Pragmatic Perspectives of Agricultural Development Programmes in Present Scenario

FARMERS’ BUYING BEHAVIOUR FOR PESTICIDES OF VADODARA DISTRICT

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ABSTRACT

Agriculture is defined as the backbone of Indian economy. Approximately 60-70% per cent of the population is working in agriculture. Agriculture sector need to be boom because of increasing population but it cannot be possible without solving the problems of pests. Without the use of pesticides, the production and quality of food would immediately fall to 30 to 40% due to the ravages of pests. The Indian Agrochemical industry is the fourth largest in the world only after the US, Japan and China. Pesticide Industry has the vast potential to grow in India. Present study on farmers buying behaviour of pesticide was undertaken in all the taluks of Vadodara district and from each taluka 10 farmers were selected randomly. Tabular analysis was used for analysing farmers buying behaviour of pesticides, With regard to mode of purchase for pesticides majority 70 per cent of the farmers used to purchase pesticide on credit basis. Regarding point of purchase, 80 percent farmer purchase by from company dealers. The analysis of farmer purchasing of pesticides revealed that that reasonable price is most important factor which is considered by farmers while purchasing of pesticides products, quality of pesticides products, and brand image of products, yield performance, packing, and relation with dealers. Recommendation by progressive farmers is lastly considered by farmers while purchasing of pesticides products. The results expected from the company for the purchase of pesticides by the farmer’s shows that reasonable price of pesticide followed by good quality of pesticides products, easy availability of pesticides products.

Keywords: buying behaviour, agri inputs, farmers preference, purchase habits

INTRODUCTION

Agriculture is defined as the backbone of Indian economy. Agriculture accounts for 17 percent of India’s GDP, approximately 60-70% per cent of the population is working in agriculture. Village farming and modern agriculture are two major components of Indian economy. In world output, India ranks first in production of milk, fruits, cashew nuts, coconuts and tea; second in wheat, sugar, vegetables and third in tobacco and rice. Although India has the second largest area of arable land in the world, its agricultural output, particularly in wheat and rice does not reflect its great potential, with rapid population growth and industrialization being contributing factors in low agricultural production vis-à-vis production potential.

Pests are an ecological problem and therefore our control strategies must be ecologically sound. Modern agriculture is a combination of two approaches i.e. prevention and cure or the removal of the cause and human intervention is necessary, whether it be pulling out weeds by hand, use of pesticides or genetic engineering. Control methods evolve over time as knowledge and techniques improve. Without the use of pesticides, the production and quality of food would be severely jeopardized with estimates that food supplies would immediately fall to 30 to 40% due to the ravages of pests. Agricultural chemicals are vital to our welfare and the protection of the health of our families and pets. Unless and until, better, more efficient and more cost effective means of pest control are developed, pesticides will remain a major weapon in our constant battle against pests. Indian growers need to be aware about latest development in this sector.

The global market of pesticides and agro industry is very huge ~$44 billion. Globally, due to higher productivity, decline in the green movement, tight regulations and better crop management, the pesticide industry is not growing very rapidly. In fact, it is stagnant or slightly declining. In India, the agro industry has grown significantly over the last 30-40 years from a mere ₹ 400 Cr. to over ₹ 8,000 Cr. today.

The Indian Agrochemical industry is the fourth largest in the world only after the US, Japan and China and has undergone many changes over the years. Insecticides account for the largest share of the Indian crop protection market - 65%. Fungicides - 15%, Herbicides - 16% and Bio-
pesticides and others - 4%. The consumption pattern is: paddy pesticides - 28%, cotton pesticides - 20% and others 52%. Exports account for over 47% of total Indian agrochemicals industry turnover.

Pesticide consumption in India is one of the lowest in the world with per hectare consumption of less than one kg compared to US (4.5 kg/ha) and Japan (11 kg/ha).

**Consumption could be low for the following reasons**

- Lack of awareness among the farmers about different types of pesticides available and their impact on environment
- Pesticide is the last input in agricultural cropping operation; hence, farmers generally have no surplus money left and start using them only after the pest attack.
- Consumption is mainly driven by cotton and paddy crops.
- In India pesticide use is extended to approximately 16.7 million hectares, which is just 9% of the total cultivable land.

Gujarat has been the leading state in terms of attracting investment for chemicals industry and today known as the ‘Petro Capital’ of India. It contributes significantly to the country’s petrochemicals production (62%), chemicals production (51%) and pharmaceuticals production (35%). Its business friendly policies have made it the first choice for investors. In 2011 alone it signed more than 80 MoU’s with an aggregate proposed investment of Rs. 55,000 Crores. Over the past two decades, Gujarat has become one of the most preferred locations for industrial investment in India. Gujarat has achieved an annual growth rate of over 10% p.a. over the past five years and is one of the most industrialized states of India. It accounts for 16% of the nation’s industrial production and 22% of its exports. Gujarat possesses several advantages which have enabled it to chart a path of rapid growth and industrialization such as sound infrastructure facilities, availability of skilled and semi-skilled manpower, excellent domestic and international connectivity and rich natural resources. The key differentiating factor has been Gujarat’s investor-friendly policy towards industrial development. These have resulted in Gujarat evolving as the hub of India’s chemical and petrochemical industry - with the state accounting for more than half of India’s total chemical industry and ~63% of total national petrochemical production.

**OBJECTIVE**

To study the farmers’ buying behaviour for pesticides of Vadodara district

**METHODOLOGY**

Descriptive research design was used in the study. The study was conducted in Vadodara district of Gujarat region. This district was selected purposively, total 200 farmers selected as respondents purposively. The data collected through structured questionnaires by face to face interview and then data were processed for further analysis. The following statistics were used in the study. Percentage, Arithmetic Mean and Standard Deviation, Mean, Standard Deviation, Co-efficient of correlation (r).

**RESULTS AND DISCUSSION**

**Profile of the respondents**

**Age of farmers**

Based on primary data majority 50% of farmers were in middle age group (i.e. 36 to 50 years), 28% farmers were in young age group (i.e. Up to 35 years) and others 22% are in old age group (i.e. above 50 years of age).

**Education of farmers**

According to respondents, education level of farmers in the study area. 36 % of farmers were below SSC, followed by 25% farmers completed SSC and 17% completed HSC. There are 10% farmers completed their graduation, very few 4% completed post-graduation study and 8% farmers were illiterate.

**Land holding size (in acres)**

Maximum number of farmers 43% was had land between 5 to 10 acres, followed by 22% farmers had less than 5 acres, 19% farmers had land between 11 to 15 acres, only 9% farmers had land between 16 to 20 acres and 7% farmers had greater than 20 acres.

**Growing season of crops**

According to response, growing season of crops. majority of 75% farmers grown crops in both (Kharif and Rabi) season, followed by 15% farmers grown crops in Rabi season and 10% farmers grown crops in Kharif season.

**Farming experience**

Mostly 29% farmers had farming experience of 11 to 15 years, 26% farmers had farming experience of 16 to 20 years, 23% farmers had farming experience of more than 20 years, 16% farmers had farming experience of 5 to 10 years and only 6% farmers had farming experience of less than 5 years.

**Source of pesticides products**

Data indicate that 80% farmers were get pesticides
products by dealer, 10% farmers were by retailers, 5% farmers were by agent and 5% farmers were by company.

**Mode of purchase of pesticides by farmers**

Data shows that majority of 70% farmers were purchase of pesticides by credit and only 30% farmers were purchase pesticides by cash.

**Factors consider by farmers while purchasing of pesticides**

In the above graph we can see that reasonable price is most important factor which is considered by farmers while purchasing of pesticides products, quality of pesticides products, and brand image of products, yield performance, packing, and relation with dealers and so on. Recommendation by progressive farmers is lastly considered by farmers while purchasing of pesticides products.

**CONCLUSION**

Farmers’ have average land between 5 to 10 acres. Most of farmers have annual income between 1.5 to 2 lakh rupees. Majority of farmers purchase pesticides on credit basis from the dealers. Per season average use of pesticide is 2.01 lit. Furthermore for the study concluded that reasonable price is most important factor while purchasing of pesticide product, and other factor like quality, brand image of product, yield performance and packing is least consider by the farmers at the time of purchase. Company should try to balance between quality and price for satisfaction of farmers and benefit for the organisation.

**REFERENCES**


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