

# An explorative study of marketing strategies of agrochemical companies: Indian Perspective

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**Abstract** - It has to be mentioned that, the present paper is neither literature review nor metadata analysis but in fact it can be classified as an explorative theoretical paper employing deductive reasoning approach based on the relativism of ontology. Per hectare consumption of agrochemical companies is growing, it can be treated as positive sign to the industry. Though there is a lot of untapped market is available in industry.

The present discusses and explores the marketing strategies suitable for this industry involving explorative study of certain parameters, namely, demand for agrochemical products, capacity of production, details of consumption and marketing aspects such as price, promotion, place and products. Finally, paper offers probable strategic consideration to be adopted by industry in tabular form while marketing of agrochemical products.

**Keywords:** Indian Economy, Marketing strategies, Agrochemical companies

## I. INTRODUCTION

Indian economy is witnessing rapid continuous growth in terms of economic activities highlighted by gross domestic products. As a thumb rule, economy is expected to be progressing by observing increasing share of service sector in entire gross domestic products (GDP). Though, agricultural activity is essential in economic sense of Indian perspective as it has been intended to satisfy very basic need of the population. But the share of agricultural and allied services into GDP of India is witnessing diminishing behavior. This aspect has been highlighted with the help of Table No. 1.1 below.

**Table No. 1.1: GDP and its sectoral share (1999-2000 price)**

	Agriculture and allied	Industry	Services
1950-51	55.9	14.9	29.2
1970-71	45.2	21.7	33.1
1980-81	38.1	25.9	36.0
1990-91	33.2	25.2	41.6
2006-07	20.5	24.7	54.8
2007-08	19.4	24.9	55.7

(Source: <http://www.economicdiscussion.net/indian-economy/changes-that-have-taken-place-in-the-indian-economy-after-1951/14150>)

It would be seen from the table that, since 1950-51 Indian agricultural sector has witnessed overall 36.5 per cent reduction in the GDP share. This may not be attributed to the diminishing development of agricultural activity in

India; since 1950-51 to 2002-03 agricultural output has been considerably increased<sup>1</sup>. This has been reflected from the *Table No. 1.2*, below.

**Table No. 1.2: Per hector agricultural productivity in India**

Crops	(Kgs. per hectare)		
	1950-51	1980-81	2002-03
Rice	668	1336	1804
Wheat	663	1630	2613
Maize	547	1159	1638
Cotton	88	106	193
Sugarcane (Tonnes)	33	58	65
Jute	1,043	1130	2154

The table 1.2 furnishes six crops and their details to provide understanding on the statement made above. On an average, the agricultural output per hector of land has been (near about) three times higher in the year 2002-03 as compared to the year 1950-51. There are several reasons attached for this incremental growth but role of agricultural products cannot be neglected.

In this view of matter present paper focuses its attention on the role of agro chemical companies in this achievement of growing productivity of Indian agricultural sector. Second aspect of this paper is to explore futuristic scope for the agrochemical companies in Indian agricultural sector. Finally, paper examines strategic decisions to the extent of marketing perspectives of the agrochemical companies to exploit the marketing opportunities in Indian agricultural segment.

## Section-(i)

### Problem statement

It has been witnessed in the Indian agricultural activities that, unique solution to the agricultural activity cannot be provided. This can be attributed to the certain factors such as, differences in soil, fertility of soils, corresponding agricultural growth and unreliable weather conditions. The companies into the agrochemical industry have to develop their marketing strategies by keeping these factors in mind. In a broader way, farmer illiteracy, backwardness and poverty are some of the factors impacting directly on the strategic marketing planning of the agrochemical companies in India.

Keeping all these in mind, the title of the present study, namely, 'an explorative study of marketing strategies of agrochemical companies: Indian Economy Perspective', itself is a statement of problem. Though, technically speaking, research problem of the study can be defined as, what will be the efficient marketing strategies of agrochemical companies in India based on 4Ps of marketing? Is there a scope for agrochemical companies with business potential in India? What will be more proper strategic considerations for agrochemical companies in India?

All these research questions can be treated as research problems for present study. To this extent objectives of the present research paper have been formulated and presented in below section

## II. AIMS AND OBJECTIVES OF THE STUDY

The primary aim of the study is to focus and study the role of agro chemical companies in agricultural market of India. This study has been conducted in the framework of strategies adopted by the agrochemical companies to exploit marketing potential in this industry. This broader aim has been formulated with the objectives as stated below-

- To explore futuristic scope for the agrochemical companies in Indian agricultural sector.
- To study strategic decisions to the extent of marketing perspectives of the agrochemical companies to exploit the marketing opportunities in Indian agricultural segment.
- To offer hypothetical observations in regards to the marketing strategies of Agrochemical companies in India.

The scientific method of investigation has been adopted during the study of present paper. Though, methodological aspect of the paper has been discussed in below section.

## III. METHODOLOGY ADOPTED IN THE RESEARCH PAPER<sup>2</sup>

The present paper is a part of PhD work carried out by the researcher. This study is entirely based on secondary data stated in the existing research papers. Though this paper is not only the literature review but it has employed solid data collected by other researchers. The paper has its distinct nature, as though it uses similar data but the inferences drawn are unique. The inferences are different and unique because it has inferred based on other variables. It has to be stated here that, strategic assessment of agrochemical companies for marketing functions has been reviewed with Indian economy and thus two separate aspects have symbioses to unveil multiple dimensions of strategic decisions of agrochemical companies.

The paper examines Indian economic perspectives with subordinating factors such as, demand for agrochemical companies, production capacity of this industry and consumption also the study discussed 4Ps of this industry. Technically, this is neither literature review in total nor a metadata analysis but in the present paper explorative theoretical deductive reasoning technique has been utilized based on the relative ontology.

## IV. ANALYSIS AND EXPLORATION

### Demand, Production Capacity and Consumption

India has been seen as the traditional agricultural country over the centuries. It has well said that the plow used in agricultural activity in 4<sup>th</sup> century was still used in the 20<sup>th</sup> century. Even now days, in 21<sup>st</sup> century, called as information millennium, no significant changes, such as 'plow' has been witnessed<sup>3</sup>. This is easy to infer low progress in agricultural methodology and wisely stated as culture. But in the year 1906 an agricultural chemical manufacturing unit has been set up in Ranipat, having 6000 metric tons capacity<sup>4</sup>. Another significant happening has been seen in the nineteen forties and fifties by setting up large sized fertilizers and chemical plants at Cochin and Sindri. This has been with intention of mass production, manufacturing and industrialization. It would be easily inferred from these facts that between first decade of twentieth century to forties and fifties, no significant changes have been witnessed in agriculture in India<sup>5</sup>. Though it has another dark side of British Rule in India during those days, and it may stand as a significant reason for this.

The green revolution happened in the late sixties for the crop of wheat has stand as a major boost in Indian agrochemical industry<sup>6</sup>. This was a demonstration of the success of chemical oriented agriculture and anticipated a great success. Now, India is the third largest producer and consumer of fertilizers in the world.

According to the estimates made by digital portal “*Krishijagran*” India’s demand for fertilizers is on higher side and increasing day by day. This simply reflects demand side of the agrochemical companies. The more specific statistical details have been furnished with the help of *Table No. 1.3*.

**Table No. 1.3: Demand forecast of fertilizer products (thousand tons) 2012-13 to 2016-17**

Year	Urea	DAP	NP/NPKs	SSP	MOP*
2013-14	31192	11784	10577	4682	4343
2014-15	32029	12002	10861	5091	4492
2015-16	32858	12212	11142	5513	4643
2016-17	33677	12413	11420	5948	4793
2017-18	33754	12764	11841	6476	4934

\*For direct consumption

(Source: <https://krishijagran.com/farm-data/indian-fertilizer-sector-at-a-glance> retrieved on the date 06/02/2019)

Fulfilling this increasing demand, currently 63 larger size fertilizer plants and 79 small and medium scale units in India are operative to satisfy this increasing demand for fertilizers. These units mostly engaged in producing nitrogenous, phosphoric and complex fertilizers. Now speaking in consideration of the production capacity of these units, it has to be mentioned that in the year 2007 120.61 LMT of nitrogen and 56.59 LMT of phosphate could satisfy the demand estimated in above table. The research also has stated estimate of doubling per hectare consumption of fertilizers for the year 2010-12, from 90 kg in the year 1998<sup>7</sup>.

The understanding of the situation mentioned above has led to few observations in regards to the marketing strategies of the agrochemical companies.

- 1) Huge and increasing demand for fertilizers and ultimately for agrochemicals
- 2) Increase in per hectare consumption will boost the demand
- 3) Installed capacity may fall short for further enhanced demand in coming future
- 4) Large number of players in the industry will make competition tougher

All the above points need to be reflected while preparing strategy for the agrochemical companies.

## V. TRENDS IN AGROCHEMICAL INDUSTRY

The big consumer of agrochemical products is farmer. The expectation of the farmers does contribute to the changing trends in this industry. Notably, farmers in India have certain expectations such as ready product information, optimum prices and easily accessible product information. Recently there is an increasing trend for organic farming. This is basically the demand from end users of product consumers. The transparency in nutrient value and low

residues is the expectation of the end user consumers. The trend in regards to the government policy is clear about enhancing the production of agricultural activity. This has only hope from the agrochemical companies. Though, government interest is also in ground water safety, regulatory compliance and low residues in soil etc. These environmental concerns that reflected from the government policies has created extra burden on the companies of agrochemical industries<sup>8</sup>.

The strategic learning for the agrochemical companies from these trends have been summarized in below section-

- 1) Awareness of the products in terms of not only price and productivity but also mentioning nutrient values along with safety from the point of environment
- 2) This can be achieved from continuous research and development at fundamental level

### Strategic considerations at Industry Level

Kotler’s 4Ps have to be considered here in the different manner. Product, pricing, promotion and place are the key ingredients in designing marketing strategy for any business. Thus, in this section, discussion has been made on these 4Ps of marketing particularly for agrochemical industry.

#### *Product*

In agrochemical industry products are most essential part for designing marketing strategies. The products of this industry are closely related to the health of masses and impacting on environment of country. Thus, continuous research and innovation is needed to develop product which hold certain quality parameter. The quality here is not defined such as ‘expectation of customers’ because the product line of this industry is having different dynamics. For example, in case of fertilizer, it has to be designed keeping in mind particular crop or the impact of that particular fertilizer on final output of the product. It also has to be considered that the product of fertilizer should have minimum impact on the health of consumers as well.

Based on these areas discussed above industry has to employ particular and specific marketing strategy.

#### *Pricing*

The price of the product is not depending on the cost incurred during manufacturing but in agrochemical sector pricing has to be done based on certain parameters such as, paying capacity of farmer, the level of price in industry, and government regulations or subsidies.

All these factors should be thoroughly studied by the company to come up with pricing strategy of the particular product in agrochemical industry.

#### *Promotion*

This aspect of promoting agrochemical product has to be carefully decided. The promotion of the particular product in agrochemical industry these factors need to be considered such as, awareness of the farmers regarding products, instead of ingredients advertise should focus on output of the products, the names of the products should be in local language rather technical one. The social gatherings like *Yatra, Jatra, wedding* etc. are most effective way for promoting agrochemical products.

*Place*

In the case of marketing strategy for agrochemical industries, place should be considered as broader phenomena. It has involved particular area and particular crop specific to that area. So segmentation of the market first should be based on the area, then on the crop. The computability of the products should be studied before segmentation. The major cultivated land and maximum cultivated product need to be profiled. Further in this aspect, area should be covered under the demographic details. The area will also be subjected to the primary crop and the market availability for that crop.

**VI. SUMMARY**

In an essence, it has to be pointed out that marketing strategy should not be product driven in agrochemical industry but it should be driven by innovation and research. This means bottom up approach. The strategy should first focus on geographic location, then total average cultivated area should be studied, then major crops should be shortlisted. Then final step will be found out shortfalls and areas of improvement in majorly cultivated crop. This will play significant role of input in innovation and research. The efforts of this innovative research then need to be reflected at the time of designing marketing strategy. In short the marketing strategy should be driven by research, development and innovation.

**VII. FINDINGS, CONCLUSIONS AND SUGGESTIONS**

Keeping in mind the aims and objectives of the present research, present section has been designed. In first place summary of findings have been presented. The conclusions have been discussed in accordance with the objectives. The concrete suggestions have been offered subsequently.

*Summary of findings*

The summary of findings for the present paper has been described in below point-

- Huge and increasing demand for fertilizers and ultimately for agrochemicals
- Increase in per hectare consumption will boost the demand
- Installed capacity may fall short for further enhanced demand in coming future

- Large number of players in the industry will make competition tougher
- Awareness of the products in terms of not only price and productivity but also mentioning nutrient values along with safety from the point of environment
- This can be achieved from continuous research and development at fundamental level

**VIII. CONCLUSION**

Based on these findings, the present concludes its observations such as below-

- Product of agrochemical industry should have minimum impact on the health of consumers as well on environment
- Social gatherings like *Yatra, Jatra, wedding* etc. are most effective way for promoting agrochemical products.
- Pricing may be done anticipating paying capacity of farmers, the level of price in industry, and government regulations or subsidies

Based on findings and conclusions made the present research is offering below mentioned marketing strategic considerations to the extent of agrochemical industry studied in the present paper.

**Strategic suggestion for marketing**

Parameter	Observations	Suggestion
Demand	Demand is on higher side	Awareness should be done during promotional activity
Production capacity	Production capacity need to be increased	Production should be driven by innovation and research. Such has to be reflected in marketing strategy
Consumption	Per hectare consumption is increasing	This increasing demand should be tapped with the help of considering 4Ps strategy
Pricing	-	Pricing should be based on farmers' capacity to pay
Promotion	-	Social gatherings to be tapped
Place	-	Segmentation should be based on leading crop in area and driven by research and innovation in that particular crop
Product	-	Less harmful for environment and easy to use

Finally, it has to be mentioned that, present paper is detailed keeping in mind strategies favorable to entire agrochemical industry. The output of this research will serve as input for further research that surely warrants further exploration.

## IX. SCOPE AND LIMITATIONS OF THE STUDY

This study of agrochemical companies is limited to an explorative assessment of marketing strategies only. This is one of the limitations of the present study. Secondly, marketing strategies of agrochemical companies have been assessed by considering only five factors such as, (a) differences in soil, (b) fertility of soils, (c) corresponding agricultural growth, (d) unreliable weather condition, (e) farmer illiteracy, and (f) backwardness and poverty.

Explorative nature of investigation, employing secondary source of data may be mentioned as one of the limitations of the study.

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