

# Study on consumer behaviour of the farmers and market potential of hybrid castor seeds in Banaskantha district of Gujarat state

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## ABSTRACT

The study was conducted in the Banaskantha district of Gujarat. It was observed that while purchasing seeds, the farmers consider various factors like yield, price, promotion, water requirement, etc. and 50 per cent of the farmers preferred high yielding variety seeds. It was found that most (95%) of the farmers were growing the castor crop for selling purpose. In present year, Pioneer, Syngenta, Kaveri are having more popular variety so it is very important to redevelop their marketing strategies and try to cover maximum market in Banaskantha. PHI Company is at top regarding sales promotion activity. Castor crop can be grown in all the seasons but 75% of farmers were growing castor in *Kharif* season. As 67 per cent of farmers were satisfied with varieties using currently, it was observed that they were glued to one variety *i.e.*, Western 66. Increase in promotion activity would be helpful to the Western Agriseeds Company to expand its market share.

**KEY WORDS :** Consumer behavior, Sales promotion, Market

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Consumer behaviour may be defined as the acts of individuals in obtaining and using goods and services including both the ultimate consumer and the purchaser of the industrial goods. Our approach is to view consumer behavior, we must examine the events that precede and follow from the purchase act. Consumers behavior results from individual and environmental influences. Consumers often influence goods and services with they want to accept, is therefore determined by the individual's psychological makeup and influences of others.

Castor seed is considered as a tropical crop and a non-

edible oilseed that is extracted from the castor plant. The plant's binomial name is *Ricinus communis*. High quality castor seed contains approximately. 47% of oil and the rest is converted to form a cake meal. Castor is a *Kharif* crop and is sown generally between June-July, the harvesting commences from December onwards and continues till January. Arrivals peak is the month of April and May.

There are varied uses of castor and its derivatives. Major uses of castor oil are in paint industries, cosmetic and perfumeries industry, pharmaceuticals industry and lubricant and biodeasel industry. Castor seed oil cake is used as manure for crops and is considered as a very fine alternative for fertilizer. Castor is produced in more than 30 countries across the globe. However, India is the major producer and holds a giant share of around 83% of the total global production, followed by China (6%), Brazil (5%) and Mozambique (4%). India is the largest exporter and China is the net importer of castor oil. In India, Gujarat is the top producing state which contributes 63% followed by Andhra Pradesh (19%), Rajasthan (14%) and Maharashtra (2%) ([www.seaofindia](http://www.seaofindia)).

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com).

Over a decade, India has retained the position of holding the lion's share in production of castor seed worldwide. Production has increased sharply over a last decade from 4.28 lakh tonnes in 2002-03 to over 23.15 lakh tonnes in 2011-12. The increased production is mainly attributed to rising yield that has grown from 734 kgs per hectare in 2002-03 to over 1810 kgs per hectares in the current year.

#### Objective of study:

- To study consumer behaviour of hybrid castor seeds at the time of seed purchase.
- To know the sales potential of castor hybrid seeds in different Taluka's of Banaskantha district.

### METHODOLOGY

The study was undertaken on a micro framework based on primary and secondary data on various aspects of consumer behaviour, sales potentiality and opportunities to boost the sales of Western Agriseeds Company's hybrid castor seeds.

Gujarat state occupies the first position in castor seeds production in India. Banskantha district is producing highest castor seeds in the state. Dantiwada and Amirgadh talukas were purposively selected as these two talukas are highest producers of the castor crop in the district. From Dantiwada taluk Chandanki, Kalimati and Dholiya villages and from Amirgadh taluk Dhanera, Fatehpura and Jegol villages were selected for the study as these villages were highest producers of the castor crop in the selected talukas. In all, 120 farmers and 8 dealers were randomly selected from the study area at the rate of 20 farmers from each village and 4 dealers from each taluka.

To fulfill the specific objectives of the study based on the nature and extent of availability of data, various tabular and analytical tools were employed.

### ANALYSIS AND DISCUSSION

From Table 1 it is clear that 95 per cent of the farmers were growing the castor crop for the purpose of selling in the market. As castor is a commercial oilseed crop which acts as an input for the oil producing companies and hardly it can be used for the home consumption. Hence, hardly 5 per cent of the farmers were growing the crop for the purpose of home consumption.

Purpose of growing castor seeds	No. of respondents	Percentage
Selling %	114	95
Home use %	6	5

Season of growing castor crop is depicted in Table 2. As majority of the farmers were dependent upon the rain for

growing the castor crop in the study area, hence, 75 per cent of the sample farmers had grown their crop in *Kharif* season followed by *Rabi* (20.84 %) and *Zaid* seasons (4.16%).

Seasons	No. of respondents	Percentage
<i>Kharif</i>	90	75.00
<i>Rabi</i>	25	20.84
<i>Zaid</i>	5	4.16

From Table 3, it is clear that majority (62.50%) of the farmers were having the awareness regarding the Western Agriseeds Company products. It shows the strength of penetration of the company in the rural markets, as the company often does the sales promotion activities like advertising, field demonstration activities, pamphlets distribution, hoardings, etc. And only 37.50 per cent of the farmers responded that they don't have the awareness regarding the Western Agriseeds Company products.

Yes/No	No. of farmers	Percentage
Yes	75	62.5
No	45	37.5

From Table 4, it can be depicted that as the promotion activity increases the sales of seeds also increase. Hence, majority of the farmers (71.67%) responded that their purchase heavily depends upon the promotion activities conducted by the company.

Yes/ No	No. of respondent	Percentage
Yes	86	71.67
No	34	28.33

From Table 5, it is clear that demo was the major (41.67%) promotional activity which was affecting the farmers' purchase behaviour because seeing is believing principle was mostly followed by the farmers followed by poster and exhibition promotional activities (20.83 % each).

Promotion activity	No. of respondent	Percentage
Advertisement	8	6.67
Discount	2	1.67
Demo	50	41.67
Poster	25	20.83
Exhibition	25	20.83
Pop	10	8.33

Source of information about castor seeds is represented in Table 6. From the table it is clear that majority (37.50%) of the farmers had newspaper as a major source of information because bulk of the farmers used to read newspapers followed by dependence on friends (25.00%), relatives (15.00%), television (12.50%) and Krishi Seva Kendra's (10.00%).

Sources	Number of respondents	Percentage
Newspaper	45	37.5
Friends	30	25.0
Relative	18	15.0
T.V.	15	12.5
Krishi Seva Kendra	12	10.0

From Table 7 it is clear that yield was the major factor (50%) considered by the farmers while purchasing hybrid castor seeds followed by the price of the seeds (25%). As yield is the major factor upon which the income actually depends, hence majority of the farmers considered yield as the major factor which they considered while purchasing the castor seed.

Factors	No. of respondents	Percentage
Yield	60	50.00
Price	30	25.00
Durability	10	8.33
Water requirement	10	8.33
Fodder size	5	4.17
Quality	3	2.50
Disease resistance	2	1.67

From Table 8 it is clear that majority (75 %) of the farmers were replacing the castor seeds once in a year and only 25 per cent of the farmers were replacing the castor seeds for every season. Hence, there a huge scope for the company to increase its market share and sell seeds every season by educating the farmers regarding the benefit of using new hybrid seeds.

Time	Number of respondents	Percentage
Yearly	90	75
Season wise	30	25

From Table 9 it is clear that 67 per cent of the farmers who were using the Western Agriseeds Company's castor seeds were satisfied with their yield levels. Only 33 per cent of the farmers were not satisfied with the yield levels.

**Table 9 : Level of farmer's satisfaction with regard to the yield of the Western Agriseeds company's castor seeds (n=120)**

Yes/No	No. of respondents	Percentage
Yes	80	67.00
No	40	33.00

#### Dealer's survey:

From Table 10, it can be interpreted that all the sample dealers had castor seeds stock in their shops followed by jowar and mustard seeds availability. This indicates that Western Agriseeds Company has tremendous scope to increase their market share.

**Table 10 : Seeds availability at dealers shops (n=8)**

Seeds	No. of respondents	
	Yes	No
Castor	8	0
Jowar	7	1
Mustard	7	1
Groundnut	6	2
Chickpea	4	4
Cotton	5	3

From Table 11, it is clear that Western Agriseeds Company's seeds were less available in the shop as compared to that of other companies seeds. Most of the dealers had PHI Company castor seed availability in their shop followed by Syngenta and Western agriseeds. This indicates that the Western Agriseeds Company had less market share in Banaskantha district of Gujarat.

**Table 11: Different company's castor seed available in shop (n=8)**

Company name	No. of respondents	
	Yes	No
Western Agriseeds	5	3
PHI	7	1
Monsanto	4	4
JK Seeds	4	4
Kaveri	5	3
Syngenta	6	3

From Table 12, it can be interpreted that PHI company ranked highest in terms of sales as revealed by the seed dealers followed by Syngenta and Western Agriseeds companies. PHI company seeds have a more market demand than the Western Agriseeds company. So, the company must improve its promotional activities and research and development activities to capture highest market share.

A reason behind selection of a particular brand has been depicted in Table 13. According to the results, the dealers ranked availability in the market followed by yield, price and promotion activities. The farmers when they come for

**Table 12: Which company's castor seed sale more in shop (n=8)**

Name of the company	No. of respondents		Rank
	Yes	No	
PHI	7	1	1
Syngenta	6	2	2
Western Agriseeds	5	3	3
Kaveri	5	3	4
Monsanto	4	4	5
JK Seeds	3	5	6

**Table 13: Reasons behind selection of a particular brand (n=8)**

Attributes	Yes	No
Yield	6	3
Availability	7	1
Price	4	4
Promotion	3	5
All of these above	5	3

purchase of castor seeds in a shop, they first look at availability of different brands of seeds then their yield levels, price of the product and promotional activities exposure by them.

Promotional activities adopted by various companies are represented in Table 14. According to the results, demonstration activity was adopted by almost all firms followed by exhibitions and premiums and gifts. Field demonstration was adopted by various companies because unless the farmer sees the crop in the field he will not believe in the product. Hence, demonstrations played a major role in the promotional activities conducted by the various companies.

**Table 14 : Promotional activities adopted by various companies (n=8)**

Sr. No.	Activity	Yes	No
1.	Contests, games, lotteries	3	5
2.	Premiums and gifts	5	3
3.	Sampling	5	3
4.	Fairs and trade shows	4	4
5.	Exhibitions	6	2
6.	Demonstrations	7	1
7.	Coupons	4	4
8.	Rebates	4	4
9.	Low interest financing	4	4
10.	Entertainment	3	5

Rank of companies according to their frequency of sales promotion is depicted in Table 15. According to dealers views, PHI Company conducted the highest sales promotion activities followed by Syngenta, Western Agriseeds, Kaveri, Monsanto and JK seeds. As the PHI Company ranked first in

**Table 15 : Rank of companies according to their frequency of sales promotion (n=8)**

Companies	Sales promotion		Rank
	Yes	No	
Western Agriseeds	5	3	3
PHI	7	1	1
Monsanto	4	4	5
JK Seeds	3	5	6
Kaveri	5	3	4
Syngenta	6	3	2

the promotion activities, its sales were also high in the market. Hence, the promotional activities are directly correlated with the company's sales activities.

From Table 16, it can be interpreted that majority (62.50%) of the dealers were influencing the farmers for purchase of Western hybrid castor seeds. As the company's seeds were good yielding, hence the dealers were promoting the sales of the Western hybrid castor seeds.

**Table 16 : Dealers support for selling western hybrid castor seed to farmer (n=8)**

Yes/No	Number of respondents	Percentage
Yes	5	62.5
No	3	37.5

Dealers' satisfaction with the margins provided by the Western Agriseeds Company is presented in Table 17. 75 per cent of the dealers were satisfied with the margins provided by the Western Agriseeds Company. The dealers were happy with their margins. And only 25 per cent of the dealers were not happy with the margins provided by the Western Agriseeds Company.

**Table 17 : Dealers satisfaction with margins provided by the Western Agriseeds Company (n=8)**

Yes /No	No. of dealer respondents	Percentage
Yes	6	75
No	2	25

It is evident from Table 18 that 62.5 per cent of the dealers revealed that margin has a direct impact on the company's product sales. If the company provides more margins then its sales will be high up to a certain extent because of the influence of dealers on consumers purchasing behaviour. And 37.5 per cent of the dealers revealed that the margin has no impact on the sales. Ramaswamy and Chandrashekar (1990) and Ali

**Table 18: Effect of margin on dealers' sale (n=8)**

Yes/No	Number of respondents	Percentage
Yes	5	62.5
No	3	37.5

(1992) have also conducted some studies related to the present investigation.

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