



# A Study On Marketing Of Reno (Insecticide) In Ujjain District Of Madhya Pradesh

Vipin Kumar<sup>1</sup>, Ramchandra<sup>2</sup>

<sup>1</sup>PG Scholar, <sup>2</sup>Assistant Professor,

Department of Agricultural Economics, Naini Agricultural Institute, Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj- 211007, Uttar Pradesh, India,.

## Abstract

This survey aims to investigate the marketing of Reno, an insecticide, in the Ujjain district of Madhya Pradesh. Its purpose is to assess the impact and effectiveness of UPL Ltd.'s promotional strategies among farmers. The research objectives include examining farmers' awareness of UPL Ltd., their methods of insect control, and their knowledge of chemical control. Additionally, the study aims to identify the available marketing channels, propose an insecticide development strategy for UPL Ltd. in the designated regions of Ujjain, analyse different product preference strategies employed by UPL Ltd., and explore the competitors and their market strategies in the study area.

In the current and future agricultural landscape, insecticides hold a promising outlook due to their increasing consumption. Farmers heavily rely on insecticides, indicating a growing demand for these products. The convenience they offer aligns with farmers' preference for quick and easy solutions to address field-related issues. Consequently, the efficient use of insecticides enables farmers to save time and achieve higher crop yields, reinforcing their continued usage.

Although some farmers caution against excessive insecticide application due to potential harm to the fields, the majority still prioritize their use. Farmers believe that without insecticides and plant growth regulators (PGRs), it would be challenging to cultivate crops effectively. This is because plants face various types of attacks, such as pests and diseases, at different stages of growth, affecting the soil, leaves, and stems. Insecticides play a crucial role in protecting crops and maintaining their health throughout the farming process.

**Keywords:** Insecticide, Promotional strategies, Farmers' awareness, Market strategies.

## Introduction

Insecticides are substances, either natural or manmade, that are used to control insects by either killing them or preventing their destructive behavior. They come in various formulations and delivery systems such as sprays, baits, and slow-release diffusion methods. Biotechnology has even incorporated genes from bacteria into crop plants, allowing them to produce insecticidal proteins that can eliminate pests. This chapter aims to provide a brief overview of insecticides, including a background and review of major insecticide classes used to combat insect pests. While not comprehensive, it covers significant classes and technologies, both old and new.

Out of over one million species of insects, approximately 10,000 species are known to be crop-eating, with around 700 causing the majority of damage to crops worldwide, both in the field and during storage. Humans have been on Earth for over three million years, while insects have existed for at least 250 million years. Early human ancestors likely used primitive methods to repel insects, such as huddling around smoky fires or applying mud and dust to their skin. These practices can be considered as early forms of repellents, a category of insecticides.

The use of pesticides can be traced back to around 1000 B.C., according to historians, with the earliest records mentioning the burning of "brimstone" (sulphur) as a fumigant. Pliny the Elder, in his natural history, documented various insecticide uses, including the use of lizard gall to protect apples from worms and rot. Over time, a wide range of materials was employed with varying degrees of success, including pepper and tobacco extracts, soapy water, vinegar, turpentine, fish oil, brine, and lye, among others.

The advent of World War II in 1940 marked a turning point in insect control, as it brought forth synthetic organic insecticides, starting with DDT. Prior to this, available insecticides were limited to arsenicals, petroleum oils, nicotine, pyrethrum, rotenone, sulphur, hydrogen cyanide gas, and cryolite. World War II ushered in the Modern Era of Chemical Control, revolutionizing insect control methods.

### UPL Ltd.

UPL is a producer of crop protection products, intermediates, specialty chemicals and other industrial chemicals, was incorporated in the year 1969. UPL is largest producer of agrochemicals, in India. It is amongst the top five post-patent agrochemical manufacturers in the world. It offers wide range of product and has developed more than 100 insecticides, fumigants, rodenticides, fungicides PGR and herbicides. UPL is global player of crop production products has customer base in 123 countries. It has subsidiary offices in Argentina, Australia, Bangladesh, Brazil, China, Canada, Denmark, Indonesia, France, Hong Kong, Japan, Korea, Mauritius, Mexico, New Zealand, Russia, Spain, Taiwan, South Africa, USA, UK, Vietnam and Zambia. UPL has 23 manufacturing facilities – 9 in India, 2 in Spain, 4 in France, 3 in Argentina and 1 in UK, Vietnam, Netherland, Italy and China. All the units are certified under the ISO 9001 for quality assurance, 14001 for Environment Pollution Control norms and OHSAS 18001 for healthy and safety.

## RESEARCH METHODOLOGY

The research was carried out in Ujjain, Madhya Pradesh, which consists of 8 blocks. Among these blocks, Ujjain block was purposefully chosen for the study. To determine the sample villages, a comprehensive list of all villages in the area was obtained from the respective Gram Panchayat office. The villages were then organized in ascending order based on the area of land dedicated to soybean cultivation. Subsequently, a random selection was made, encompassing 5% of the total villages. The research employed a multi-stage stratified random sampling approach to ensure the selection of representative samples for the study.

1. First stage- Selection of District
2. Second stage- Selection of block
3. Third stage- Selection of village
4. Fourth stage- Selection of respondent
5. Five stage - Selection of Market and Marketing functionaries

## RESULT AND DISCUSSION

Socio-economic status refers to the assessment of an individual's economic and social circumstances, which provides insight into their social standing based on factors such as education, income, and occupation. To evaluate the socio-economic characteristics of the participants, seven indicators were taken into account: age, gender, educational background, marital status, family type, occupation, and monthly income of the family. These indicators were considered to gain a comprehensive understanding of the respondents' socio-economic profiles.

### Age:

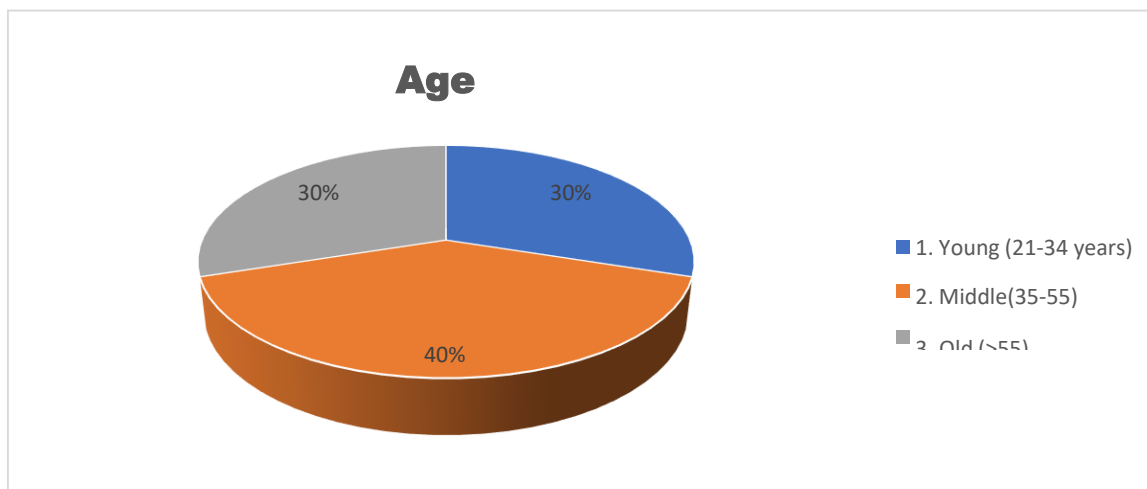
The age of the respondents was considered as length of years passed away from birth. The distribution of respondents according to different age group is presented in the table 4.1.1

Number of respondents = 100  $M+S+SM+M+L = 58+33+7+2+0 = 100$

**Table No. 4.1.1 Age**

SI. No.	Age in year	Frequency	Percentage
1.	Young (21-34 years)	30	30.00
2.	Middle (35-55)	40	40.00
3.	Old (>55)	30	30.00
	Total	100	100.00

Chart No. 4.1.1 Age



The above chart shows that 30 percent respondents belong to young age group i.e. between (21-34)years, followed by 40 and 30 percent respondents were between the age group of middle (35-55) and above 55 years respondents.

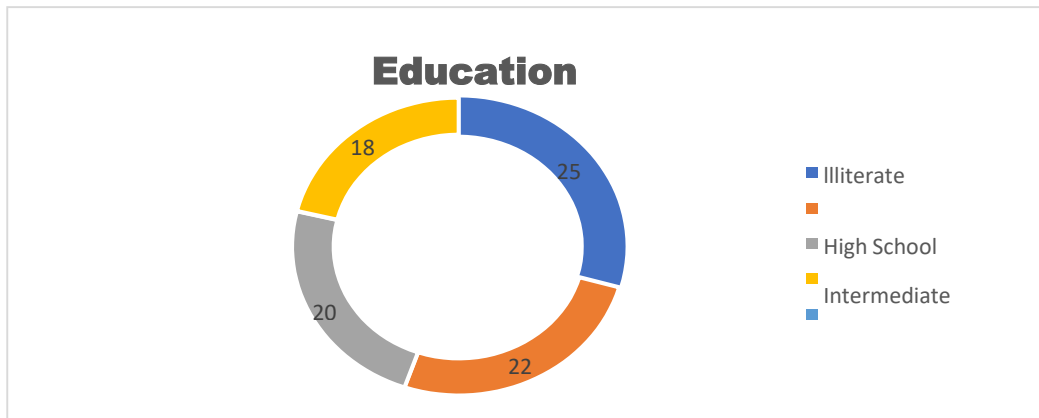
#### 4.1.2 Education:

education was considered as the number of years of formal education acquired by the respondents besides informal leading with may affect the adoption level of improved practices of bio-fertilizer. The distribution of the respondents according to different education level is presented in table 4.1.2. number of respondents=100

$$M+S+SM+M+L = 58+33+7+2+0 = 100$$

SI. No.	Education	Frequency	Percentage
1.	Illiterate	25	25.00
2.	Primary School	22	22.00
3.	High school	20	20.00
4.	Intermediate	18	18.00
5.	Graduate and above	15	15.00
	Total	100	100.00

**Fig. 4.1.2. Education**



The above chart shows that out of 100 Respondents, followed by Illiterate were 25 percent 22 percent were Primary School passed 20 percent were High School passed were Intermediate passed and Graduate and above were 15 percent.

**4.1.3. Occupation**

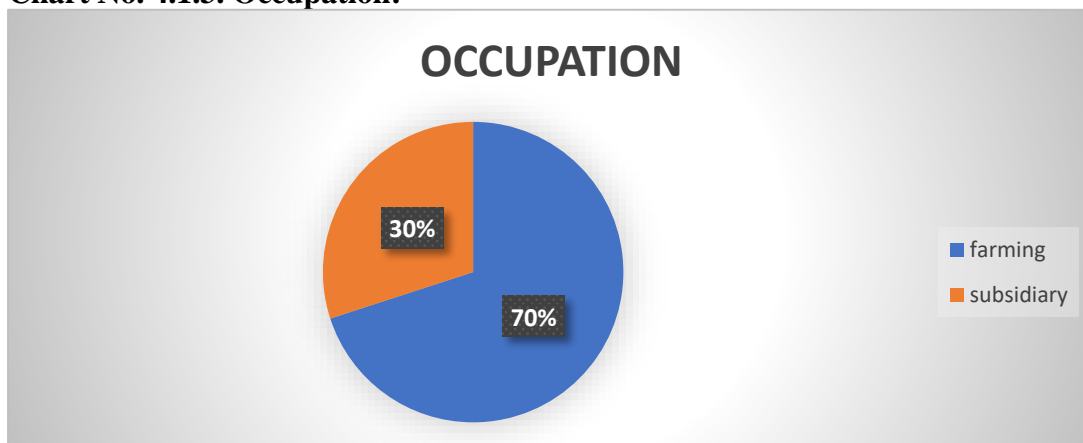
Occupation is a variable that may influence the behavior of the people.

Number of respondents = 100  $M+S+SM+M+L = 58+33+7+2+0 = 100$

**Table: 4.1.3. Occupation**

SI. No.	Occupation	Frequency	Percentage
1.	Farming	70	70.00
2.	Subsidiary	30	30.00
	Total	100	100.00

**Chart No. 4.1.3. Occupation:**



From the above table it can be concluded that majority of the respondents in that area are occupied in farming 70 percent followed by subsidiary work 30 percent.

#### 4.1.4.Land Holding:

Land holding is an important indicator of socio-economic status of family.

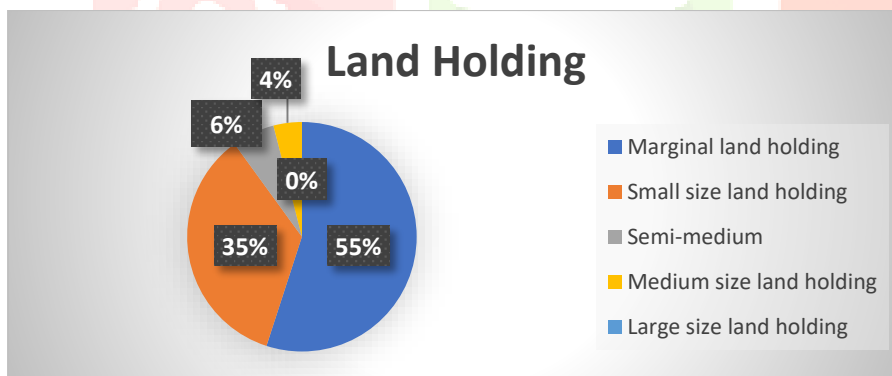
Table 4.1.4 Land Holding

Number of respondents =100=M+S+SM+M+M = 55+35+6+4+0 = 100

**Table: 4.1.4. Land Holding**

SI. No	Land Holding Capacity	Frequency	Percentage
1.	Marginal land holding (<1 ha.)	55	55.00
2.	Small size land holding (1-2 ha.)	35	35.00
3.	Semi-medium size land holding (2-4 ha.)	6	6.00
4.	Medium size land holding (4-10 ha)	4	4.00
5.	Large size land holding (> 10 ha)	0	0.00
	Total	100	100.00

**Chart No. 4.1.4 Land holding**



The data presented in above chart indicates that out of 100 respondents, 55 percent were having marginal size of land holding, followed by 35 percent were having small size of land holding, 6 percent were having semi-medium size of land holding, 4 percent were medium size of land holding, while 1 percent were having large size of land holding.

In Agriculture Census the operational land holding are categorized in five size classes as shown below.

Marginal size of land holding farmers > 1 ha.

Small size of land holding farmers 1-2 ha.

Semi-medium size of land holding farmers 2-4 ha.

Medium size of land holding farmers 4 10 ha.

Large size of land holding farmers < 10 ha.

#### 4.1.5. Family wise:

Number of respondents = 100 M+S+SM+M+L = 58+33+7+2+0 = 100

**Table: 4.1.5. Family Wise**

SI. No.	Family Type	Frequency	Percentage
1.	Nuclear	75	75.00
2.	Joint	25	25.00
	Total	100	100.00

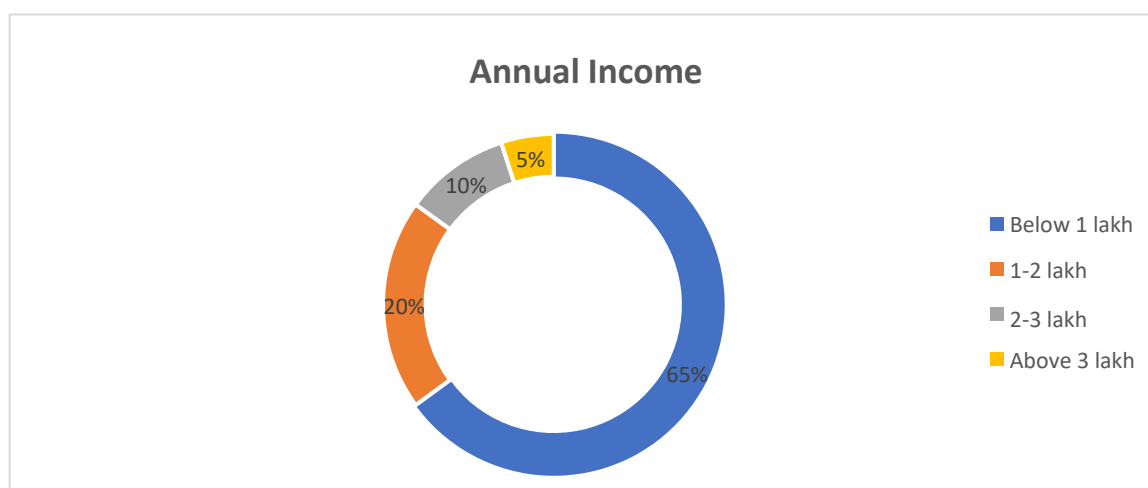
The above chart shows that 75 percent respondents were having nuclear family, while 25 percent were having joint family.

Number of respondents = 100 M+S+SM+M+L = 65+20+10+5+0 = 100

**Table 4.1.6. Annual Income**

SI. No.	Annual Income	Frequency	Percentage
1.	Below 1 Lakh	65	65.00
2.	1-2 Lakh	20	20.00
3.	2-3 Lakh	10	10.00
4.	Above 3 Lakh	5	5.00
	Total	100	100.00

**Chart. N0. 4.1.6 Annual Income**



The data presented in above chart revealed that out of 100 Respondents, 65 percent respondents were having below 1 lakh Annual Income, and 20 percent respondents having annual income of 1-2 lakh followed by 10 percent respondents having annual income of 2-3 lakh, 5 percent respondents were having annual income of above 3 lakh.

## Conclusion

In current scenario and future insecticide have bright future because every year the consumption of insecticide is increasing day by day. Farmers depend the insecticides that show the increasing demand of the insecticide. Farmers not waste time on the field they want easy solutions for any problem of field therefore they use insecticides efficiently. Due to the use of insecticides and PGR. Farmers yield more crops so they not stop to use the insecticides & PGR. Insecticide is less time taken, quick on the target organisms. Maximum farmers use the excess quantity of the insecticide but some farmers say that excess use of insecticides is harmful for the field and they use the insecticides only when it was very essential for the crop. According to farmers without insecticide in this time crop growing in effective manner is not possible because in every stage of the plant's different type of soil, leaf and stem are attacked, so insecticides are important for farming purpose.

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