



An Economic Analysis on Marketing and Brand Awareness of Rifit Plus (Herbicide) in Ghazipur District of Uttar Pradesh, India

Vinay Singh Kushwaha^{a++*}, Amit Kumar^{a#} and Atul Singh Kushwaha^{at}

^a Department of Agricultural Economics, SHUATS, Naini, Prayagraj, 211007, India.

Authors' contributions

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

Article Information

DOI: 10.9734/AJAEES/2023/v41i92040

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/101164>

Original Research Article

Received: 11/04/2023

Accepted: 14/06/2023

Published: 01/07/2023

ABSTRACT

The study aims to present an Economic Analysis on Marketing and Brand Awareness of Rifit Plus (Herbicide) in Ghazipur District of Uttar Pradesh, India. It was discovered that two marketing channels were involved in the sale of Rifit Plus (an herbicide) in the Ghazipur district of Uttar Pradesh. These channels were Channel 1 for producers, Wholesalers, and consumers and Channel 2 for producers, wholesalers, retailers, and consumers. Channel 2 is the marketing channel that respondents in the study area most frequently cite as preferable. In channel 1, the overall marketing expense is Rs. 48, the total marketing profit is Rs. 120, and the channel's

⁺⁺Research Scholar (P.G);

[#]Assistant Professor (Department of Agricultural Economics);

[†]Research Scholar (JRF);

^{*}Corresponding author: E-mail: vinaysinghkushwaha7@gmail.com;

marketing effectiveness is 2.55%. The overall marketing expense for channel 2 is Rs. 65, the total marketing margin is Rs. 125, and the marketing. Channel 2 is the most popular marketing channel among respondents in the study location. Total marketing cost in channel 1 is Rs. 48, total marketing margin in channel 1 is Rs 120, and marketing efficiency in channel 1 is 2.55%. Channel 2 has a total marketing cost of Rs.65, a total marketing margin of Rs.125, and a marketing efficiency of 2.37%.

Keywords: Marketing channels; marketing efficiency; marketing cost; marketing margin.

1. INTRODUCTION

A weed killer is a substance utilized to eliminate undesired plants. Discriminatory weed killers eliminate specific targets while sparing the desired crop largely unscathed. Some of these function by disrupting the growth of the weed and are often based on plant hormones. Weed killers used to clear wasteland are indiscriminate and terminate all plant matter with which they come into contact. Certain plants generate natural weed killers, such as the Juglans genus (walnuts). Weed killers are extensively employed in agriculture and in the management of landscape turf. They are implemented in total vegetation control (TVC) programs for the upkeep of highways and railroads. Lesser amounts are employed in forestry, pasture systems, and the management of areas designated as wildlife habitats. Weed killers have been accused of causing a range of health effects, from skin irritations to death [1-4]. The mode of attack can arise from improper application resulting in direct contact with field personnel, inhalation of aerial sprays, food consumption, and from contact with residual soil contamination. Weed killers can also be transported via surface runoff to pollute remote surface waters and thus another mode of ingestion through the extraction of those surface waters for drinking. Certain types of herbicides break down quickly in soil, while others have more persistent properties and longer environmental half-lives [5-8]. Herbicide remains have been discovered on food intended for human consumption, mainly as a result of post-harvest treatments. Some herbicides, such as vinclozolin, pose a threat to human health and have been taken out of use. Herbicides, also called weedkillers, are substances used to manage unwanted plant growth. Selective herbicides target specific weed species, while leaving the desired crop relatively unscathed, whereas non-selective herbicides (often referred to as total weedkillers in commercial products) can be employed to clear waste ground,

industrial and construction sites, railways and railway embankments, as they eliminate all plant material that they come into contact with. In addition to selective/non-selective, other critical distinctions include persistence (also known as residual action: how long the product stays in place and remains effective), means of uptake (whether it is absorbed by above-ground foliage only, through the roots, or by other means), and mechanism of action (how it works). In the past, products such as common salt and other metal salts were utilized as herbicides, but these have gradually fallen out of favor and in some countries, a number of these are prohibited due to their persistence in soil, and toxicity and groundwater contamination concerns. Herbicides have also been employed in warfare and conflict. Rifit Plus is a pre- and early post-emergence herbicide that provides effective control of annual grasses, some sedges, and broadleaf weeds in transplanted and dry-sown flooded rice [9-13]. It is a pre-emergence herbicide for paddy, to be applied after 3DAT. With its Fast DSA formula and green label, it controls monocotyledon and dicotyledon weeds. It was established in 2016 after the greater success of Rifit, but the company intends to introduce an advanced product in the market before launching Rifit Plus with a new DSA formulation.

2. METHODOLOGY

2.1 Selection of the District

In Uttar Pradesh, there exist a total of 75 Districts and 18 Divisions. For the purpose of the current investigation, Ghazipur District was chosen due to its substantial expanse dedicated to Paddy farming.

2.2 Selection of Block

There are 16 block in the district. Out of these Mohammadabad was selected purposively for the study.

Table 1. Selection of respondents

District	Block	Villages	Respondents				Total	
			Marginal	Small	Semi-medium	Medium		Large
Ghazipur	Mohammadabad	A.M. Gandhpa	7	6	3	3	1	20
		Aalapur	4	7	6	5	3	25
		Abada Urf	1	3	4	10	3	21
		Baran						
		Abbas Nagar	1	11	4	5	2	23

2.3 Selection of Villages

The block development office provided a comprehensive inventory of all the villages located in Mohammadabad block. Following this, the villages were sorted in ascending order based on the extent of paddy cultivation in the area. Consequently, a random selection of 5% of the total villages was made for the current investigation.

2.4 Selection of Farmers

The block development office of each chosen village provided a roster of all the rice farmers. The cultivators were then sorted in ascending order according to the size of their land holdings. From each village, 10% of the farmers were chosen at random, based on this ranking. These selected farmers were then categorized into five different groups based on their landholding size (Table 1).

2.5 Analytical Tools

Mean:

$$m = \frac{\text{sum of the terms}}{\text{number of terms}}$$

Marketing Efficiency:

$$\frac{(\text{Net price received by producer's} - \text{Consumer price})}{\text{Total marketing cost}}$$

Marketing Cost:

$$\text{Marketing Cost (MC)} = \frac{\Delta TC}{\Delta Q}$$

Marketing Margin:

$$\text{Marketing Margin} = \text{Producer price} - \text{Raw Material}$$

3. RESULTS AND DISCUSSION

Table 2 reveals that By interviewing and observation it was seen that out of 120 farmers 34% farmer have heard about it but never used, 25% have not heard about it, 21% seen result in other farmer field, 20% used it.

Table 3 reveals that the marketing price of the Rifit Plus channel -I, supplied by the producer was Rs.380 and the net price received by producer Rs.332. Meanwhile, the cost incurred by the producer in marketing is Rs. 48, and Rs.70 as profit per bottle of Rifit Plus. Simultaneously, the wholesaler purchased the Rifit Plus from the producer as Rs.380/ bottle, with Rs.50as profit, by which the final selling price of the Rifit Plus was Rs. 430/bottle. Finally, the selling price of the Rifit Plus to the consumers was Rs.430/bottle. Eventually, the total marketing margin in channel 1 isRs.120 the marketing cost was Rs.48, the marketing efficiency was 2.55%.

Table 4 discloses that the wholesaler provided Rifit Plus at a cost of Rs. 427, with a marketing expense of Rs. 17 and a profit margin of Rs. 30. The retailer then sold Rifit Plus to the consumer at a price of Rs. 452, with a profit margin of Rs. 25, resulting in a final consumer price of Rs. 452. Overall, the marketing cost was Rs. 65, the total marketing margin in channel 2 was Rs. 125, and the marketing efficiency was 2.37%.

Table 2. Brand awareness of rifit plus

Sr. no.	Attributes	Number	Percentage
1.	Have not heard about it	30	25%
2.	Have heard about it but never used	41	34%
3.	Seen result in other farmer field	25	21%
4.	Used it	24	20%
	Total	120	100%

Table 3. Reveals the marketing cost, marketing margin and marketing efficiency of the product in channel-I

Channel I - Producer- Wholesaler- Consumer

S. No	Particulars	Value in Rupees
1.	Producer sale price to wholesaler	380
2.	Cost incurred by the producer	
i	Packing cost	8.00
ii	Packing material cost	8.00
iii	Transportation cost	5.00
iv	Market cost	5.00
v	Labour cost	05.00
vi	Loading and Unloading cost	05.00
vii	Miscellaneous charges	12.00
	Total cost (i-vii)	48.00
3.	Margin of Producer	70.00
	Margin of Wholesaler	50.00
4.	Net price received by producer	332
5.	Wholesaler sale price to Consumer	430
6.	Marketing cost	48
7.	Marketing Efficiency	2.55%
8.	Market margin	120

Table 4. Reveals the marketing cost, marketing margin and marketing efficiency of the product in channel-II

Channel II- Producer –Wholesaler – Retailer – Consumer

Sr. No	Particular	Value in Rupees /Bottle
1.a	Producer sale price to wholesaler	380
b	Marketing cost incurred by producer	48
c	Margin of producer	70
d	Net price received by producer	332
2.	Sales price of Wholesaler to Retailer	427
a.	Cost incurred by the Wholesaler	
I	Loading & Unloading charges	2
li	Carriage up to shop	3
lii	Weighting charges	3
Iv	Town charges	4
V	Transportation	3
Vi	Losses & Miscellaneous charges	2
b	Total Cost (i-vi)	17.00
	Margin of wholesaler	30
3	Margin of Village Merchant/Retailer	25.00
4.	Consumers paid price	452
5.	Total marketing cost	65.00
6.	Total marketing margins	125
7.	Marketing Efficiency	2.37%

4. CONCLUSION

In the present situation and in the future, herbicides have a promising outlook as their consumption is increasing each year. Farmers rely on herbicides, which indicates the growing demand for them. Farmers prefer easy solutions

for any field-related issues and therefore use herbicides proficiently. The use of herbicides and plant growth regulators (PGR) results in higher crop yields, and hence farmers continue to use them. Herbicides act quickly on the target weed and save time. While many farmers overuse herbicides, some believe that excess use can

harm the field and use them only when necessary. Farmers consider herbicides crucial for effective crop growth as different parts of the plant are attacked at various stages. PGR provides micro-nutrients to the plant and regulates growth, allowing farmers to obtain high yields with low investment.

Ghazipur plays a significant role in paddy production, and paddy growers use agrochemicals from various companies such as Syngenta, Dow, Bayer, Sumitomo, Dhanuka, and UPL.

Overall, Syngenta's performance is satisfactory, but it should conduct more effective promotional activities in Mohammadabad district. Syngenta has an excellent opportunity to capture more market share by increasing its promotional activities and focusing on new products. It enjoys a good brand image and reputation for its services in the region, which it can leverage to increase sales and market share.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Aggarwal. Suggested that Consumer behaviour research is the scientific study of the processes consumers use to select, secure, use and dispose of products and services that satisfy their needs. Res. 2022;39:161-166.
2. Ajay. Studied farmer's buying behavior for pesticides revealed that farmers still depended on the written media for information. journal of economic and social development. 2019;v(1).
3. Anwar. Studied farmers buying behavior on pesticide products and reported that, past experience was an important reason for using a pesticide. Lumle Regional Agricultural Research Centre Review Paper. 2018;95(18):23.
4. Bharttacharya. I alto causes wilting of seedlings and kaf necrosis in several pants. These symptoms were similar to those produced by the fungus itself, thus the toxin plays a key role in athogenesis Agricultural Situation in India. 2018; 46(4):279-284.
5. Chandan, Prajapati. Studied that the farmers were not having a very strong brand loyalty as far as pesticides are concerned, though their loyalty did increase as their association with the brand grew old. Sustainable Agriculture and Food Security. 2021;327-398.
6. Gangawane, Reddy. Showed that in the absence of herbicides, more of less proportion of both the carbendazim and thiophanate methyl resistant and sensitive mutants of *Aspergillus flavus* was seen at fourth passage on groundnut pods and kernels. Project report of Agro-Economic Research Center JNKVV, Jabalpur (M.P.). 2019;3(2):56-58.
7. Kiral T, Ankara ilinde Tsfas besi bolge sefligi tarafindan desteklenen sigir besiciligi isletmelerinin ekonomik analizi. A.U. Ziraat Fakultesi Yayinlari No: 1280, Ankara; 1993 (in Turkish).
8. Kiral T, Kasnakoglu H, Tatlidil F, Fidan H, Gundogmus E. Methodology for Revenue and Cost Calculation for Agricultural Products and Data Base Guideline. Agricultural Economics Research Institute Project Report 1999-13, Publication No: 37, December, Ankara; 1999.
9. Leonard P Gianessi. Herbicide use is increasingly being adopted around the world. Many developing countries (India, China, Bangladesh) are facing shortages of workers to hand weed fields as millions of people move from rural to urban areas. Journal of Economic and Social Development. 2017;v(1).
10. Vinod SP. In his study weedicide use in Indian Agriculture: Trends, Market Structure and Policy Issues, he found three issues that need to be addressed right away in order to strengthen the domestic weedicide industry and ensure safe weedicide application Indian Journal of Agricultural Economics. 2022;53(3):402-403.
11. Sanjay, Arora. Reported that the monthly income of majority of the farmers was low which has posed a serious problem in acquiring the recommended herbicide to combat pests in their farms. agricultural research communication centre, Indian J. Agric. Res. 2020;49(2):114-124.
12. Wasim. Reported the extensive benefits which man accrues from herbicides and the best opportunity that these chemicals provide to those who juggle with the risk-benefit equations. The Bihar Journal of Agricultural Marketing. 2019;3(2):153-161.

13. Yuvarani. Analysed that liberalization of the Indian economy had far reaching consequences, which led to the free entry of global brands in Indian markets. Earlier companies focused their marketing efforts towards the urban markets targeting the educated consumer. Indira Gandhi Agricultural University, Raipur, Chhattisgarh; 2021.

© 2023 Kushwaha et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

*The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/101164>*