A Study on Factors Influencing Buying Behavior of Tractor Customers in Banswara District of Rajasthan

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“India’s future is in her farms. Agriculture has the potential to accelerate growth and social development in India.” Mukesh Ambani, Reliance Industries

Agriculture forms the backbone of the Indian Economy. Despite concerted industrialization during the last five decades and decreasing share of agriculture in GDP (54% in 1960-61 to 20% in 2005-06); it occupies a place of pride. Without its growth, it is futile to think of a high GDP growth rate of the country. As stated by our Finance Minister Mr. P Chidambaram stated in one daily newspaper “Our goal is to touch the magical number of 10% growth. Can we do it this year? I am doubtful. Can we do it next year? I think it is possible. If we get our act together and our agriculture grows to 4.5%, then India can grow at 10% in 2008-2009”. This statement indicated the urgent need to grow the Indian agriculture at a higher rate. Agricultural growth depends primarily on two main factors - institutional factors and technical factors. Institutional reforms or factors include land reform, tenancy reforms and institutional credit reforms etc. Technical factors emphasize using agricultural inputs like high yielding variety seeds, fertilizers and mechanization of agriculture.

As far as the mechanization of agriculture is concerned, tractor is one of the most important equipments used for farming. Major manufacturers of the tractors in India are – Eicher, Escorts, Ford, Indo Farm, HMT, Mahindra & Mahindra, New Holland, Punjab Tractors, Sonalika, Tafe etc. The following table is showing the size of the tractor industry in India: Table: 1

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Year | Number
--- | ---
1999 - 2000 | 2,70,000
2002 - 03 | 1,70,000
2003 - 04 | 2,10,000
2004 - 05 | 2,48,000
2005 - 06 | 2,80,000 (Expected)
2006 - 07 | 2,90,000 (Expected)
2007 - 08 | 3,02,000 (Expected)


The table shows that the Indian tractor industry is growing at an impressive rate. India contributes nearly 30\% of global tractor production (largest in the world). The following table shows India’s position in global tractor market:

Table: 2

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>2,40,000</td>
<td>31</td>
</tr>
<tr>
<td>China</td>
<td>95,000</td>
<td>12</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>5,000</td>
<td>2</td>
</tr>
<tr>
<td>Australia</td>
<td>10,000</td>
<td>1</td>
</tr>
<tr>
<td>Europe</td>
<td>1,75,000</td>
<td>23</td>
</tr>
<tr>
<td>Pakistan</td>
<td>45,000</td>
<td>6</td>
</tr>
</tbody>
</table>


The global spotlight on Tractor manufacture certainly in terms of unit volume seems to be swinging away from the USA, UK and Western and Eastern Europe towards India and China where growth in the number of producers and the total volume in recent years have been impressive. Though India’s is the world leader in the manufacturing of the retractors but when it comes to density of
tractors per hectares or the average HP per hectare, situation seems to be very poor. The following table shows that India stands far behind in terms of these indicators:

<table>
<thead>
<tr>
<th>Table: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tractor Density</strong></td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>US</td>
</tr>
<tr>
<td>Global Average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Average HP per hectare</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
</tr>
<tr>
<td>Developing Countries</td>
</tr>
<tr>
<td>Developing Countries</td>
</tr>
<tr>
<td>World</td>
</tr>
</tbody>
</table>

Source:
http://www.escortsgroup.com/newsroom/newsroom_industry_news.html

**Statement of the Problem**

Agriculture still accounts for 20% of country’s GDP and engages 60% of the population in employment. Average CAGR of tractor industry has been 8% over the last 3 decades. Tractor population is concentrated in just 10% of our villages. India is the largest manufacturer of the tractors in the world; even today 70% of Indian villages do not have a tractor. There is large untapped potential – it is a growth industry for at least next 15 years. Tractor manufacturing companies have a good opportunity to expand their business in India. For this purpose to understand customers’ perception towards the tractor and analyze various important factors which
influence the buying behavior of the customers is a prerequisite. This paper is an attempt to throw light on customer’s perception and to understand various factors influencing the buying behavior of the customers. It also focuses on the act of the tractor dealers which is one of the major factors influencing the purchasing decision of the tractors.

**Objectives of the Study**

Main objectives of the study are as follows:
1. To analyze the perception and awareness of the customers towards the tractors.
2. To study various factors influencing behavior of the customers while purchasing the tractors.
3. To analyze the act of the dealer as it is one of the major influencing factors to influence the buying behavior of the customers.
4. Finally on the basis of the results of the studies suggest some measures so that the tractor manufacturing companies can expand their business in near future.

**Methodology**

The present study is an empirical study basically based on the primary data but secondary data have also been collected from various published and unpublished sources as per the requirement of the study. For collection of primary data, an exclusive survey was conducted in Banswara district of Rajasthan by targeting customers from all the five tehsils of the district. To obtain information a structured questionnaire was formulated including both close as well as open ended questions. Based on the results of pilot studies final interview schedules were finalized for farmers. These questionnaires were filled by the researcher by face to face interaction with the respondents.

**Sampling**

As the study is based on primary data collected from farmers from the rural area, the researcher faced lot many problems during the process of collection of data. Farmers leave their homes early in the morning and return back late in the evening. Thus the availability of the respondents was the crucial issue due to odd working hours of the respondents. In view of the above problem, convenience sampling method was adopted, though enough care was taken to make the sample representative to the population.

**Sampling units**
One farmer has been considered as one sampling unit for the purpose of the collection of primary data.

**Sample size**
The size of sample is 150 units consisting of 50 units from each tehsil (mentioned below) of the district.

**Scope of the study**
The scope of the study is Banswara district of Rajasthan. Banswara district has an area of 5037 km which is 1.47% of Rajasthan. The whole district is divided into five tehsils shown below:
1. Banaswara
2. Garhi
3. Ghatol
4. Kushalgarh
5. Bagidora

The Banswara district is a great hub of tractors and people use it for both agriculture and commercial purpose. So market growth rate is quite high in this district and every tractor company wants to establish their product here.
The graph below shows the sales of tractors in the district by total industry from the financial year 1998 to 2007:

Graph -1
The market share of different companies in the district has been shown below:

**Market Share of Companies**

Source: RTO report (financial year 2006-2007)
It is clear from above graph that Mahindra is at No.1 in Banswara district having the market share of 35%, second position is held by Sonalika with the market share of 15% and Swaraj is on 3rd position with the market share of 9%. Others include Mahindra Gujarat, SAME, John Deere, Standard, Bajaj etc.

Data Analysis and Result: After the completion of the interview schedule a thorough check up of the data was made. The collected data was analyzed with the help of the simple statistical tools like percentage. Besides tables, bar diagrams and pie charts have also been used to analyze the data.

Findings of the study: Findings of the study have been discussed in the following section:

Farmers having knowledge about Horse Power
The knowledge of the Horse Power is the first step towards making decision for purchasing a tractor. The following graph shows the awareness of the farmers about the Horse Power of the tractors:

Graph : 3
Awareness of Horse Power

Source: Field Survey

It is really surprising that 51% farmers are not aware even the horse power (HP) of the tractors. HP is the unit of power which is used in Tractors. They also do not know about the various Tractor brands which are similar in name but available in the market at different HP. The result is that they purchase a tractor with low HP even for the hard works as this tractor is less costly. Due to improper use of their tractors they suffer from the maintenance and other problems. Without this knowledge they either blame the dealer or the tractor manufacturer company for all these problems.

Nature of the Buyers:

The following graph reveals the nature of the buyers:

**Graph: 4**
The above picture reveals that there are three types of buyer- **First time Buyer, Repeat Buyer, Additional Buyer**. First time buyer are those buyers, who are purchasing the tractor first time, repeat buyer are those buyer, who were having tractor but already sold it and purchased new one, additional buyer are those buyer, who already own tractor /tractors owning but purchased additional new one. As this graph is showing that first time buyer is in the major proportion, it means that most of the customers are purchasing the tractor for the very first time. The knowledge of the HP of the tractor and the nature of buyers is correlated in one sense. As the major portion is of first time buyers it can be inferred here that most of these buyers are not aware about the knowledge of the HP of the tractors.

**Most preferred Features of the tractor**

The following graph throws light on the perception regarding the most preferred feature of the tractors:

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Graph :5
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Multiple responses

Source: Field Survey

The data shows that the fuel efficiency which is measured by the hours per liter was perceived the most preferred feature of the tractor. Operational efficiency, jerking or the smoothness of the tractor on the road and on the farm and life of engine were
perceived important by 40 per cent of the respondents. Other features were not considered much important.

**Major Influencing Factors:**
Respondents were asked to tell the most important factors to be considered while purchasing the tractors. As there are many companies which manufacture and sell tractors in the market, this information might be very useful for the future expansion of their business. The following graph is showing the major factors which influence the buying behavior of the farmers:

![Graph:6](image)

Source: Field Survey
This clear from the graph that the most important affecting the buying behavior of the farmers is durability of the tractor. 29 per cent farmers had the view that it was the most important factor they will consider or considered while purchasing the tractors. Brand image is equally important factor as 28 per cent respondents gave it first rank. Besides the approach of the company agents is also crucial. It is quite surprising that that only 10 per cent farmer under the study that price was the most important for them. It reflects the importance of the non price factors in influencing the buying behaviour of the farmers.

**Availability of Finance**
During the survey it was observed that most of the farmers want to purchase tractors on credit and not on cash. In this case the availability of finance becomes very important to influence the buying behavior of the customer. The status of the availability of finance to purchase the tractors has been shown in the following graph:
The results of the study are in contrast to general perception that farmers do not get sufficient finance to purchase tractors and other equipments. Here 84 per cent respondents told that finance was easily available to them and only 6 per cent respondents told they are facing the shortage of finance for purchasing the tractors. In this situation it may be quoted that there are many tractor manufacturing companies which provide finance to purchase the tractors and some times farmers or dealers manipulate and get finance easily from the banks.

**Margin Money**
Margin money plays an important role in influencing the buying behavior of the customers as the lower margin money charged by the company/dealers motivates customers to purchase the particular brand . This is the graphical representation of margin money in. The following graph reveals that 27% tractors were given at below than Rs10, 000; 19% are below than Rs 20,000 and13% below than Rs 30,000. This chart also shows that only 27% paid more than 60,000. it is clear that due to competition among various tractor selling companies ,dealers are charging very low margin money from customers.

**Graph: 8**
**Margin Money**

Source: Field Survey
For low margin dealer gives the quotation for tractor +trolley+ cultivator but when customers pays very less margin money dealer adjusts the price of trolley & cultivator as margin money (margin money 20% of quotation).

**Satisfaction on the Performance of the Tractors**
The following graph shows that most of the customers were satisfied with the performance of their tractors. This is a good sign for the tractor manufacturing companies. This percentage can be increased by addressing the problems related to the customers.

**Graph:** 9

![Performance of the tractor](image)

**Source:** Field Survey

**The Act of Dealer during Purchasing**
Customer relationship is the key of rural marketing. Dealers or the agents appointed by Companies play a major role in influencing the buying behavior of the customer. These dealers are the link between customers and the companies. During the study it was observed that these dealers or agents cheat farmers in different ways as most of the customers in the area are uneducated. The respondents were not sure while giving the answer on this issue. Some of the respondents gave their answer in explained way which can be summarized as below:

- Most of the time it was found that proper explanation regarding the product, product cost and product features was lacking from the agents. They (agents) just give a brief to the customers and try to force their choice to achieve their own target.
- Some of the customers acknowledged that at the time of loan they (dealer/agent) give a claim for accessories and made loan structure for that but at last customer do not get all the accessories.

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• Customers get cheated on the ground of free products offered on the purchase of the tractors. Product like filter kit and other free gifts are generally kept by the dealer.

• Most of the farmers are uneducated so they don’t understand the necessary paper works. Agent arranges the loan from bank, and sometimes the farmers doesn’t know about that how much loan is sanctioned and from which bank (Whether government bank or private bank).

• There are few cases where customers wanted to purchase tractor of less horse power and dealer somehow managed to sell tractor of high horse power because here dealer gets more commission on high horse power tractor.

**Recommendations and Suggestions**

On the basis of the results of the study following suggestions can be given which might prove very valuable for the tractor manufacturing and selling companies in expanding their business in the area and to tap the market potential:

1. **Enhance Awareness:** The major problem being facing at present in the district by the companies is the lack of awareness among the customers. Awareness is one of the initial steps which influence the purchasing decision of a consumer. It is very necessary for the company to inform to the customers about the products, offers and services. Many times customers are not aware of different offers given by the company or new product launched by the company and people relate improved product with older one. Thus it is necessary to enhance the awareness by different means of promoting the product. For example, tractor companies are not promoting their products through radio. But in rural area radio is the best mode to communicate.
In Banswara newly launched FM radio stations can provide best media for this because of its popularity among villagers. By repeated advertisement, companies can improve brand recall value. Advertisement tractors should be in such a way that it should reach the target customer. Advertisement message should highlight features of the tractors, such as safety, fuel efficiency, smoother ride etc. In this case emotional advertisement can be helpful. These companies should advertise specially local Hindi news papers like Rajasthan Patrika, Dainik Bhasker, Dainik Navjyoti etc.

Advertisement through DD-I might be effective in enhancing awareness among customers. Wall paintings and door to door campaign will also improve awareness of the product and company. Campaigns through a special van or tractor which can go from village to village will also be helpful.

2. Improve Approach-: Companies can improve their business if they approach the farmer in a better way. Companies can target people those who have more than 20 acre of land because they can be the potential buyers. Companies should focus on those villages where the sales are low or new players are coming. A good training session should be held by companies for its new buyers especially for the first time buyers because if new customers do not know how to handle farm equipment, it can create a bad impression on potential buyers of the village. The most important thing for the company is to have a feedback of customers on dealership from time to time so those dealers behave decently and honestly with the customers.

3. Availability of Salesman: There is a shortage of the salesmen in Banswara district and it is one of the reasons why people remain unaware. This shortage leads to the problems like less coverage and poor contacts. So the dealership needs to recruit some trained salesman who can satisfy the queries of customer as well as explain about the product in a better manner to customers.

4. Demonstration: Demonstration of a product is the best way to convey the full knowledge of the product to the customers, particularly in the rural areas where the literacy rate is very low. It is the best process to remove misconception regarding the product. In Banswara, most of the companies lose their customers due to poor demonstration of the product for the customers.

5. Reforms in Dealership: As it has been observed that dealers cheat the customers in various ways. So there is an urgent need to reform dealership. For this purpose companies should keep an eye on the activities of these dealers. Dealers must be clear about the cost of tractors and provide all the relevant information to the customers. Dealers should also provide spare parts and accessories so that the customers should not go to very far to buy them. There should be a campaign for the dealers organize by the companies so that companies’ officials can explain/address various issues which
are related to customer satisfaction. Dealers suggest to their customers that which type of Tractor (HP) is useful for the particular type of work. Dealers should not play with the emotions of the customers instead of this they do their business through customer-oriented activities. If some dealers are not working properly than companies should make the direct contact with the customers through their agents/salesman. Dealers should also inform to its company about the recent market trend, tastes and the preferences of the customers. Likewise dealers should also explain to the customers about the various policies of the companies as they act as a bridge between company and the customer.

**Conclusion:**

On the basis of the results of the study it can be concluded that there is a vast untapped potential market of tractors in India and tractor manufacturing and selling companies have a golden opportunity to expand their business in India. Rural marketing is not an easy task. The key of marketing lies in understanding the needs, perceptions and behavior of the customers. If companies formulate their strategy in this direction rationally and tap the market potential it would be beneficial not to them only but to the whole nation.

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