Study on consumer buying behaviour and product preference of insecticides (ampligo) in Muzaffarnagar district of uttar Pradesh

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Abstract
Syngenta India Pvt. Ltd is a prominent player in the agri-inputs industry, with a focus on high-quality innovative agrochemicals that increase crop yield and quality. The aim of this research was to investigate market preferences for different types of agrochemicals (fungicides, insecticides, weedicides) in the cereal market. The study also aimed to assess dealer perceptions and consumer satisfaction with Syngenta India Pvt. Ltd products compared to other brands, and to analyze customer behavior when purchasing agrochemicals for cereal crops. The research used a multistage sampling method and involved personal interviews and questionnaires with 120 farmers and 35 dealers. The findings revealed that most farmers purchased cereal agrochemicals from cooperatives as they offered credit facilities. Dealers preferred to stock branded products, and both farmers and dealers preferred Syngenta agrochemicals due to their superior quality. Agrochemical companies used various marketing strategies such as price discounts, field demonstrations, and promotional schemes to generate demand from farmers.

Introduction
Agriculture is considered the foundation of the Indian economy, contributing 22% to the country's GDP, and employing roughly 58% of the population. The sector comprises both traditional village farming and modern agriculture. Effective pest control strategies must be ecologically sound since pests pose an ecological problem. Major players in the industry, such as Syngenta, Bayer, Indofil, BASF, TATA Rallis, DOW, Sumitomo chemicals, FMC, and DuPont, have shifted their focus from low-value products to high-value specialty products, with increased competition.

One such product is Ampligo, a pesticide produced by Syngenta India Pvt. Ltd. Farmers use Ampligo to control insects that harm crops, including Pink Wall Worm, Fall Army Warm, Semi Luper, Spider Mites, Leaf Miners, White Flies, Aphids, and others. The pesticide's technical name is Chlorantraniliprole10 and Lambda-Cyhalothrin 5%, with a recommended dosage of 70-100 ml per acre or 10 ml per pump. Ampligo has a yellow label and low toxicity, making it less harmful to humans and animals. However, caution must still be exercised, and it provides 20-25 days of plant protection.

Research Methodology
The research was carried out in Muzaffarnagar district, Uttar Pradesh, which is an important district known for its large area and crop production. The Janshat block was purposively selected as it had the highest area under Cereal crops. From this block, ten villages were randomly selected, and a list of all Cereal growers was compiled. The farmers were then categorized based on their operational land holding into small (below 1 hectare), medium (2-3 hectare), and large (above 4 hectare) size groups.

Selection of district: The study focuses on consumer buying behavior in the Muzaffarnagar district of Uttar Pradesh, which was selected purposively due to its high production of wheat, paddy, sugarcane, and sugar industry.

Selection of Block: Janshat block was purposively selected for the present study due to its significant position in sugarcane cultivation in Muzaffarnagar district.

Selection of villages: For the study on Insecticide Ampligo, 10 villages were randomly selected from the selected blocks and under Panchayat. The villages selected for the study are Jalalpur nila, Ramraj, Hussainpur, Tikola, Putthi, Lalpur, Siyali, Hanshabala, Deval, and Mirapur.

Results and Discussion
To identify the consumer buying behavior and product preference towards insecticides.

Table: Consumer perception and buying behaviour

<table>
<thead>
<tr>
<th>Parameter</th>
<th>No. of farmers</th>
<th>Farmers %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>25</td>
<td>20%</td>
</tr>
<tr>
<td>Price</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>Packaging</td>
<td>04</td>
<td>03%</td>
</tr>
<tr>
<td>Relation with Dealer</td>
<td>35</td>
<td>30%</td>
</tr>
<tr>
<td>Brand Image</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>Promotional Strategies</td>
<td>10</td>
<td>08%</td>
</tr>
</tbody>
</table>
It is founded that about 20% farmers prefers to buy a product according to its quality, about 17% farmers prefers the price of product, about 03% farmers prefers the attractiveness of the packaging, 30% farmers buy agrochemicals only because of the relationship with the distributor, 17% of the farmers buy agro products on the basis of Brand Image, about 08% farmers buys agro products by convinced through promotional strategies, and 05% farmers take information about products from their friends and neighbours or any other person.

**Conclusion**

The study focused on understanding the market preferences for various agrochemicals in the Cereal sector, assessment of dealer perception and consumer satisfaction about Syngenta India Pvt. Ltd. Products vis a vis other brands, and customer behavior regarding the purchase of agrochemicals by Cereal growers. The study revealed that farmers preferred purchasing agrochemical products from cooperatives due to credit facilities, and dealers kept branded products for selling. The quality of the product was the most significant factor in purchasing agrochemicals by the farmers, followed by the price and brand image. The study also found that almost all agrochemical companies generated demand from farmers by introducing various schemes, price discounts, and field demonstrations to the farmers. The study emphasizes the importance of providing quality agrochemical products to farmers, maintaining good relationships with dealers, and implementing effective promotional strategies to generate demand. Overall, the study provides insights into the market preferences and behavior of Cereal growers towards agrochemical products, which can help agrochemical companies to develop effective marketing strategies to meet the needs and expectations of their customers.

**References**