Studies on Marketing of Selective Herbicide in Kurukshetra District of Haryana, India

Mohit Kumar Maurya [a*], Guddu Nishad [a] and Saurabh Soni [a]

[a] *Department of Agricultural Economics, Sam Higginbottom University of Agriculture, Technology and Science, Prayagraj-211007, India.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

An herbicide is a type of pesticide used to control or eliminate unwanted plants, commonly known as weeds. Antibiotics work by interfering with various physiological processes in plants, including photosynthesis, cellular respiration, and cell division. One of the main benefits of herbicides is their impact on weed control and crop yield. Calaris Xtra's business in the Kurukshetra district of Haryana includes two business channels where channel 2 (manufacturer-product-retailer-consumer) precedes channel 1 (manufacturing wholesaler-consumer). Finally, the price of Calaris will provide customers with an additional profit of Rs. 1300/700ml bottle. Finally, channel 1's total business profit is Rs 250, business price is Rs 54 and business efficiency is 4.27%. Channel I's spread is Rs 104, channel 2's total market cap is Rs 71 and channel 2's total market cap is Rs. 283 business efficiency is 3.89% with a spread of Rs 184 on channel 2. The limiting factor in the Calaris Xtra herbicide business is the high shipping cost, with 30 respondents responding to level 1, followed by storage issues, 20 responding as level II, followed by storage issues 18 high value participants, level III; followed by famine. level IV with 16 market participants; slow sales followed, with 11 participants responding to grade V; price volatility comes next and 5 participants answer level VI.

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Corresponding author: E-mail: mohit8808421890@gmail.com;

1. INTRODUCTION

The history of antibiotics can be found in ancient times, when ancient civilizations used salt, vinegar, and other natural chemicals to control the growth of plants. The development of synthetic herbicides in the 20th century revolutionized crop control in agriculture, increasing crop yields and food production. Today, pesticides are still important tools in modern agriculture and infrastructure. Antibiotics work by interfering with various physiological processes in plants, including photosynthesis, cellular respiration, and cell division. Herbicides are generally divided into three groups: contact herbicides, systemic herbicides, and pre-emergence herbicides [1-3]. Body herbicides that are absorbed by the plant and carried through the tissue kill the plant at its roots, while contact herbicides only kill the part of the plant they come into direct contact with. Pre-emergent herbicides are used before plant seeds germinate and prevent them from sprouting. Selective herbicides target specific plant species, while non-selective herbicides kill all plants they touch. For example, glyphosate is a popular herbicide used in agriculture and landscaping to control weeds in fields, pastures and roads. Other herbicides include atrazine, 2, 4-D and dicamba, which are used to control broadleaf weeds and grasses in many agricultural settings [4-6]. One of the main benefits of herbicides is their impact on weed control and crop yield. Herbicides reduce the competition of plants for nutrients, water and sunlight, making crops grow more and be more productive, Additionally, the use of herbicides can reduce labor costs associated with weed control and reduce the need for tillage machinery that can damage the soil [7-10].

2. METHODOLOGY

2.1 Selection of District

Haryana has 22 cities named Panchkula, Ambala, Yamunanagar, Kurukshetra, Karnal, Kaithal, Jind, Fatehbad, Hisar, Sonipat, Rohtak, Bhiwani, Jhajjar, Gurgaon, Mahendranagar, Mewat, Rawari, Sirsa, Faridabad, Panipat. The area in Haryana has been deliberately chosen as the largest rice growing area.

2.2 Selection of Block

There are 7 blocks in line. Among these people, Radeva deliberately chose to be the subject. The agriculture of the block is intended for cultivation. Farmers in the neighborhood have been growing crops for years.

2.3 Selections of Villages

A total of 59 villages in the Ladwa block were taken over by the block development office. After that, the villages were ranked according to the availability of land. Therefore, 5% of the villages from each village were selected for this study.

2.4 Selection of Respondents

A list of all soybean farmers in the selected villages was obtained from the block development office of each selected village. 120 farmers were selected from the farmer family and from the whole village, in order of the land from smallest to largest.

2.5 Selection of Market and Market Functionaries

2.5.1 Market: Purpose of choosing two types of market for research

2.5.1.1 Main market

The main market (Ladwa market etc.) is the chosen target.

2.5.1.2 Secondary market

The ladwa market is deliberately chosen.

2.5.2 Market functionaries

A list of documents and other business values collected by the operating personnel of the different enterprises under consideration, as well as a list of all operating personnel, is put together with the help of the primary and secondary business centers, and then by the employees of the enterprise. Integer, for example 5 wholesalers, 7 stores, 13 customers, etc. This study was chosen for store employees.

2.5.2.1 Analytical tools

Chi Square: Chi-square is a statistical test used to examine the difference between categorical variables in a random sample to determine the goodness of agreement between expected and observed results.

$$x^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

2.5.2.2 Marketing cost

All costs occur in the business of many agents involved in the sale.

C=CF+Cm1+Cm2+Cm3................... +Cmn

2.5.2.3 Price range

Spread is defined as the difference between the price that consumers pay and the net price that producers receive.

Price Spread = (Consumer price – Net Price of Producer)

2.5.2.4 Garret ranking

We used the Garrett Ranking method to understand participants' acceptances and limitations in processing and marketing antimicrobial products. Garrett's formula for converting rankings to percentages is as follows:

Per cent position = 100 (R_{ij} - 0.5) /N_j

3. RESULTS AND DISCUSSION

3.1 To Studies Socio-Economic Status of the Participants in the Research Area

Table 1 Out of the 100 respondents, 30 were marginal size farm, 23 were have small size farm, 18 were have semi medium size farm, 15 were have medium size farm and 14 were large-farms.

Table 2 It is seen from the table that there are 60 (60.00%) in the 20-35 age group, 30 (30.00%) in the 36-50 age group, and middle-aged people in the 36-50 age group. There are 10 (10.00%) participants in the age group. over 50 years old. Therefore, most of the respondents are young, between the ages of 20-35.

Table 3 The highest level of education of the participants was primary school at the age of 17 (17.00%), followed by those who graduated from high school at the age of 12 (12.00%) and then had an average education level of 11. years (11.00%), followed by participants with an average education level. 10 (10.00%) for high school graduates, followed by (1.00%) for university graduates 00%). Therefore, the total number of readers in the study area is 51 (51.00%).

Table 1. Distribution of farmer according to farm size

S.No.	Categories(members)	Respondent	
		No.	%
I	Marginal (< 1.00 ha)	30	30.00
II	Small Farmers (1.00-2.00 ha)	23	23.00
III	Semi Medium Farmer (2.00-4.00)	18	18.00
IV	Medium Farmers (4.00-10.00 ha)	15	15.00
V	Large Farmers (> 10.00 ha)	14	14.00
Total		120	100.00

Table 2. Respondents by age

S. No.	Categories	Respondents number	Marginal	Small	Semi medium	Medium	Large	Percentage
1.	Young age group (20-35 years)	60	21	11	11	9	8	60.00
2.	Middle age group (36-50 years)	30	6	10	5	5	4	30.00
3.	Old age group (above 50 years)	10	3	2	2	1	2	10.00
	Total	100	30	23	18	15	14	100.00

Table 3. Distribution of respondents based on their age

S. No.	Categories	Respondents number	Respondents					
			Marginal	Small	Semi small	Medium	Large	Percentage
1.	Primary School	17	6	2	4	3	2	17.00
2.	Junior high school	10	3	3	1	1	2	10.00
3.	High school	12	2	4	3	2	1	12.00
4.	Intermediate	11	3	2	2	3	1	11.00
5.	Graduate	1	0	0	0	1	0	01.00
A.	Total literate	51	14	11	10	10	6	51.00
6.	illiterate	49	16	12	8	5	8	49.00
	total	100	30	23	18	15	14	100.00

Table 4. Distribution of respondents according to their gender

S. No.	Category	Respondents number	Respondents					
			Marginal	Small	Semi medium	Medium	Large	Percentage
1.	Male	86	27	21	15	13	10	86.00
2.	female	14	3	2	3	2	4	14.00
Total		100	30	23	18	15	14	100.00

Table 5. Distribution of respondents according to their caste category

S. No.	Category	Respondents number	Respondents					
			Marginal	Small	Semi medium	Medium	Large	Percentage
1.	General	49	16	11	9	6	7	49.00
2.	OBC	30	8	8	5	5	4	30.00
3.	SC/ST	21	6	4	4	4	3	21.00
Total		100	30	23	18	15	14	100.00

Table 6. Distribution of respondents according to their family type

S. No.	Class	Respondents number	Respondents					
			Marginal	Small	Semi medium	Medium	Large	Percentage
1.	Nuclear	90	29	22	15	13	11	90.00
2.	Joint	10	1	1	3	2	3	10.00
Total		100	30	23	18	15	14	100.00

Table 4 Gender is important in marketing research as it influences the purchasing decision. Because of differences in knowledge and relationships, men and women often come to different conclusions when shopping. Of the 100 participants, 86 were men, constituting 86.00% of the total sample, and the remaining 14 participants constituted 14.00% of the total sample.

Table 5 Since caste influences purchasing decisions, it has important links with market research. Because of differences in knowledge and relationships, groups of people often come to different conclusions when buying. Out of 100 respondents, 49 respondents belonged to the general category with 49.00%, followed by 21 respondents with 30.00% for OBC and 21% for SC/ST. 00% of all samples.

Table 7. Distribution of respondents according to their religion

S. No.	Class	Respondents number	Respondents					
			Marginal	Small	Semi medium	Medium	Large	Percentage
1.	Hindu	70	22	16	10	11	11	70.00
2.	Muslim	20	5	5	7	1	2	20.00
3.	Christian	10	3	2	1	3	1	10.00
Total		100	30	23	18	15	14	100.00

Table 8. Reveals the preferred marketing channel by the respondent farmers

S. No.	Method type	No. of respondents	Percentage
I	Method - I	15	15.00
II	Method - II	85	85.00
Total		100	100.00

Table 6 because families influence purchasing decisions, they have important links to marketing research. Because of differences in understanding and relationships, joint families and nuclear families can often make fferent decisions when buying. Out of 100 participants, 90 participants live in nuclear families and 10 participants live in joint families.

Table 7 Because belief influences purchasing decisions, it has important links with marketing research. Relationships often come to different conclusions when shopping because of differences in information and relationships. Out of 100 participants, 70 are Hindus ie 70.00, 20 Muslims ie 20.00 and the remaining 10 participants are Christians ie 10.00. All sample sizes are 00.

3.2 To Find Out Different Marketing Channels Involved in Marketing of Calaris Xtra

Table 8 The study period showed that 15 out of 100 samples in the study area (15.00%) preferred channel 1 to buy and sell Calaris Xtra on channel 1, and the remaining 85 (85.00%) participants chose channel 1 to buy and sell Calaris Xtra. He showed that he preferred -2.

4. CONCLUSION

In this study, we found that in the large farm category, most farmers were in the marginal large farm category, followed by the small farm farming category, then the semi-medium farming category, the medium farming category, and finally the large farm category. farm size category. Farm size category. By age group,

respondents are mostly young, followed by middle-aged and finally elderly. In the education category, 49 of the different respondent groups were illiterate and 51 were literate. In the gender group, there were 86 men and 14 women among all participants. In the caste category, we found that most respondents belonged to the general category, followed by BC and SC/ST. Regarding family type, we found that 90 people live in nuclear families and 10 people live in combined families. In the religion category, Hinduism is the most visible, followed by Muslims and finally Christianity. Calaris Xtra's business in the Kurukshetra district of Harvana includes two business channels where channel 2 (manufacturer- product- retailer- consumer) precedes channel 1 (manufacturing wholesaler-consumer). The final retail price of Calaris is an additional Rs 1300 for a 700 ml bottle for consumers. Finally, channel 1's total business profit is Rs 250, business price is Rs 54 and business efficiency is 4.27%. The spread for channel 1 is Rs 104 and for channel 2 the total market cap is Rs. 71, channel 2's total operating profit is Rs. 283 business efficiency is 3.89% with a spread of Rs 184 on channel 2. The limiting factor in the Calaris Xtra herbicide business is the high shipping cost, with 30 respondents responding to level I, followed by storage issues, 20 responding as level II, followed by storage issues 18 high value participants, level III; followed by famine. level IV with 16 market participants; slow sales followed, with 11 participants responding to grade V; price volatility comes next and 5 participants answer level VI.

5. SUGGESTIONS

- Field staff should be well educated and having good sense of humour and sharp mind.

- Number of stuff should be enough for each level of work.
- Strategy should be made to fulfill all the recommendation of farmers.
- Field staff should keep in mind that our consumers are the giver.
- Company should give the appraisal to the staff for their good works.
- Field work is the most necessary part and it should be done with great potential.
- Company should also focus on medium and small land holding farmers to make its grip strong in the market.
- Quality of products, its packaging supply should be good.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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