Strategic Management in Pesticide Industry: Case Studies of Selected Companies

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**Abstract:** The present study explores the environment of pesticide industry during 1995-2005 at macro as well as micro level and also the existing strategies of firms with respect to product, market and functions. The study also aims to compare the strategies of domestic as well as multinational companies. This is an exploratory type of research which has used case research method. Pesticide manufacturing companies, Dealers and Farmers have been taken as sampling units. Multistage sampling design has been used for selection of the companies by taking form of organization and degree of vertical integration as two important parameters. The study has been supported by the primary data collected through structured questionnaires from dealers and farmers of three top pesticide consuming states. Punjab, Haryana and U.P. Secondary data has been collected from industry associations namely Pesticide Association of India, Indian Crop Protection Association, Pesticide Formulators Association of India, Govt. organizations such as Department of Chemicals & Fertilizers, Ministry of Agriculture; Directorate of Plant Protection and Quarantine, Ministry of Agriculture; Central Insecticides Board, Department of Agriculture of various state Governments. Statistical tools such as correlation, index numbers, percentages and non-statistical tools such as SWOT analysis, Porter's analysis, Product Portfolio Matrix and competitive Profile Matrix were used for deriving the results.

The analysis of the sales, production, consumption, distribution, export trends of the industry for the said period has been done. The study has presented the SWOT as well as the Porter's industry analysis of the industry. The Porter's attractiveness index has also been calculated. The analysis of product portfolio matrix has revealed that multinationals are having most of the products, which score high on market attractiveness (M. A.) and high environmental attractiveness (E. A.); however Indian companies have molecules in all

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the segments such as high M.A. & High E.A. and medium. M.A. & medium E.A. and low M.A. & low M.A. segment. The strategies adopted by multinationals are mergers & acquisitions, strategic alliances, product acquisitions, brand acquisitions. The Indian companies have been found to be adopting related diversification strategy, forward integration, backward integration, turnaround strategy and restructuring. The performance of the strategies of companies related to product, market and functions have been ranked with the help of competitive profile matrix.

The farmers in top three topmost pesticide consuming states Punjab, Haryana and U.P. has also been surveyed to compare the performance of the companies' strategies. In Punjab, Good product quality and price of the brand were the main factors affecting the purchase decision of farmers, followed by the company name and brand name. This was followed by the fellow farmers advice and services provided by the distributors, which were ranked equivalent. In Haryana, the results were almost same with the price as the most important criterion followed by quality, fellow farmer' advice and brand name, dealers; advice and distributors service provided. Packaging of the pesticides was the least important criterion in both the states. In U.P., it was the price of the pesticides, which was an important criterion deciding the brand to be purchased. The difference in Punjab, Haryana and U.P was due to the fact that in Punjab farmers are very well off, having large land-holdings and are mainly using pesticides on cash crop cotton whereas the farmers in U.P. are having less income, hence price-sensitive. Quality and branding was concern of large landholders while dealer's opinion and peer's advice is major influencer in case of small landholders. Most of the farmers feel pesticide use for plant protection is necessary. They also have been found to be aware of the ill effects of pesticides on the human health and the environment. Most of them feel that pesticide has got beneficial impact on the crop health and it should be used as per recommendation, and most of the times, use of the pesticides increase their income.

The strategies of companies' related to the product and market have also been ranked with the help of farmers' survey. The product portfolio of multinationals was ranked better than domestic counterparts. Quality of products by multinationals has been ranked better as compared to the Indian companies. Companies which offered wider product portfolio were ranked better than other companies. Packaging was relatively not important to farmers as compared to quality, brand name and product line length.

The results of the dealer survey has also been presented to compare the market strategies of selected companies. With regards to sales policy, Indian companies were ranked better that multinationals. The pricing strategies for Indian companies were also found to have better ranking by dealers. This is because of the reason that Indian companies are giving more margins to the distributors, however, multinationals due to their products and quality command more premium in market but the margin procured by the dealers is quite less.

When ranked for services provided to the dealers/farmers, it was found that the multinationals were found to score better than Indian companies. The services provided by Indian multinationals include the field staff, who regularly contact the farmers, trials at the farmers; field, solutions to farmer; crop protection problems. Multinationals were again ranked better when it came to advertising and promotion. Major means of advertising found were product launches, farmers meetings, advertising through newspaper, TV and newspaper. Local cable network was also used as a means of promotion. However with respect to giving discount to farmers, Indian companies were better in terms of credit, cash discounts, turnover discounts. Profit margins were of course the most important criterion followed by availability and relationship with field staff. Promotional policies, product range and product quality also affected dealers' decision to work with any company. Farmers' choice, pricing and services provided by companies such as field demonstration were least important criteria. Indian companies scored better with respect to market strategies as compared to multinationals. Rallis was said to be very strong in marketing.

Based on these findings, a competitive profile matrix has been prepared to rank the companies. It has been suggested that Indian companies should diversify to offer new molecules/ crop protection technologies in the market and should focus on strategic alliances/ brand acquisition to launch environmentally safer molecules. Multinationals should focus on developing marketing alliances with Indian companies and should integrate forward to launch their one-stop shops. Based on the classification of products in product portfolio matrix, various strategies for products under different category has been suggested.