sugarcane mustard, vegetables and pea. Few farmers grew maize.

Crop pattern helps in deciding the best suitable time for advertising. It is necessary to calculate appropriate time of promotional activity to insure the maximum gathering of farmers and it requires for the scheduling of the demonstrations.

7.2 FARMER'S PREFERENCES, ATTITUDE AND BEHAVIOUR ABOUT BIOFERTILIZERS

All the surveyed farmers use fertilizers It shows today's scenario of farming that fertilizers are a essential part of farming and which shows a tremendous business opportunity for fertilizer sector.

7.2.1 SOURCE OF INFORMATION OF FERTILIZERS

Majority (58%) of the farmers got the information of fertilizers from their dealers. Rest of the farmers were persuaded by the company persons or get information from their neighbours. Only 6% farmers used fertilizers by seeing advertisement on TV/radio. Dealers were the prime persons who were frequently contacted by the farmers, they were local peoples hence easily available to the farmers therefore their credibility was more than others. Farmers could complain about the product to them without any problem.

7.2.2 INFLUENCER IN DECISION MAKING ABOUT QUANTITY AND METHOD OF APPLICATION

It is seen in survey that majority of farmers were influenced (30%) by dealers and 24% farmers take decisions on their own. Rest 18% by neighbours, 12% by co-operatives, 12% by Hariyali kisan bazaar and 5% were influenced by other sources.

7.2.3 PLACE AND TIME OF PURCHASE OF FERTILIZER

Majority of farmers (60%) purchase fertilizers from dealers. Remaining 12% purchase from Hariyali kisan bazaar and Tata kisan centre 18% from co-operatives and 10% from other sources.

70 percent farmers purchased fertilizers just before sowing, 22% purchased 15 days before sowing and rest 8% purchased more than 30 days before or more than that

7.2.4 STATUS OF AWARENESS OF BIOFERTILIZERS

Majority of farmers use biofertilizers because it do not harm soils fertility. Other reason for using bifertilizers includes its easy use , and increase in yield. Most of the farmers use fertilizers to increase yield ,to increase soil fertility and crop susceptibility to disease etc

7.2.5 ATTITUDES OF FARMERS TOWARDS BIOFERTILIZERS

Farmers were asked about various factors related to price, health, benefits,usage,dosage and environment friendliness about bifertilizers to know their attitudes. And table 7.1 shows their attitude. It is well shown in table that people are quite aware about biofertilizers but still percentage is very less than anticipated.

TABLE 7.1 ATTITUDES OF FARMERS TOWARDS BIOFERTILIZERS ON DIFFERENT FACTORS

Factors	Items	Response
Price	It is cheap	36%
	It is costly	40%
	It gives value for money	24%

Health	Does not harm to soil	72%
	Harmful for soil	8%
	No effect on soil	20%
Benefits	Increases yield	44%
	No difference	32%
	Decreases yield	24%
usage	Easy to use	34%
	neutral	18%
	Complex to use	58%
dosage	Require high dose	52%
	neutral	26%
	Small dose	22%
Environment friendly	yes	60%
	neutral	20%
	no	20%

7.3 ACCESS TO PRINT AND VISUAL MEDIA BY FARMERS

Out of all the farmers only 66 percent farmers had subscribed news paper while 34 percent farmers had not subscribed it. Though majority of the farmers were literate even though many of the farmers were not keen to read news paper but were unable to read because lack of timely availability of new paper at their door step, lack of interest and lack of time to read it. Majority of the farmers were not viewing TV Large number of farmers had not shown keen interest in viewing TV while some had lack of time for that. Farmers read the pamphlets which are provided by the company to the farmers. Farmers also listen radio only in free time. Radio was still a very common source of information and entertainment among the villagers. Farmers not only listen radio in their homes but also in fields during their hectic work.

7.4 PARTICIPATION IN FARMER'S FAIR AND FARMER'S MEETING

Majority of the farmers (70%) visited Kisan Mela once or twice a year only 30% farmers did not visit regularly to Kisan Mela. G. B. Pant University of Agriculture, and Technology (an agriculture university situated near surveyed area) organizes Kisan Mela twice in a year. Various companies, societies and institutes participate in the Mela. Most of the farmers visit the Kisan Mela to get up to date information about agriculture and to buy the quality seeds , pesticides etc.

A large number of farmers attended social gathering in their local areas like local fairs, village level meeting, local parties etc. but in general they attended them for entertainment and other personal reasons not for getting agriculture information.

They also attended meeting which are organized by different companies, only 38% farmers had not taken part in such meetings and 12% farmers participate sometimes.

Many agro based companies organize farmers' level meeting in the villages as a promotion strategy to promote their products. These meeting are helpful for direct interaction with the number of farmers at the single place hence that save the time. Farmers participate in the meeting and put their problems to the company persons and share the views about the product if used earlier. These meeting increase the trust among the farmers for the company and their products.

7.5 CONSULTATION BY FARMERS FOR THEIR PROBLEM

Farmers consulted dealers for any agricultural problem followed by the neighbour farmers Only 10% farmers consulted company persons for their problem.

Dealers are local and easily available people for the farmers hence their credibility is higher than others. Opinion leaders are always followed by the other farmers; that is with the experience of neighbour's farmers. The company person visit is higher to the big farmers and big farmers generally put their problem to company persons.

7.6 PROMOTIONAL TECHNIQUES USED IN AREA

Promotions in area are done by distributing pamphlets and brochures, newspapers, hoardings, jeep campaign and through TV/radio.

7.7 EFFECT OF PROMOTION ON PURCHASING

It is found in research that farmers purchase fertilizers because of promotions . Farmers given various reasons like they believe that only good products are promoted, new products are promoted, products which are promoted are of good quality etc.

8. RECOMMENDATIONS/SUGGESTIONS

Main promotion should be done through demonstration for users because farmers always believe what they see followed by distribution of pamphlets in farmer's meeting which are having very little cost. Mostly farmers attend farmers meetings. Promotion through Kisan Mela can also be done because it's easy to reach for farmers. G. B. Pant University of Agriculture and Technology organizes two Kisan Mela in a year, they are in October and March. 70 percent farmers visit Farmer's Fair. Pamphlets are the cheapest source of promotion, though they are the supportive material for Jeep campaigning, farmer's meeting and at dealers shop for buyers because they are hard to convince they increase reliability of product.

Demonstration plays a important role in increasing the sales of products hence it takes the major amount of promotion.

Demonstration must be more focused on those villages where the product is not in use but near to the villages where it is already used so farmers can share the words about the result of the product.

TABLE 8.1. RECOMMENDED STRATEGIES FOR FARMERS OF STUDY AREA

STRATEGY	FREQUENCY	OBJECTIVES
Demonstration	Once in each season	To make farmers aware about product's quantity method of application
Farmer's meetings	Once in a month	Group discussion by experts about biofertilizers its benefits, importance, new researches etc
Distribution of pamphlets	Weekly	Information about products
Advertisement through newspaper TV and radio	Weekly	Information about product

9. FINDINGS

This study shows that most of the farmers are aware of biofertilizers but do not use because of unawareness of its benefits. Some farmers were confused between organic manure and biofertilizers they think organic manure is biofertilizers. Farmers also use chemical fertilizers because of its easy availability and easy handling. Most of the farmers are literate in surveyed area so electronic and print media is good for promotion.

10. CONCLUSION

Promotion of products plays a very important role in business. It increases not only sale but also increase awareness about the product. In case of agriculture it is of prime importance because farmers always believe what they see. Biofertilizers are a part of integrated nutrient management but still it is not used by farmers because of lack of awareness about its use , benefits and other related issues. Main factor is lack of proper promotion.

Promotion is influenced by many factors and it affects many other things also. Due to Ad campaigns farmers are aware of the various brands and the companies. The most desired media by the farmers is found out to be the pamphlets, brochures, newspaper, magazines and hoardings. Sales promotion in agrochemicals is a key ingredient in marketing. Sales promotion such as demonstration, field trails, get together are growing up fast. Demonstration of Biofertilizers is very important as it makes the farmer self-equipped.

Majority of the respondent comments that there is an influence on them purchasing the agrochemicals through advertising and sales promotion. It is because they believe that due to advertisement they become aware of the products and its usage. Advertisement through T.V. and Radio are now became the most common method for sales promotion along with print media. Demonstration is the best method for the promotion of biofertilizers. It should be properly followed with other mode of promotion.

11. LIMITATIONS

Sample size was taken less because of time and cost constraints

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ANNEXURE

QUESTINNARE USED FOR SURVEY

Name of the Respondent _____

Name of Village _____

Name of District _____

1 Major occupation

A _____ B _____

2 Land holding

3 Education

4 Age.

5 Are you aware about of biofertilizers, could you please tell us that what is that you know about biofertilizers

1 It increase the productivity of crops

2 Does not harm soil

3 It is easy to use

4 Do not know much about it

5 It improves the quality of yield

6 Other

6 Why do you use biofertilizers?

1 Faster growth of plants

2 Better appearance

3 Less susceptibility to disease and pest

4 better quality yield

5 Enhancement

in soil fertility

6 Increase in yield

7 Other

7 Benefits you anticipated by using biofertilizers

8 Use of biofertilizers next year?

1 Yes

2 No

9 Attitude of farmers towards biofertilizers on different factors

Factors	Items	Response
Price	It is cheap	
	It is costly	
	It gives value for money	
Health	Does not harm to soil	
	Harmful for soil	
	No effect on soil	
Benefits	Increases yield	
	No difference	
	Decreases yield	
usage	Easy to use	
	neutral	
	Complex to use	
dosage	Require high dose	
	neutral	
	Small dose	
Environment friendly	yes	
	neutral	
	no	

10 Types of fertilizers you are aware of

- | | |
|--|----------------------------------|
| <input type="checkbox"/> 1 Urea | <input type="checkbox"/> 4 SSP |
| <input type="checkbox"/> 2 Di ammonium phosphate | <input type="checkbox"/> 5 MOP |
| <input type="checkbox"/> 3 SP | <input type="checkbox"/> 6 Other |

11 Source of information of fertilizers?

- | | |
|---|---|
| <input type="checkbox"/> 1 Advise of the Dealer | <input type="checkbox"/> 2 Neighbour's Experience |
| <input type="checkbox"/> 3 Demonstration | <input type="checkbox"/> 4 Company Officers |
| <input type="checkbox"/> 5 Pamphlets | <input type="checkbox"/> 6 Other |

12 adviser of the use of fertilizers and quantity to be used per acre?

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> 1 Dealers/ retailers | <input type="checkbox"/> 2 Peer group | <input type="checkbox"/> 3 company officer |
| <input type="checkbox"/> 4 Based on past experience | <input type="checkbox"/> 5 Other | |

13 From where did you buy your requirements of crop nutrients/fertilizer?

- | | |
|---|---|
| <input type="checkbox"/> 1 From the dealer/retailer | <input type="checkbox"/> 5 Godrej adhar store |
| <input type="checkbox"/> 2 From the sugar factory | <input type="checkbox"/> 6 ITC e-chaupal |
| <input type="checkbox"/> 3 Co-operatives | <input type="checkbox"/> 7 From TATA KISAN SANSAR |
| <input type="checkbox"/> 4 Hariyali kisan Bazaar | <input type="checkbox"/> 8 Other |

14 When did you buy your requirement for nutrients/Micronutrients to be used for this season?

- | | |
|--|--|
| <input type="checkbox"/> 1 Just before sowing | <input type="checkbox"/> 3 More than 30 days before sowing |
| <input type="checkbox"/> 2 More than 15 days before sowing | <input type="checkbox"/> 4 Even before that |

15 Are you subscriber of News Paper? Y/N

Name of News Paper _____

16 Do you watch TV

1 Yes

2 No

17 Time of watching TV 7-9 AM

12-2 PM

7-9 PM

9-11 PM

18 Do you listen radio?

19 Do you visit Farmers Fair / Social Gathering / Farmer's Meeting

20 Do you read Pamphlets provided by company persons? Y/N

21 At the time of any Problem you consult to:

- | | | |
|---|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> 1 Dealers/ retailers
Department | <input type="checkbox"/> 2 Neighbours | <input type="checkbox"/> 3 Extension |
| <input type="checkbox"/> 4 Based on past experience | <input type="checkbox"/> 5 Other | |

22 Which promotional activity you have seen in your area

23 impact of promotions on purchasing

1. Do you think you buy the product mostly due to the reason of being advertised and promoted?