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## AN EMPRICAL ANALYSIS OF MARKETING OF OILSEEDS IN HAVERI DISTRICT OF KARNATAKA STATE OF INDIA

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### ABSTRACT

Edible oilseeds mainly comprise groundnut, mustard, sesame, safflower, soyabean, and sunflower. Oilseeds contribution to GDP stands only next to cereals and milk. Edible oil accounts for about 5.5 per cent of the family budget occupying the third place, next to cereals and milk. Among the edible oil seeds, groundnut is the most important one accounting for about 46 per cent of the total area under oil seed, about 67 per cent of the total oil seeds production and about 59 per cent of the total edible oil production in India. In oil seeds marketing various intermediaries are involved and they transfer the oilseeds from producers to ultimate consumers. So the farmer should identify right time and right place to market their produce. Processing and marketing of oil seeds are some of the major factors responsible for the stagnation in the oil seed economy. The oil seeds industry in general and groundnut in particular is faced with many problems and challenges. The inadequacy of cropped area, low productivity lack of adequate supply of quality seeds absence of integrated nutrient supply management, inefficient crop management practices, absence of suitable soil and moisture conservation etc are the major problems in the area of production management. The problem areas of market of oil seeds and groundnut relate to absence of scientific assembling and storage, lack of adequate transport and grading facilities insufficient market information. The role of market intermediaries and the APMC have been found unsatisfactory. High marketing costs and inadequate finance resulting in distress sales in the village local sales at low prices are the other set of marketing problems of groundnut farmers and sellers.

**Keywords:** Production, Groundnut, Marketing, inadequate finance, crop management.

### Introduction and Background of Haveri District:

The oil seeds scenario in India has undergone a transformation during the last 15 years. The major contributory factors of this transformation have been, Availability of improved oil seeds production technology and its adoption, expansion in cultivated area, price support policy and institutional support particularly establishment of technology mission on oil seeds(TMO)in 1986. There has been large

regional variation in area, production and productivity changes of oil seeds. States like Haryana, Madhya Pradesh, Rajasthan and West Bengal increased their oil seed production both through area expansion and productivity improvement. But states like Maharashtra, Tamilnadu and Himachal Pradesh increased their oil seeds production mainly through productivity improvement. In some states like Orissa, area production and productivity declined sharply. The Indian edible oil industry

is expected to grow at a rate of 6 percent annually over the next five years with consumption set to reach 20 mn tonnes by 2015, said Rabo India in its latest research report. India relies heavily on imports to meet over 50 percent of domestic edible oil requirements. Through the years, India's domestic production of oilseeds has not grown in line with edible oil demand. Lower levels of oilseed production have resulted in low capacity utilization. With oilseed crushing being considerably lower than expected in the last six months, The Solvent Extractors' Association of India has requested government to consider revival package for the industry and suggested revision of import duty on edible oils to support farmers and the industry. The oilseed crushing industry is facing tough times. The industry is faced with negative crush margins due to reserve selling by stockiest and farmers as well as excessive speculation in the markets. "The factors have made the prices of oilseed too high for the crushers. Also, duty free import of

crude vegetable oils contributed to the negative crush margins," Sethia stated. India's overall edible oil demand is expected to see a surge to 20.8 million tonnes by 2015 from the 15.6 million tonnes now. Of which, 10 million tonnes (6.5 million tonnes now) will be supplied from domestic sources while the remaining will be imported. The import share in India's edible oil demand will rise marginally from 51 per cent now to 53 per cent by 2015, said Mehta.

The study present study attempts a holistic approach for optimizing economic and social returns to all resources employed in the production and processing of oilseeds. Oilseeds farmers, processors and traders constitute the majority of stakeholders on the supply side. Likewise, consumers of edible oil and other products of oilseeds seek satisfactory value for their money, through reasonable prices and acceptable quality for edible oil and other products. The interests of all these stakeholders will receive consideration in the study area.

**Table 1: Comparative Picture of Income and its Growth in Haveri District**

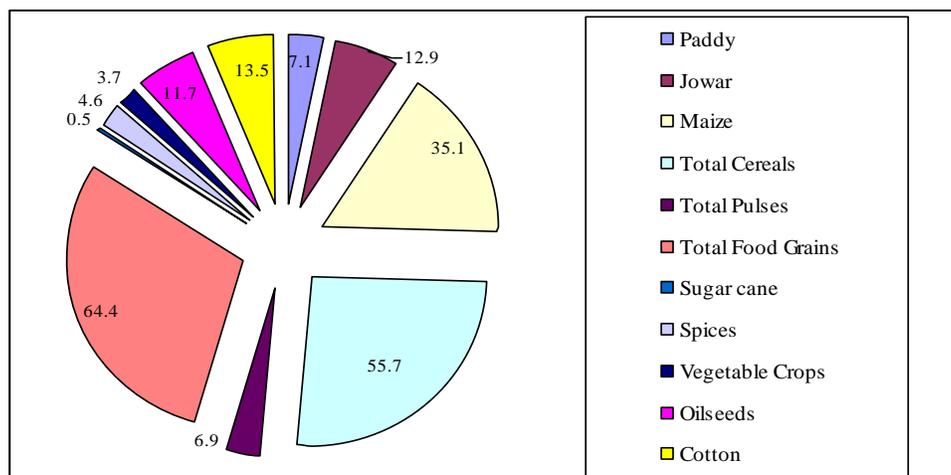
Sl. No.	Income Measurement	Haveri District		Karnataka	
		1999-2000	2006-07	1999-2000	2006-07
1	Gross Domestic Product* (GDP)	228773	374781	10124745	20092235
2	Per Capita Income* (PCI)	16242	24297	19574	35469
3	Growth Rate of GDP**		7.31		10.29
4	Growth Rate of PCI**		2.70		8.86

\* Rs. in Lakhs; \*\* Percent p.a. Source: DES, Bangalore

Table 2 shows sector wise composition of the District Domestic Product (DDP). The service sector generates about half of the district income and the remaining shared almost equally by agriculture and industry sectors. Agriculture is a dominant sector and along with animal husbandry it contributes about 25% to total income. Registered manufacturing and other services occupy the second place accounting for 11% of district income. All activities of service sector and construction activities too are contributing significantly.

### **Cropping Pattern and Agricultural Productivity of Haveri District**

Cropping depends on soil, rainfall and climate conditions. Since a major part of the district is dependent on rainfall, the important crops grown are jowar, maize, wheat, millets, tur, grams, sugarcane, cotton, groundnut, sunflower, etc. Paddy is a major crop in canal irrigated areas. Cropping pattern of the district is shown in chart.1

**Chart1: Cropping Pattern of Haveri District**

Source: DSO, Haveri, 2008

Major crop groups of the district are cereals (55% of sown area), pulses (7% of sown area), spices and vegetables (4% of sown area). Food grains occupy almost two-thirds of total sown area. Major non-food crops are cotton (13.5% of sown area) and oil seeds (11.7% of sown area). Individually maize cotton, jowar and paddy are preferred by the farmers of the district. The other important crops of the district are wheat, millets and paddy. Percentage area under pulses is less

in the district compared to the state. Oilseeds are grown in 18% of area and cotton in 14% of area. Vegetables are grown in remaining 2% of area which reveals that horticultural crops do not occupy a major portion in the cropped area of the district. But the agricultural progress or backwardness is better discussed using the yield data. Hence, yields of major crops in the district are presented in Table 2 in comparison with that of the state, nation and its own potentiality.

**Table 2: Comparative yield of Major Agricultural Crops**  
(kg/ha, Sugarcane in tonnes/ha)

S. No.	Crop	India	Karnataka	Haveri	Potential of the district
1	Paddy	1938	2568	1936	3000
2	Jowar	803	1653	<b>1855</b>	2200
3	Maize	1817	3072	2476	3500
4	Tur	703	766	500	750
5	Greengram	-	271	<b>500</b>	650
6	Ground Nut	970	621	457	1500
7	Sunflower	552	531	<b>750</b>	1500
8	Soyabean	958	988	<b>1000</b>	1800
9	Cotton	204	240	<b>299</b>	400
10	Sugarcane	69	99	50	75

Source: DCAP, Haveri District

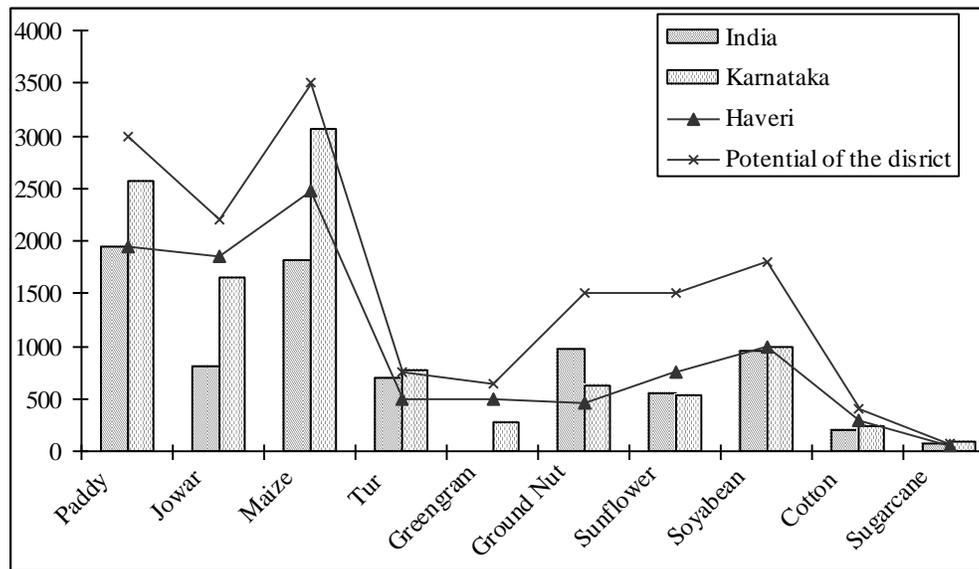
The data reveals that the district' agricultural yields are quite lower compared to the state as well as the nation and far low when compared to

the potential. Except in respect of Jowar, Greengram, Sunflower and Cotton, the yield levels of all major crops are lower than that of

the state or the nation. However, yield of maize, which is a predominant crop, is higher than that of the country and paddy yield is comparable to the nation's. This comparison of the productivity of different crops reveals that agricultural progress in the district is not so encouraging. The district lags behind compared to the state in

productivity of all crops which is an indication of wide opportunities available in the district. Hence efforts should be made to raise it at least to the state level. This is perhaps due to lack of adequate irrigation facilities and consumption of less amount of fertilizers. Chart 6 clearly depicts the yield scenario of Haveri district.

**Chart 2: Comparative yield of Major Agricultural Crops**  
(kg/ha, Sugarcane in tonnes/ha)



Source: Table 8

Average food grains production of the district works out to be 133.6 kg which is higher than the state average of 124 kg. Whereas Per capita cultivated land for the district is 0.22 hectares for the state it is 0.23 hectares, percentage irrigated area of the district is lower than that of the state. Since per capita fertilizer consumption in the district (61 kg) is far lower than that of the state (80 kg) increasing fertilizer usage may bring about increase in yields. However, opportunities for organic agriculture must also be explored.

**II.STATEMENT OF THE PROBLEM:** The oil seeds industry in general and groundnut in particular is faced with many problems and challenges. The inadequacy of cropped area, low productivity lack of adequate supply of quality

seeds absence of integrated nutrient supply management, inefficient crop management practices, absence of suitable soil and moisture conservation etc are the major problems in the area of production management. The problem areas of market of oil seeds and groundnut relate to absence of scientific assembling and storage, lack of adequate transport and grading facilities insufficient market information. The role of market intermediaries and the APMC have been found unsatisfactory. High marketing costs and inadequate finance resulting in distress sales in the village local sales at low prices are the other set of marketing problems of groundnut farmers and sellers.

In view of the above areas of production and marketing inadequacies the researcher felt that

there is need for an micro level study of the production and marketing of oil seed in general and groundnut in particular in the study area which is a major producer of groundnut in this part of Karnataka state.

#### **OBJECTIVES OF THE STUDY:**

The major objectives of the proposed study shall be an production and marketing of oil seeds-a case study of Dharwad district in Karnataka state. The study shall have the following specific objectives are outlined for the present study.

- 1.To study about the production dimensions of the oil seeds in general and groundnut in particular in the Dharwad district.
- 2.To examine the production problems and production costs of oil seeds and groundnut of the framers in the district
- 3.To study the marketing process of groundnut and the market problems of the groundnut farmers.
- 4.to analyze any other aspect of production and marketing of groundnut germane to the study.
5. Production and marketing of oil seeds-a case study of Dharwad district in Karnataka state., for the purpose of the present study, two Villages from Kalgatagi block are selected on the basis of simple random sampling method. For the purpose of the Production and marketing of oil seeds, 60 households were selected from

different categories on the basis of simple random sampling method.

#### **ECONOMIC DIMENSIONS OF GROUDNUT IN INDIA:**

Groundnut which is known as Archishypogaes Linnaeus is one of the words important oilseed crops. groundnut seeds are a rich source of edible oil with 43.55% and protein with 25-28%. The approximate weight of the groundnut kernels is 70% in shells and kernels have oil recovery of 40-42%. The annual global production of groundnut seed and oil vary between 21-24 and 5-5.5million tons.

#### **World Production of Groundnut:**

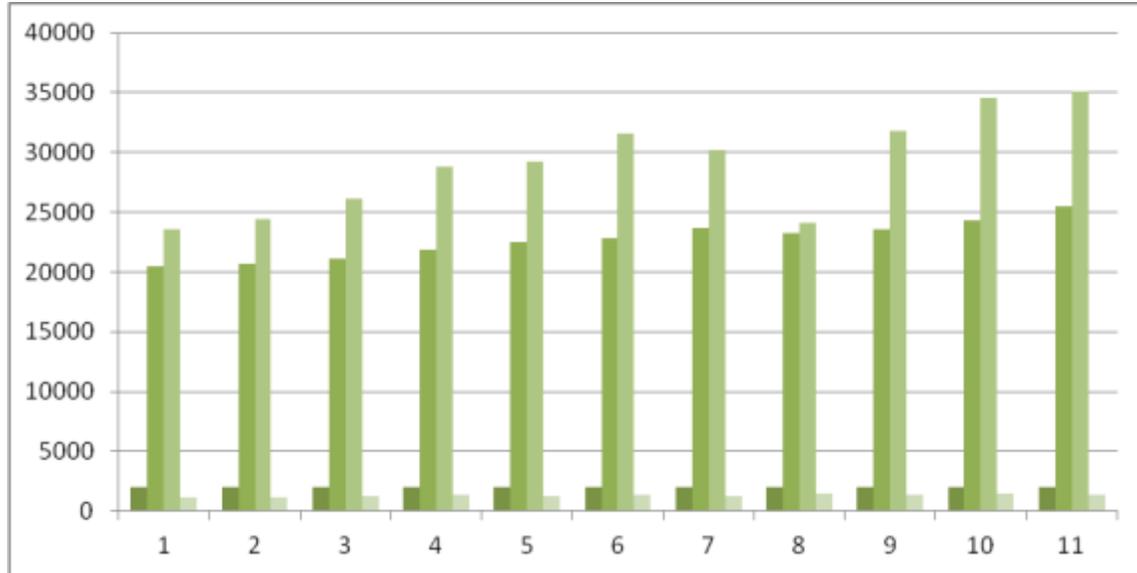
The world production of groundnut rose from 23531 millon tones in 1991 to 35096 million tones in 2001. This amounts to about fifty percent increase in the production of groundnut in a period of ten years. A trend of continous growth of production during the decade was observed except in 1997 and 1999 when there was a decline in the production compared to the production in the previous years respectively. maximum production of groundnut was 35096 mt in 2001 while the minimum was 23531 mt in 1991.

**Table.No.3. Area under Groundnut crop. Production and yield per Hectare-world Trends.**

Year	Area(000hectare)	Production(000MT)	Yield per Hectare/kg
1991	20442	23531	1151
1992	20720	24411	1178
1993	21114	26082	1235
1994	21889	28850	1318
1995	22509	29277	1301
1996	22827	31531	1381
1997	23697	30160	1273
1998	23266	24125	1467
1999	23520	31794	1352
2000	24291	34516	1421
2001	25538	35096	1374

Source: Compiled from various issues of FAO production year books and FAO STAT data base includes Groundnut.

**Chart.No.3. Area under Groundnut crop. Production and yield per Hectare-world Trends**



#### **GROWTH INDEX OF GROUNDNUT:**

The growth index of area under groundnut production and yield per hectare has indicated a trend of fluctuations between 1990-91 and 2000-01 with the base at 100 in 1981-82 the area of production growth index rate rose from 116.6 in 1990-91 to 121.7 in 91-92 but declined to 114.6 in 92-93. A trend of fluctuation is further observed in the subsequent period. The index rose from 116.8 in 1993-94 but declined to 110.02 in 94-95 105.6 in 95-96 with a small rise to 106.6 in 96-97 but fell to 99.9 in 97-98 and rose to 103.8 in 98-99. the index fell to 96.3 in 99-200.

Production index between 1990-91 and 2000-01 varied between a minimum of 88.5 in 99-2000 and a maximum of 149.7 in 1998-99. The index of growth of production of groundnut has

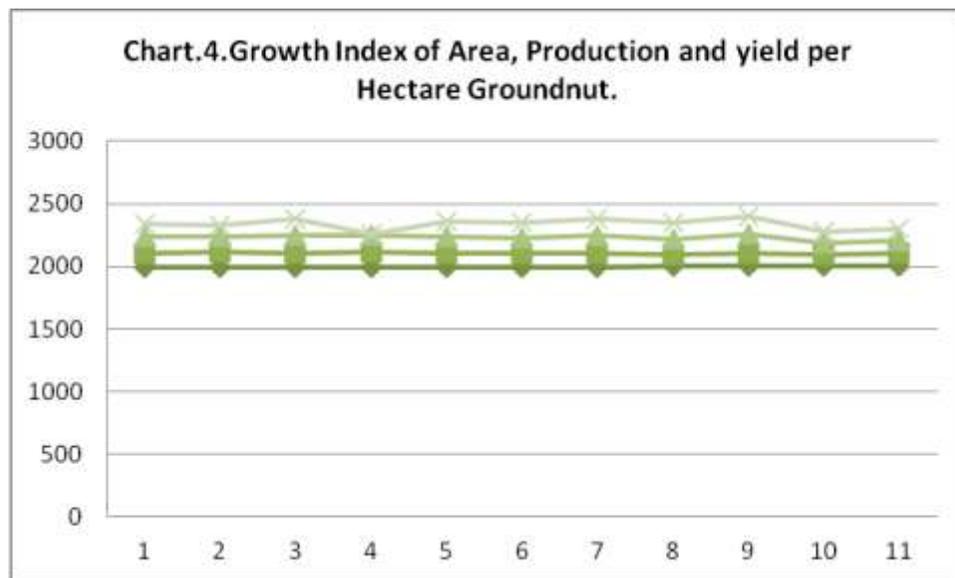
indicated a trend of fluctuations during the period starting with in 1990-91 and reaching a high of 149.7 in 1998-99 and reaching a low of 106.9 in 2000-01.

The index of yield of groundnut has also indicated a similar trend of fluctuation during the above period. The yield per hectare was 107.4 in 1990-91 and reached a high of 144.3 in 1998-99 and slided to a low of 91.9 in 1999-2000. The details are given in the following table.

**Table.No.4-Growth Index of Area, Production and yield per Hectare Groundnut.**

Year	Area(000hectare)	Production(000MT)	Yield per Hectare/kg
1991	116.6	125.3	107.4
1992	121.7	118.3	97.2
1993	114.6	142.8	124.6
1994	116.8	130.5	11.8
1995	110.2	134.4	122.0
1996	105.6	126.4	119.7
1997	106.6	144.1	135.2
1998	99.5	122.9	123.6
1999	103.8	149.7	144.3
2000	96.3	88.5	91.9
2001	NA	106.9	NA

Source: Agriculture situation in India-Data compiled from Economic Survey 1999-200 Government of India.



## RESULTS AND DISCUSSIONS

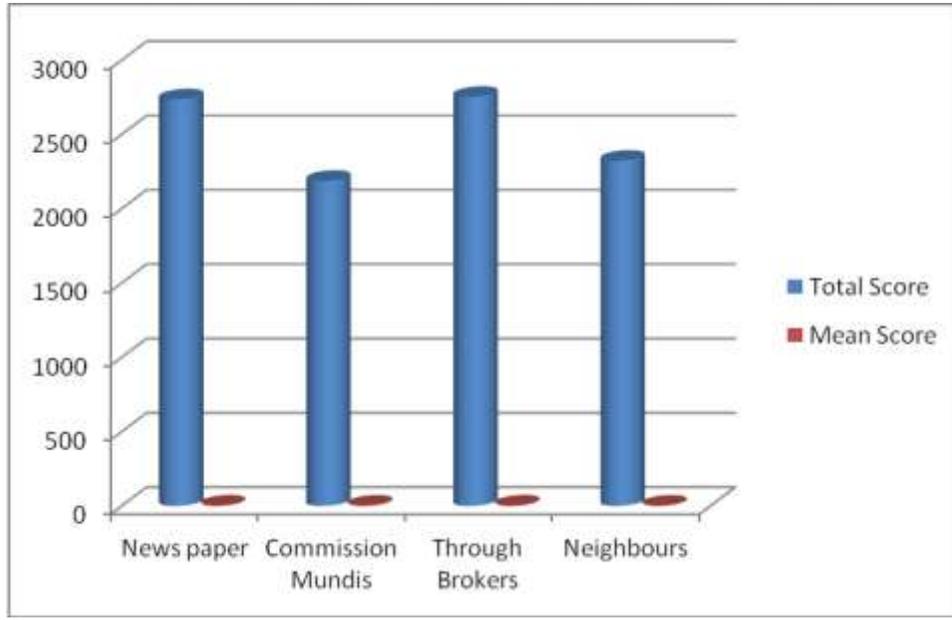
### Sources of information about oilseed market:

The farmers, who are cultivating oilseeds having good knowledge in production, but they are very much lack in the knowledge of marketing these oilseeds. An attempt was made to identify the sources of

knowledge acquired was studied by selecting four major classifications namely through “newspapers”, “commission mundis”, “through broker” and “neighbours”. Henry Garrett ranking method was employed to arrive the results accurately and the details are shown in the following table

**Table 5. Sources of information about oil seed market**

Sl. No	Informations	Total Score	Mean Score	Rank
1	News paper	2736	2.7360	II
2	Commission Mundis	2188	2.1880	IV
3	Through Brokers	2753	2.7530	I
4	Neighbours	2323	2.3230	III

**Chart.5. Sources of information about oil seed market**

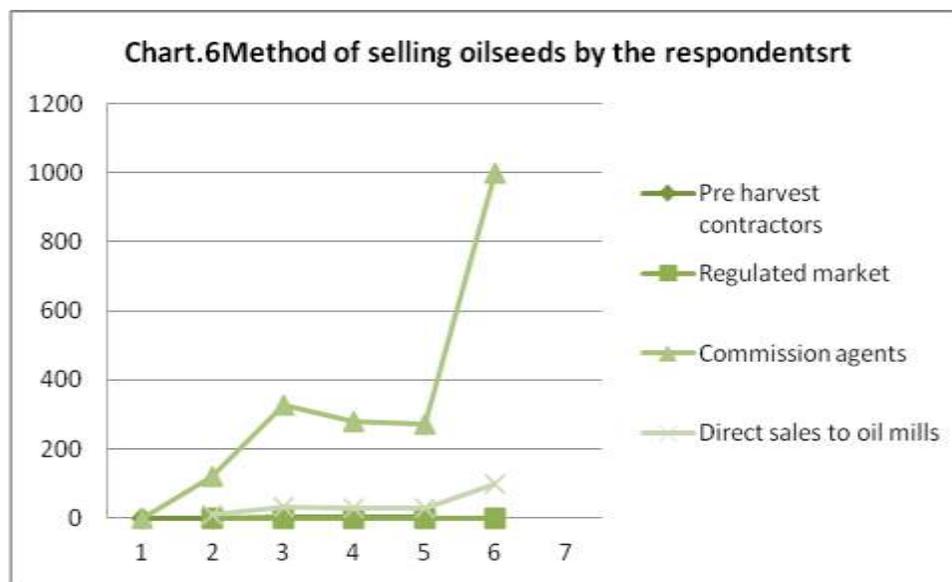
ranked first with a Garrett score of 2753 points. It is followed by the “news paper source” with a Garrett score of 2736 points. The other sources such as “neighbour” and “commission mundis” are placed in the third and fourth ranking with the Garrett score of 2323 and 2188 points respectively. From the analysis, it is concluded that “brokers” and “newspapers” are the major sources providing information about oilseed market

#### **Methods of selling oilseeds:**

The farmers cultivating oilseeds are find difficulty to sell their agriculture produced. In this study an attempt was made to identify the methods of selling the oilseeds. The common methods are pre-harvest contract, using regulated market, selling through commission agents and direct sales to oil mills. The details are analyzed with the help of percentage analysis and furnished in the following table.

**Table.6.Method of selling oilseeds by the respondents**

Sl. No.	Methods	No. of Respondents	%
1.	Pre harvest contractors	121	12.1
2.	Regulated market	326	32.6
3.	Commission agents	281	28.1
4.	Direct sales to oil mills	272	27.2
	Total	1000	100



It is examined from the above table that 32.6% of the respondents using “regulated market” to sell their oilseeds. 28% of the respondents are using “commission agents” to sell their

agricultural produce. 27.2% of the respondents directly selling the oilseeds to oil mills. On the other hand, 12.1% of the respondents underwent “pre- harvest contract” with the private brokers

**Table 7. Methods practiced to sell the oilseeds when market is volatile**

Sl. No.	Demand	No. of Respondents	%
1.	Aggressive selling during peak market	428	42.8
2.	Store the oil seeds in the godowns during inflation	191	19.1
3.	Selling the oilseeds immediately after harvesting	381	38.1
	Total	1000	100

**Methods of pricing the oilseeds:**  
Normally pricing methods are studied as

penetrating pricing strategy, skimming pricing strategy market based pricing and

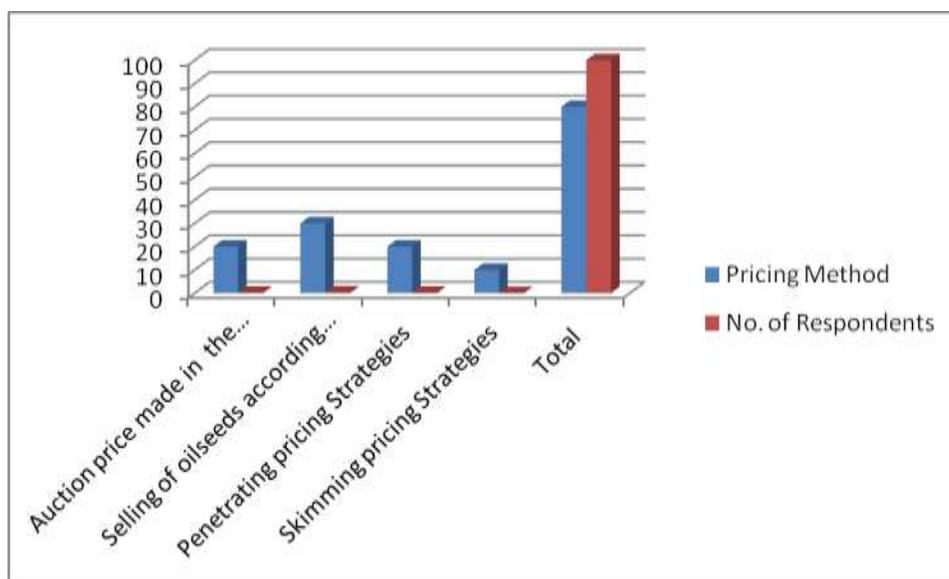
auctions. In this study, the style of pricing practiced by the oilseed growers was studied with the help of percentage

analysis and the details are shown in the following table.

**Table 7. Pricing method of oilseeds practiced by the respondents market practiced**

Sl.No.	Pricing Method	No. of Respondents	Percentage
1.	Auction price made in the Regulated market	20	25%
2.	Selling of oilseeds according to market price	30	40%
3.	Penetrating pricing Strategies	20	25%
4.	Skimming pricing Strategies	10	10%
	Total	80	100

**Chart 7. Pricing method of oilseeds practiced by the respondents market practiced**



It could be observed from the above table that 38.6% of the respondent using auction price made in the regulated market 58.0% of the respondents selling their oilseeds according to the market prices, 2.1% of the respondents using penetrating pricing strategies, 1.3% of the respondents using skimming pricing strategies. From the analysis, it is inferred that most of the respondents selling the oilseeds according to

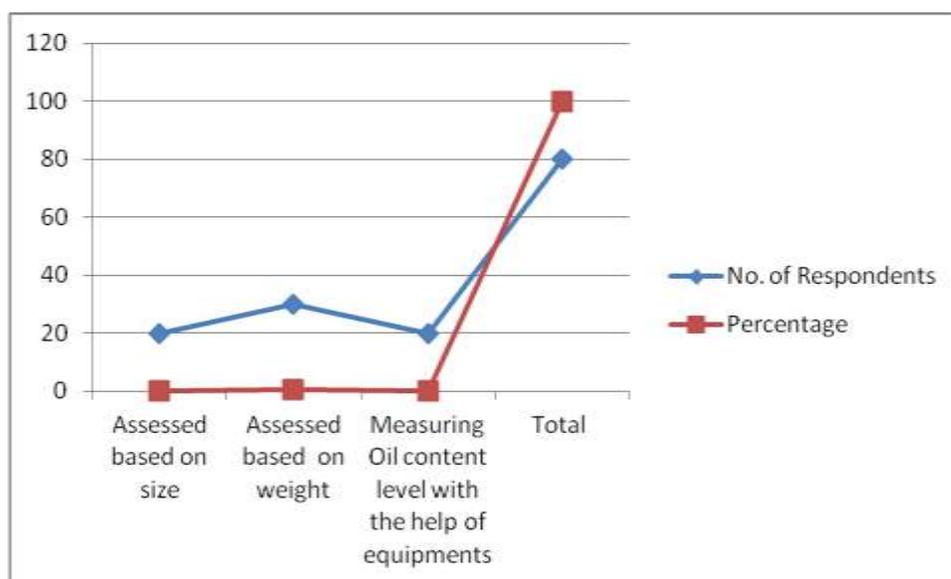
the prevailing price in the market.

#### **Respondents Opinion on grading on oilseeds:**

In the era of competitive business, customers preferred a good standard of products in general, and in particular, to oilseeds. The respondent's opinion on grading the oilseeds in the market were gathered and analysed with the help of percentage method. The detailed opinions are furnished in the following table.

**Table 8. Respondent's opinion on oilseeds grading in the market**

Sl.No.	Pricing Method	No. of Respondents	Percentage
1.	Assessed based on size	20	25%
2.	Assessed based on weight	30	40%
3.	Measuring Oil content level with the help of	20	25%
	Total	80	100

**Chart.8. Respondent's opinion on oilseeds grading in the market**

It is witnessed from the above table that 52.1% of the respondents measuring oil content level in each seed with a help of specially designed equipment. 26.7% of them assessed based on weight. On the other hand 21.2% of the respondents opined that they were assessed based on the size. From the analysis, it is found that 52.1% of them measuring the seeds graded them based on the oil content level.

#### **SUMMARY OF FINDINGS**

#### **CONCLUSIONS AND SUGGESTIONS**

The present study is a micro level analysis of the production and marketing of oilseeds with special reference to groundnut in two talukas of Haveri District in North Karnataka region. The

analysis has covered 80 ground nut growing farmers in the study area. The respondent 40 farmers from each talukas were interviewed with a well structured interview schedule covering different aspects of production and marketing dimensions

The study is aimed at measuring the benefits enjoyed by the farmers and the problems faced by them during production and marketing of oilseeds in the study area. Field survey technique was employed to collect the first hand information from the sample respondents. Interview schedule was the main tool employed to collect the pertinent data. The data thus collected were arranged in simple tabular forms and appropriate statistical tools were used for

data analysis. Based on this analysis, Interpretations were made systematically.

An attempt was made to recapitulate the key findings and conclusion. Based on these findings, a few suggestions have also been made.

On the marketing dimensions of groundnut different aspects likes assembling , packaging, storage, grading transport channel of distribution marketing cost finance, pricing and price trends during the 2009-2010 have been analysed in detail and the major marketing problems of the groundnut growing farmers have been analysed on the basis of perceptions of the respondent farmers. The major findings and conclusions along with the necessary suggestions have been provided here.

#### **FINDINGS OF THE STUDY**

1. It was observed that the yield levels of groundnut in the state as a whole were declining over time and that of sunflower too was not encouraging. Hence, there is an immediate need to take appropriate yield raising measures for sustained production of oilseeds in the study area.
2. The study has provided enough evidence that the area allocation decisions in respect of oilseed crops have been governed by their relative profitability, indicating that price factors are more important than non-price factors. Hence, the ongoing price policy should be directed towards assuring appropriate remunerative prices to oilseed producers in the study area.
3. It was revealed that groundnut and sunflower prices in the domestic and international market are integrated. This implies that domestic market is responsive to changes in the international market prices and producers would benefit from the increases in the international market prices. However, this benefit has not been fully exploited by the

farmers because we are not self sufficient in edible oils. Self sufficiency can be achieved by evolving high yielding varieties and providing improved technologies to the producers. So, government should come out with appropriate policy to overcome this problem.

4. The production, consumption and exports of major oilseeds have witnessed a significant transformation in the last 14 years. During this 14 years period, in absolute terms, world oilseed production increased by 79% consumption by 72% and world trade by an impressive 131.4%.
5. The consumption of vegetable oils worldwide has gone up by 3.6% in the last seven years (2000-07). It has shown an upward trend with variable rates - from a minimum of 3% in 2001-02 to as high as 7.5% in 2004-05. In the last two years (2005-06 and 2006-07), the growth percentage has declined (year on year), and has stood at 6.7% and 5% respectively.
6. Sources of information about oilseed market was studied and found that brokers and news papers are the main sources providing about information about oilseed market.
7. Problems with regulated market was studied and it was learned that the officials in the regulated market taking more time unnecessarily at the time of marketing the oilseeds. It is followed by the tactics played the buyers in fixing the price through mutual understanding
8. Methods of selling oilseeds was studied and found that regulated market and commission agents are the main modes of selling oilseeds. During volatility the farmers using aggressive selling strategies when the market is peak positions. Some farmers store the oilseeds in the godowns during the inflation

9. while analyzing the pricing methods practiced in the oilseeds market, it is noted that majority (58%) of the respondents selling oilseeds according to the market price and 38.6% of the respondents using auction price made in the regulated market.

### **SUGGESTIONS FOR THE POLICY MAKERS**

Among the selected oilseeds, castor seed crops showing high yield in the tribal area and forest areas. The tribal people are producing good yield of castor seeds but finds difficult to sell out in the market.

From the study it is divulged that the farmers producing oilseeds have collected latest information only from the fellow farmers. Hence, it is suggested that more number of seed The regulated market staff should be trained psychologically to take the farmers issue amicably. Necessary training is very much essential to make them to work efficiently without making unnecessary time delay.

The following suggestions are recommended for strengthening the marketing of oilseeds:

1. Better enforcement of regulated markets, so that more farmers feel attracted to use them (at present less than half), getting the benefit of higher prices and for correct quality and quantity
2. Strengthening cooperative marketing institutions and introduction of forward marketing and contract farming, which will also help the farmer to get a better price for his produce.
3. Promoting market integration, which will also get a better price for the farmers.
4. Price incentives for edible oil storage in the lean season.
5. Reducing the cost of storage by introducing bulk storage facilities

6. Alleviating the over-regulation of markets and introduction of future markets and hedging practices. Rewarding better quality produce with better price.
7. Streamlining the six statutory regulations regarding quality.

### **CONCLUSIONS**

Oils and oilseeds played an important role in the Indian economy for a long time India produces a large variety of oilseeds including groundnut, gingelly, sunflower and castor seeds that earn the country a huge share of foreign exchange while analyzing the world level oilseed productivity, India occupies the second place for groundnut productivity and in sunflower seeds though Russian federations are in top, India tries to fulfill the domestic demand. The production, consumption and exports of these selected oilseeds have witnessed a significant transformation in the last 14 years. Further it is advised that the farmers are suffering more due to lack of adequate working capital. A separate Co-operative marketing society exclusively for oilseed growers may be established and it should help the farmers who are in that need of adequate working capital. The oil seeds industry in general and groundnut in particular is faced with many problems and challenges. The inadequacy of cropped area, low productivity lack of adequate supply of quality seeds absence of integrated nutrient supply management, inefficient crop management practices, absence of suitable soil and moisture conservation etc are the major problems in the area of production management. The problem areas of market of oil seeds and groundnut relate to absence of scientific assembling and storage, lack of adequate transport and grading facilities insufficient market information. The role of market intermediaries and the APMC have been

found unsatisfactory. High marketing costs and inadequate finance resulting in distress sales in the village local sales at low prices are the other set of marketing problems of groundnut farmers and sellers.

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