

Demand Supply Gap and Dealers' Margin for Hybrid Castor Seed in Gujarat

Harpreet Sodhi¹, K.P.Thakkar² and S.M. Patel³

¹ Assistant Professor, Karnavati Education Institute of IT and Management, Palanpur

² & ³ Assistant Professor, C.P.College of Agriculture, SDAU,
Sardarkrushinagar, (B.K), Gujarat

ABSTRACT

The castor is an important non edible oilseed crop with immense industrial importance. The area production and productivity of castor is highest in Gujarat state. In India where hybrid castor is pre- dominantly cultivated. The hybrid castor seed is produced by public and private sector seed companies and marketed with their strong network at distinct and taluka levels. The present study focuses the demand and supply gap and dealers margin for castor hybrid seed. The castor seed marketed in Gujarat state. The study revealed that the GSSCL (Gujarat State Seed Corporation Ltd.) has the major share of 53.62 per cent in the market during 2010-11 while a number of other companies were also the prominent with their respective brands in the market. The dealers' margin was as low as 4.55 per cent of public sector companies and up to 11.76 per cent for a private sector company.

Keywords: Demand supply gap, Dealers' margin, hybrid castor

INTRODUCTION

In the agricultural economy of India, oilseeds are important next only to food grains in terms of area, production and value (Hegde 2009). Oilseeds have been the backbone of agricultural economy of India since long. The Indian climate is suitable for cultivation of oilseeds crops therefore, large varieties of oilseeds are cultivated here (Narayan *et al* 2011). The major oilseeds grown in India are groundnut, soybean, rapeseed, sesame, linseed, safflower, castor, sunflower and niger. Castor (*Ricinus communis* L.) is an important non- edible oilseed crop of arid and semi-arid regions of the world. Castor seed contains 48 to 56 percent oil. Castor oil is obtained through pressing the seeds followed by solvent extraction of the pressed cake. The average castor production in India was approximately 11.15 lakh tonnes in 2008-09. Banaskantha, Mehsana, Sabarkantha, Gandhinagar, Ahmedabad and Kutch are the main castor growing districts in Gujarat (Anonymous 2008). As far as area and production of castor in North Gujarat is concerned, Banaskantha ranks first followed by Sabarkantha and Mehsana (Anonymous 2010). Andhra Pradesh and Rajasthan follow Gujarat in production of castor seed. Gujarat state is pioneer in the development and release of hybrids where the first castor hybrid GCH-3 was released for general cultivation in 1968 (Acharya *et al* 2010). Subsequently six more hybrids viz.,

GAUCH-1, GCH-2, GCH-4, GCH-5, GCH-6 and GCH-7 have been released for general cultivation, among which GCH-7 is nematode and wilt resistant high yielding hybrid (Pathak *et al* 2005). Gujarat, Rajasthan, and Andhra Pradesh contribute 96% of the total castor seed production in India. The total cultivated area under castor in Banaskantha district is 1,78,700 ha. Gujarat ranks first in area, production, and productivity (area, 433.90 thousand hectare; production, 852.00 thousand tonnes). Large number of public as well as private companies are dealing in hybrid castor seed production as well as marketing of castor seed, amongst which GSSCL (Gujarat State Seed Corporation Ltd.) and GUJCOMASOL (Gujarat Co-operative Marketing Society Ltd, Ahmedabad) are major public sector companies along with many private companies.

Astringent seed production standards are there to produce the hybrid castor seed which is managed and strictly monitored by GSSCA (Gujarat State Seed Certification Agency), a public sector independent organization. The present study was conceived with a general objective of analyzing demand and supply gap of hybrid castor seed and percentage contribution of GSSCL in fulfilling total demand of castor seed. Moreover the study also focused on dealers' margin under different brands available in the market.

METHODOLOGY

In order to proceed with investigation as per the objectives stated, it was necessary to adopt an appropriate sampling design so as to focus the importance of objective in tackling the problems in marketing of castor seed. It was proposed at the outset to study the area under castor crop in primary stage. For this purpose the secondary source data published by the Directorate of Economics and Statistics, Banaskantha was used. A multistage random sampling was adopted as appropriate sampling procedure for the study. The Castor crop is mainly grown in the Bansakantha district. Bansakantha ranks first in terms of area and production of castor among all the district of Gujarat state. Hence the study was focused on Banaskantha District. In the second stage, it was proposed to select five talukas in Banaskantha district which were top ranking talukas in respect of area under castor in the district. These talukas are: Tharad, Vav, Dhanera, Kankrej and Palanpur. In the third stage, from each taluka 10 dealers on cross sectional basis were selected. Since in each taluka, the *Taluka Kharid Vechan Sangh* a co-operative marketing organisation exists, it was invariably included as one of the dealer. Hence total numbers of dealers for the study were 50. Keeping in view the objective to analyze the projected demand and supply gap primary data regarding

area under castor cultivation and hybrid seed production by GSSCL were collected from GSSCL, Gandhinagar. The estimated seed requirement (demand) was calculated @ 5 Kg/ha seed rate which is recommended seed rate for castor hybrid by S.D. Agricultural University and to find dealers margin of hybrid castor seed, popularly available brands in the market were enlisted and the questionnaire was prepared and dealers were interviewed.

RESULTS AND DISCUSSION

Castor is an important commercial crop grown in the study area. Large numbers of brands of castor hybrid seeds are available to the farmers. However, the castor hybrids like GAUCH-1, GCH- 2, GCH-4 and GCH- 7 are important hybrids which are in great demand in the study area. These hybrids are marketed by *Taluka Kharid Vechan Sanghs* which are co-operative bodies having presence in almost all talukas of the state. In addition large numbers of private dealers are also operating in these talukas. In the study area, it was proposed to go into details of the dealers' margin under different popular brands available in the market. For this, opinion survey was conducted for a sample of total 50 farmers in each taluka and popular castor seed brands are enlisted and compared by questioning the farmers. The data collected by this were subject to statistical analysis.

Table 1: Demand and supply gap of hybrid castor seed production by GSSCL in Gujarat

Sr. No.	Details	Years		
		2008-09	2009-10	2010-11
1	Area under castor cultivation (ha)	4,33,900	4,21,600	4,19,600
2	Estimated seed requirement (Demand) Kg.*	21,69,500	21,08,000	20,98,000
3	Hybrid seed production by GSSCL (Supply)	2,60,027	4,56,266	11,25,009
4	Percent share of GSSCL in market	11.99	21.64	53.62
5	Gap (Kg.)	19,09,473	16,51,734	9,72,991
6	Gap (%)	88.01	78.36	46.38

Seed rate @ 5 Kg./ ha.

Table 2 : Dealers' margin for hybrid castor seed

Sr. No	Company / Brand	Purchase price of dealer (Rs.)	Discount per 2 Kg. Bag	Dealers retail price	Dealers margin (%)
1	Gurabini (GSSCL)	330	15	345	4.55
2	Gujcomasol	330	15	345	4.55
3	Avni	270	20	290	7.41
3	Nandi	280	20	300	7.14
4	DSP	330	20	350	6.06
5	Mahyco	340	40	380	11.76
7	Bhooma	400	35	435	8.75
8	Navbharat	300	30	330	10.00

As far as the projected demand supply gap is concerned, it was estimated by the differences between the projected demands based on the area under cultivation under castor during last three years. The production figures of different castor hybrid recommended by SDAU were obtained from GSSCL. The projected gap was estimated from the available figures of demand and supply.

During last three years, the area under castor cultivation in Gujarat state was 4,33,900 ha. (2008-09), 4,21,600 ha. (2009-10) and 4,19,600 ha. (2010-11). Considering the recommended seed rate of castor @ 5 Kg/ha., the estimated seed requirement has been worked out which is the total demand of hybrid castor seed. It is presumed that there is almost 99 per cent SRR in castor in the state. The estimated seed requirement is given in Table 1.

The hybrid seed produced by GSSCL during last three years is also given in the Table which amounts to 2,60,0,27 Kg during 2008-09, 4,56,266 Kg during 2009-10 and 11,25,009 Kg during 2010-11. The per cent share of GSSCL in the hybrid castor seed market in the state comes to 11.99 per cent during 2008-09, 21.64 per cent during 2009-10 and 53.62 per cent during 2010-11. It clearly reflects that there was linear increase in the share of GSSCL in the hybrid castor seed market in the state.

As far as the gap is concerned during these years, it amounts to 88.01 per cent, 78.36 per cent and 46.38 per cent respectively during last three years. This gap is met by large number of other seed companies which are marketing their seed in Gujarat state as well as in other castor growing states of the country particularly Andhra Pradesh, Karnataka and Rajasthan.

The presence of diverse market situation for castor hybrid seed entails presence of large number of recommended castor hybrids as well as their brands in Banskantha as well as in the five talukas under study. The margin of the dealer does not vary with the levels of operation and margin mostly varies according to their cost of marketing and other services provided by dealers to the farmers. Table 2 depicts the various brands (8) of castor hybrid GCH-7.

The dealers' margin was studied in relation to castor hybrid GCH-7. In the study area, the major brands / seed companies operating were GSSCL, GUJCOMASOL, Avni, Nandi, DSP, Mahyco, Bhooma and Navbharat. From the dealers their purchase price was asked along with the discount each company offers them. The information given in Table 2 reveals that the purchase price of the dealers ranged from Rs. 270 (Avni) to 400 (Bhooma). The discount on per 2 kg bag ranged from Rs. 15 (Gurabini and GUJCOMASOL) to Rs. 40 (Mahyco). The retail price for the consumers' i.e farmers ranged from Rs. 290 to Rs. 435 per two Kg bag. In respect of the dealers' margin, it was as low as 4.55 per cent for Gurabini (Gujarat Rajya Beej Nigam), a popular brand of GSSCL and GUJCOMASOL brand and up to 11.76 per cent in respect of Mahyco brand.

REFERENCES

- Anonymous 2008. National Multi-Commodity Exchange of India Limited. New Delhi. Report on Castor.
- Anonymous (2010). SEA survey 2009-10 Final estimates: District wise area, production and productivity of castor in Gujarat.
- Acharya, S., Patel P.S., Patel J.B and Vaghela K.O, 2010. Maintenance of genetic purity in castor. Technical Bulletin 3 :1-19. DOR, Sardarkrushinagar Dantiwada Krushi University, Saradarkrushinagar. (Gujarat), India
- Hegde, D. M., Can India achieve self-reliance in vegetable oils? In National Symposium on Vegetable Oils Scenario: Approaches to Meet the Growing Demands, 29-31 January 2009, 1-15
- Narayan P., Chauhan, M S and Chauhan, S (2011). Oilseeds scenario in India. Agriculture Today, December, 2011. 40-43
- Pathak H.C., Chaudhary F.P, Patel M.S. and Patel D.K.. 2005 Gujarat Castor Hybrid 7. SDAU News 2 (2):1