A STUDY ON PROCUREMENT OF OILSEEDS AND SALES MANAGEMENT OF EDIBLE OIL BY KARNATAKA COOPERATIVE OILSEEDS GROWERS FEDERATION LIMITED (KOF)

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DEPARTMENT OF AGRICULTURAL MARKETING,
COOPERATION AND BUSINESS MANAGEMENT
UNIVERSITY OF AGRICULTURAL SCIENCES
BENGALURU - 560 065

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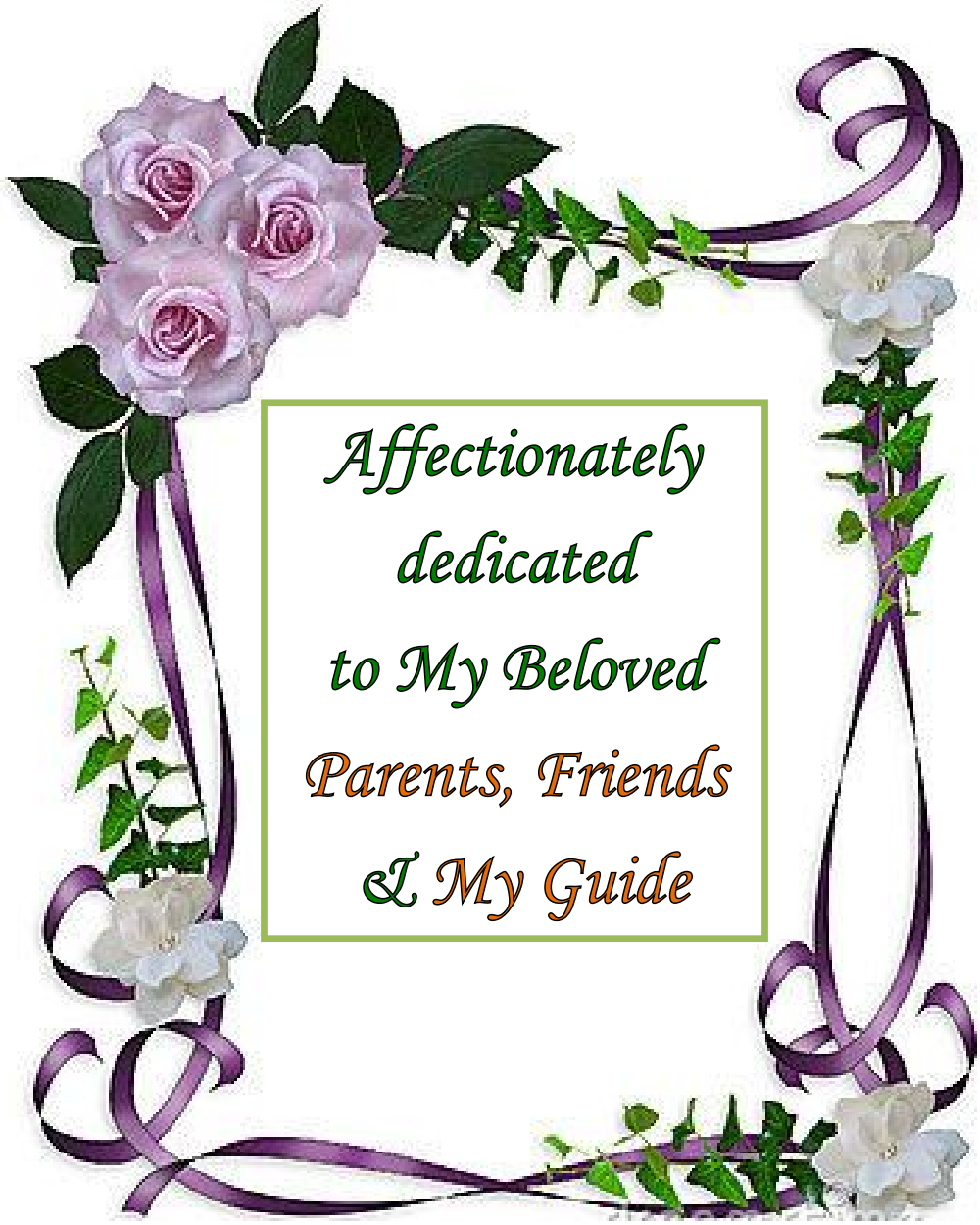
Affectionately
dedicated
to My Beloved
Parents, Friends
& My Guide

DEPARTMENT OF AGRICULTURAL MARKETING, COOPERATION AND BUSINESS MANAGEMENT
UNIVERSITY OF AGRICULTURAL SCIENCES
BENGALURU – 560 065

CERTIFICATE

This is to certify that the thesis entitled **"A Study on Procurement of Oilseeds and Sales Management of Edible Oil by Karnataka Cooperative Oilseeds Growers Federation Limited (KOF)"** submitted by **Mr. ANANDA, C**, ID No. **PAK 9123** for the degree of **MASTER OF SCIENCE (Agriculture)** in **AGRICULTURAL MARKETING AND COOPERATION** to the University of Agricultural Sciences, GKVK, Bengaluru, is a record of research work done by him during the period of his study in this University under my guidance and supervision, and the thesis has not previously formed the basis of the award of any other degree, diploma, associate ship, fellowship or similar other titles.

Bengaluru
July, 2011

(M.S. JAYARAM)
Major Advisor

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Bengaluru

July, 2011 *(Ananda, C.)*

A Study on Procurement of Oilseeds and Sales Management of Edible Oil by Karnataka Cooperative Oilseeds Growers Federation Limited (KOF)

Ananda, C.

Abstract

The research was conducted to study the procurement of oilseeds and sales management of edible oil by Karnataka Cooperative Oilseeds Growers Federation Limited (KOF). The primary data were collected by member farmers of KOF, personnel of KOF, distributors, stockists and retailers. The secondary data were collected from the audit reports, handouts of KOF and other published sources. KOF procures oilseeds from the Agricultural Produce Market Committees (APMC's) through commission agents. KOF procures oil from its own processing unit, regional unions and also from private oil mills. Better price, less risky and absence of middlemen were the important factors which influences the sales of oilseeds by members/farmers to village trader. The pricing strategy for edible oil includes various components like cost of oil, packing cost, transportation cost, interest on working capital, value added tax and margins etc. Sales promotion expenses incurred was maximum on television and boards. The compound growth rate of net sales of edible oil of the KOF was 8.3 per cent. The seasonal indices of sales of edible oil of KOF were found to be maximum in the month of January. KOF is distributing the packaged edible oil brands to the consumers through its own retail outlets, distributors, stockists/ wholesalers, retailers, institutions and through organized retail outlets. The stockists and retailers average margin was found to be maximum on coconut oil and deepa lighting oil respectively. It was realized from the study that KOF brands required intensive promotions.

Ananda, C. (M. S. Jayaram)

Major Advisor

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಎಣ್ಣೆಕಾಳು ಬೆಳೆಗಾರರ ಸಹಕಾರ ಮಹಾಮಂಡಳಿ ನಿಯಮಿತ (ಕೆ.ಒ.ಎಫ್) ಮೂಲಕ ಎಣ್ಣೆಕಾಳುಗಳ ಖರೀದಿ ಮತ್ತು ಖಾದ್ಯ ತೈಲ ಮಾರಾಟ ನಿರ್ವಹಣೆಯ ಅಧ್ಯಯನ

ಆನಂದ, ಸಿ.

ಸಾರಾಂಶ

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಎಣ್ಣೆಕಾಳು ಬೆಳೆಗಾರರ ಸಹಕಾರ ಮಹಾಮಂಡಳಿ ನಿಯಮಿತ (ಕೆ.ಒ.ಎಫ್) ಮೂಲಕ ಎಣ್ಣೆಕಾಳುಗಳ ಖರೀದಿ ಮತ್ತು ಖಾದ್ಯ ತೈಲ ಮಾರಾಟ ನಿರ್ವಹಣೆಯನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಈ ಸಂಶೋಧನೆಯನ್ನು ನಡೆಸಲಾಗಿದೆ. ಸಂಸ್ಥೆಯ ಕಾರ್ಯವೈಖರಿ, ಬೆಳವಣಿಗೆ ಮತ್ತು ಆಡಳಿತ ಕುರಿತಾದ ಮಾಹಿತಿಗಳನ್ನು ಕೆ.ಒ.ಎಫ್. ಸದಸ್ಯರು/ ರೈತರು, ಕೆ.ಒ.ಎಫ್. ಸಿಬ್ಬಂದಿ, ವಿತರಕರು, ಸಗಟು ಹಾಗೂ ಚಿಲ್ಲರೆ ವ್ಯಾಪಾರಿಗಳನ್ನು ಸಂದರ್ಶಿಸಿ, ಪೂರ್ವಸಿದ್ದಪಡಿಸಿದ ಪ್ರಶ್ನಾವಳಿಯ ಮೂಲಕ ಸಂಗ್ರಹಿಸಲಾಯಿತು. ಸಂಸ್ಥೆಗೆ ಸಂಬಂಧಿಸಿದ ಇತರೆ ವ್ಯವಹಾರಾತ್ಮಕ ವಿವರಗಳನ್ನು ಮಂಡಳಿಯ ಲೆಕ್ಕ ವಿಮರ್ಶಾ ವರದಿಗಳು, ಕರ ಪತ್ರ ಮತ್ತು ಇತರೆ ಪ್ರಕಟಿಸಿದ ಮೂಲಗಳಿಂದ ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಕೆ.ಒ.ಎಫ್. ಮಂಡಳಿಯು ಎಣ್ಣೆ ಕಾಳುಗಳನ್ನು ಕೃಷಿ ಉತ್ಪನ್ನ ಮಾರುಕಟ್ಟೆ ಸಮಿತಿಗಳಲ್ಲಿರುವ ದಲ್ಲಾಳಿಗಳ ಮುಖಾಂತರ ಖರೀದಿ ಮಾಡುತ್ತದೆ. ಕೆ.ಒ.ಎಫ್. ತೈಲವನ್ನು ತನ್ನ ಸ್ವಂತ ಸಂಸ್ಕರಣಾ ಘಟಕದಲ್ಲಿ ಸಂಸ್ಕರಿಸುವುದಲ್ಲದೆ, ಪ್ರಾದೇಶಿಕ ಘಟಕಗಳು ಮತ್ತು ಖಾಸಗಿ ತೈಲ ಗಿರಣಿಗಳಿಂದಲೂ ಖರೀದಿ ಮಾಡುತ್ತದೆ. ರೈತರು ಹೆಚ್ಚಾಗಿ ಎಣ್ಣೆ ಕಾಳುಗಳನ್ನು ಗ್ರಾಮದಲ್ಲೇ ವ್ಯಾಪಾರಿಗಳಿಗೆ ಮಾರಾಟ ಮಾಡುತ್ತಿದ್ದು ಅದಕ್ಕೆ ಉತ್ತಮ ಬೆಲೆ, ಕಡಿಮೆ ಶ್ರಮ ಮತ್ತು ಮಧ್ಯವರ್ತಿಗಳ ಅನುಪಸ್ಥಿತಿ ಇವೇ ಮೊದಲಾದ ಪ್ರಭಾವ ಬೀರುವಂತಹ ಪ್ರಮುಖ ಅಂಶಗಳಾಗಿರುತ್ತವೆ. ವಿವಿಧ ಖಾದ್ಯ ತೈಲ ಬ್ರಾಂಡ್‌ಗಳ ಬೆಲೆ ನಿಗದಿಯು ತೈಲ ಖರೀದಿ ವೆಚ್ಚ, ಪ್ಯಾಕಿಂಗ್ ವೆಚ್ಚ, ಸಾರಿಗೆ ವೆಚ್ಚ, ನಿರ್ವಹಣಾ ವೆಚ್ಚದ ಮೇಲಿನ ಬಡ್ಡಿ, ಮೌಲ್ಯವರ್ಧಿತ ತೆರಿಗೆ ಹಾಗೂ ಲಾಭಾಂಶಗಳ ಮೇಲೆ ನಿರ್ಧರಿತವಾಗಿರುವುದು ಪ್ರಸ್ತುತ ಅಧ್ಯಯನದಿಂದ ತಿಳಿದುಬಂದಿರುತ್ತದೆ. ಕೆ.ಒ.ಎಫ್. ನ ತೈಲ ಪ್ರಚಾರ ವೆಚ್ಚಗಳು ದೂರದರ್ಶನ ಮತ್ತು ಪ್ರಚಾರ ಪಲಕಗಳ ಮೇಲೆ ಅತ್ಯಧಿಕವಾಗಿ ಕಂಡುಬಂದಿರುತ್ತದೆ ಮತ್ತು ಸಂಸ್ಥೆಯು ಖಾದ್ಯ ತೈಲದ ನಿವ್ವಳ ಮಾರಾಟದಲ್ಲಿ ಕಳೆದ ಹತ್ತು ವರ್ಷಗಳಲ್ಲಿ ಶೇ. ೮.೩ರಷ್ಟು ಬೆಳವಣಿಗೆಯನ್ನು ಸಾಧಿಸಿದೆ. ಕೆ.ಒ.ಎಫ್. ಖಾದ್ಯ ತೈಲ ಮಾರಾಟದ ಋತು ಸೂಚ್ಯಂಕಗಳು ಜನವರಿ ತಿಂಗಳಲ್ಲಿ ಗರಿಷ್ಟವಾಗಿ ಕಂಡುಬಂದಿರುತ್ತದೆ. ಕೆ.ಒ.ಎಫ್. ಪ್ಯಾಕೇಜ್ ಮಾಡಿದ ವಿವಿಧ ಖಾದ್ಯ ತೈಲ ಬ್ರಾಂಡ್‌ಗಳನ್ನು ತನ್ನ ಸ್ವಂತ ಮಳಿಗೆಗಳು, ವಿತರಕರು, ಸಗಟು ವ್ಯಾಪಾರಿಗಳು, ಚಿಲ್ಲರೆ ವ್ಯಾಪಾರಿಗಳು, ವಿವಿಧ ಸಂಘ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಸಂಘಟಿತ ಚಿಲ್ಲರೆ ಮಳಿಗೆಗಳ ಮೂಲಕ ಗ್ರಾಹಕರಿಗೆ ವಿತರಿಸುತ್ತದೆ. ಸಗಟು ವ್ಯಾಪಾರಿಗಳ ಮತ್ತು ಚಿಲ್ಲರೆ ವ್ಯಾಪಾರಿಗಳ ಸರಾಸರಿ ಲಾಭಾಂಶ ತೆಂಗಿನ ಎಣ್ಣೆ ಮತ್ತು ದೀಪದ ಎಣ್ಣೆಗಳಲ್ಲಿ ಗರಿಷ್ಟವಾಗಿ ಕಂಡುಬಂದಿರುತ್ತದೆ. ಕೆ.ಒ.ಎಫ್. ಬ್ರಾಂಡ್‌ಗಳಿಗೆ ತೀವ್ರ ಪ್ರಚಾರದ ಅವಶ್ಯಕತೆ ಇದೆ ಎಂದು ಈ ಅಧ್ಯಯನದಿಂದ ಕಂಡುಬಂದಿದೆ.

ಆನಂದ, ಸಿ.

(ಎಂ. ಎಸ್. ಜಯರಾಮ್)

ಮುಖ್ಯ ಸಲಹೆಗಾರರು

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CHAPTER I
INTRODUCTION

Edible oils and fats are essential ingredients for a wholesome and balanced diet and are vital items of mass consumption. There are two sources of oils – primary source and secondary source. The primary sources are the nine principal oilseeds viz. groundnut, rapeseed / mustard, soyabean, sunflower, sesame, niger, safflower, castor and linseeds. Edible oils obtained through secondary source include coconut, cottonseed, rice bran and oilseed cakes.

Oilseeds occupy an important position in the Indian economy, as they provide the much needed protein, fat and energy to the human and livestock population and also earn precious foreign exchange to the country. No other farm commodity can really meet simultaneously in such a large quantity the energy and protein requirements of human body as oilseeds do.

Apart from their use in human foods and animal feeds, oilseeds also have a wide variety of industrial applications. The use of vegetable oils in soaps, paints and varnishes and even in lubricating oils has been known for quite some time. In recent years, oilseeds are finding their way in diverse industrial uses as fatty acids, glycerin, tannin and even chemicals. As a result of new technological developments, uses of oilseeds are actually increasing.

India is fortunate in having a wide range of oilseeds crops grown in its different agro climatic zones. Groundnut, mustard/rapeseed, sesame, safflower, linseed, nigerseed/castor are the major traditionally cultivated oilseeds. Soyabean and sunflower have also assumed importance in recent years. Coconut is most important amongst the plantation crops. Efforts are being made to grow oil palm in Andhra Pradesh, Karnataka,

Tamil Nadu in addition to Kerala and Andaman & Nicobar Islands. Among the non-conventional oils, rice bran oil and cottonseed oil are the most important oils being used. In addition, oilseeds of tree and forest origin, which are grown mostly in tribal inhabited areas, are also a significant source of oils.

India is a vast country and inhabitants of several of its regions have developed specific preference for certain oils depending upon the oils available in the region. For example, people in the South and West prefer groundnut oil while those in the East and North use mustard/rapeseed oil. Likewise several pockets in the South have a preference for coconut and sesame oil. Inhabitants of northern plain are basically hard fat consumers and therefore, prefer Vanaspati, a term used to denote a partially hydrogenated edible oil mixture. Vanaspati has an important role in our edible oil economy. Its production is about 1.2 million tonnes annually. It has around 10% share of the edible oil market. It has the ability to absorb a heterogeneous variety of oils, which do not generally find direct marketing opportunities because of consumers' preference for traditional oils such as groundnut oil, mustard oil, sesame oil etc. For example, oils like soybean, sunflower, rice bran and cottonseed and oils from oilseeds of tree and forest origin had found their way to the edible pool largely through vanaspati route. Of late, things have changed; through technological means such as refining, bleaching and de - odouraisation, all oils have been rendered practically colourless, odourless and tasteless and, therefore, have become easily interchangeable in the kitchen. Newer oils which were not known before have entered the kitchen, like those of cottonseed, sunflower, palm oil or its liquid fraction (palmolein), soybean and rice bran. These tend to have a strong and distinctive taste preferred by most traditional customers. The share of raw oil, refined oil and vanaspati in the total edible oil market is estimated at 35%, 55% and 10% respectively.

Production of oilseeds, which has increased significantly in the 1980s, hit a plateau in the 1990s. The production of domestic oilseeds showed an increasing trend since from 2003-04. The supply from indigenous sources falls short of demand in the market because demand of edible oils has been increasing at a pace faster than that of production due to growth in population and improvement in the standards of living of people.

There are two major features, which have very significantly contributed to the development of this sector. One was the setting up of the Technology Mission on Oilseeds in 1986. This gave a thrust to Government's efforts for augmenting the production of oilseeds. This is evident by the very impressive increase in the production of oilseeds from about 11.3 million tonnes in 1986-87 to 24.8 million tonnes in 1998-99. There was some setback in 1999-00 because of the un-seasonal rain followed by unfavorable weather conditions. The production of oilseeds declined to 20.7 million tonnes during 1999-00. However, the oilseeds production went up to 23.72 million tonnes in 2005-06 and was 23.01 million tonnes during 2009-10. The other dominant feature which has had significant impact on the present status of edible oilseeds/oil industry has been the programme of liberalization under which the Government's economic policy allowing greater freedom to the open market and encourages healthy competition and self regulation rather than protection and control. Controls and regulations have been relaxed resulting in a highly competitive market dominated by both domestic and multinational players.

Oilseeds and edible oils are two of the most sensitive essential commodities. India is one of the largest producers of oilseeds in the world and this sector occupies an important position in the agricultural economy.

The area and production under oilseeds are 27.56 million hectares and 27.72 million tonnes respectively during 2008-09(APPENDIX I). Madhya Pradesh ranks first in the production of oilseeds followed by Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Karnataka and Uttar Pradesh. Karnataka is the 6th major oilseeds growing state in the country. It accounts for 1.21 million tonnes of production in an area of 2.18 million hectares during 2008-09. Karnataka contributes 7.90 per cent to the total production of oilseeds in the country. Madhya Pradesh has largest area in oilseeds in the country. It accounts for 6.49 million hectares followed by Rajasthan, Maharashtra, Gujarat, Andhra Pradesh, Karnataka and Uttar Pradesh accounts 4.65, 3.98, 2.98, 2.60, 2.18 and 1.35 million hectares respectively(APPENDIX IV).The average productivity of oilseeds in India is 1006 kg / hectare during 2008-09.

The total production of oilseeds increased from 5.16 million tonnes during 1950-51 to 27.72 million tonnes during 2008-09. The area under irrigation was 27.1 per cent during 2008-09. The area under oilseeds in the country is also increased from 10.73 million hectares during 1950-51 to 27.56 million hectares during 2008-09.

Groundnut is considered as one of the universally preferred oil seed crop and is grown throughout the world. It has gained a lot of economic importance and nutritional value on a global scale. It has now been regarded as poor man's cashews and has become a replacement for expensive nuts such as almonds, cashews and pistachio.

Area, production and productivity of groundnut are 6.16 million hectares, 7.17 million tonnes and 1163 kg / hectare respectively during 2008-09(APPENDIX II). The area under groundnut was declined from 8.67 million hectares during 1991-92 to 6.16 million hectares during 2008-09. Karnataka is the fifth major groundnut growing State in the country. It accounts for 0.50 million tonnes of production in an area of

0.85 million hectares. It contributes 13.79 per cent to the total production of groundnut in the country (APPENDIX V). The major groundnut growing districts in Karnataka are Chitradurga, Dharwad, Belgaum, Bijapur, Raichur, Bellary and Bidar. About 70 per cent of the crop is grown in black soils with the remaining 30 percent in red soils.

The largest producing States in the country are Gujarat, Andhra Pradesh and Tamil Nadu accounts for 2.66 million tonnes, 1.55 million tonnes and 0.97 million tonnes respectively. Gujarat contributes 30.94 percent to the total production of groundnut in India followed by Andhra Pradesh and Karnataka where they contribute 28.65 per cent and 13.79 per cent to the total production, respectively. Productivity level of groundnut in Karnataka was 589 kg/ha during 2008-09 whereas Tamil Nadu has higher productivity level of 1989 kg/ha during 2008-09.

World groundnut production stood at 34.43 million tonnes in 2008-09 and India with 6.25 (18%) million tonnes is the second largest producer after China with 14.30 (32.95%) million tonnes and the United States of America with 2.34 (6.8%) million tonnes. India is placed 2nd in the world groundnut consumption list. The country actually consumes almost all of its groundnut produced that is around 30 per cent of the world's total consumption. The main demand for groundnut and derivatives originate from the western and southern parts of the country.

Sunflower is native to North America but the largest traditional producer is Russia or the former Soviet Union. Sunflower is one of the important oilseed crops next to groundnut in India. In India, it was used mainly as ornamental crop but in the recent past it has become an important source of edible and nutritious oils used for a variety of cooking purposes. Sunflower seed contains about 48 – 53 per cent edible oil.

Sunflower seed is one of the most nutritious and healthy foods. Besides oil, it is used in the manufacturing of paints, resins, plastics, soaps, cosmetics and many other industrial products. This crop has gained importance due to its short duration, photo-insensitivity, constituting excellent quality of oil, wide adaptability to different kinds of cropping pattern, and drought tolerance. Sunflower is grown as a pure crop as well as an inter crop with Groundnut, Pigeon pea, Castor, Soybean or Urad bean. Since it is a photo-insensitive crop, it can be grown throughout the year. Sunflower oil cake is rich in high quality protein (40 – 44 %) and used as cattle and poultry feed. This crop is considered valuable in the economic development of an agro - based country.

The production of sunflower is 1.16 million tonnes in an area of 1.81 million hectares during 2008-09 in India (APPENDIX III). Yield level is 639 kg/ha. Sunflower production has increased from 0.08 million tonnes during 1970-71 to 1.16 million tonnes during 2008-09. Karnataka State ranks first in the area and production of sunflower followed by Andhra Pradesh, Maharashtra, Tamil Nadu, Haryana, Bihar and Uttar Pradesh. Karnataka has larger share in the production of sunflower in the country. It contributes 55.22 per cent to the total production of sunflower (APPENDIX VI). In Karnataka, major sunflower growing districts are Chitradurga, Davanagere, Tumkur, Mysore & Hassan. Chitradurga district has the largest area under sunflower followed by Davanagere & the major sunflower markets of the State are Chitradurga, Challakere & Davanagere.

According to National Sunflower Association statistics, it has been reported that sunflower was grown in about 24.5 million hectares of land with a production of 34.5 million tonnes during 2008-09 in the world. Russia was the largest producer of sunflower with 23.1 percent of

production in the world followed by Ukraine (17.0 %) & Argentina (14.3%) during the same period. India ranks fourth among these countries accounting for about six percent of the world production. According to the Agricultural Produce Market Committee's (APMC's), 70 per cent of the crop is produced in Rabi (November – March) season, and remaining 30 per cent in Kharif (June – September) based on market arrivals. The major trading centers for sunflower oil are Mumbai, Chennai, and Hyderabad.

Rajasthan State ranks first in the production of rapeseed and mustard in India. It accounts for 3.50 million tonnes during 2008-09. Madhya Pradesh State ranks first in the production of soybean accounts for 5.85 million tonnes during 2008-09. The other major producing States are Maharashtra and Rajasthan. Present level of oilseeds / oils in the country is insufficient to meet the country's domestic needs/requirements. The demand for edible oil during 2008-09 was 167.81 lakh tonnes. The production / net availability of edible oils was 85.98 lakh tonnes. The gap between demand and supply of indigenous edible oils is being bridged by imports. The imports of edible oils during 2008-09 are 81.83 lakh tonnes. The demand for edible oil is expected to be 183 lakh tonnes by 2009-10.

Imports were significantly increased from 43.97 lakh tonnes during 2003-04 to 81.83 lakh tonnes during 2008-09 in order to meet the domestic requirements. Total availability / consumption of edible oil from all the sources increased from 115.37 lakh tonnes during 2003-04 to 167.81 lakh tonnes during 2008-09.

Export of oil meals, oilseeds and minor oils has increased from 50.09 lakh tonnes in the financial year 2005-06 to 61.94 lakh tonnes in the financial year 2008-09. In terms of value, realization has gone up from Rs. 5213.58 crores to Rs.12, 717 crores.

Per capita consumption of edible oils in India increased from 11.1 Kg /annum during 2003-04 to 13.4 during 2008-09. Per capita consumption of edible oils has also increased in world from 20.15 Kg /annum during 2003-04 to 23.87 Kg /annum during 2008-09.

The prices of the major edible oils in the domestic market as well as in the international market have shown mixed trend during the last one year. As on 21.01.2010, the domestic wholesale prices of groundnut oil, cottonseed oil, vanaspati, RBD palmolein and rice bran oil have increased by 18.26 per cent, 3.41 per cent, 10.57 per cent, 18.15 per cent, and 13.59 per cent respectively during the last one year where as the wholesale domestic prices of soyabean oil, mustard oil, sunflower oil, sesame oil and coconut oil have decreased by 5.75 per cent, 15.77 per cent, 1.04 per cent, 2.82 per cent and 11.84 per cent respectively. As on 21.01.2010, the international prices of Crude Palm Oil (CPO), soyabean oil, sunflower oil and RBD palmolein have increased by 47.47 per cent, 17.01 per cent, 20.98 per cent and 30.77 per cent respectively during the year.

Despite large production of oilseeds in the country, there is a big gap between per capita requirement and per capita availability of edible oil.

A profile of KOF

Government of India in mid 1980's started the "Technology Mission on Oilseeds and Pulses" (TMOP) in order to enhance productivity in oilseeds and make India self - sufficient in edible oil. On 22.8.1984 Government of Karnataka approved the implementation of National Dairy Development Board's (NDDB) project “Restructuring Edible Oil and Oilseeds Production and Marketing” in Karnataka keeping in view the objectives laid down in the TMOP.

The Karnataka Co-operative Oilseeds Growers Federation Limited (KOF), the agency entrusted with implementation of the Project. The KOF was registered on 26th October 1984, under the Karnataka Co-operative Societies Act. The project, which was inspired by the Anand Model of Milk Co-operatives, is designed to create an integrated Co-operative System of production, procurement, processing of oilseeds and marketing of edible oil and its by-products.

This project aimed at establishing a direct link between the producer and the consumer by eliminating middlemen. Village level primary co-operative societies were organized by making the oilseeds growers as members; in turn these primary co-operative societies became the members of the apex body at the State level till June 1990 during the first phase of the project.

During the second phase of the project the structure has been re-organized to a three tier cooperative structure with the village level Oilseeds Growers' Cooperative Societies affiliated to Regional Unions organized at the district level and in turn the Regional Unions have been affiliated to the State level Federation.

Initially the project covered 32 taluks in the districts of Dharwad, Raichur, Bijapur, Gulbarga, Bellary and Chitradurga. At present, it covers eight more districts namely, Koppal, Bidar, Davanagere, Tumkur, Haveri, Gadag, Bagalkot and Belgaum.

The Karnataka Co-operative Oilseeds Growers Federation Limited., (KOF) has shown good progress in physical terms over the years. The number of Primary Oilseeds Growers Co-Operative Societies (OGCS) increased many folds from 35 during 1984-85 to 352 during 2008-09, number of villages covered increased from 145 to 3197 and oilseeds area covered increased from 12,000 hectares to 3, 65,315 hectares during

2008-09. Procurement of oilseeds increased from 316 metric tonnes during 1984-85 to 1234.278 metric tonnes during 2009-10.

The Three Regional Unions, registered on 3rd June 1990, are as shown below

i. **Raichur Regional Union** covering the districts of Raichur, Gulbarga, Koppal and Bidar districts.

ii. **Chitradurga Regional Union** covering the districts of Chitradurga, Bellary, Davanagere and Tumkur districts

iii. **Dharwad Regional Union** covering the districts of Dharwad, Bijapur, Haveri, Gadag, Bagalkot and Belgaum districts.

There are 352 Oilseeds Growers Co-operative Societies working under the above three unions with 1, 46,483 farmer members.

Objectives of the Federation

a. To carry out activities conducive for socio-economic development of Oilseed growers by efficient marketing of commodities.

b. To carry out activities of production, procurement and processing of commodities for economic development of oilseeds growers through the affiliated oilseeds unions.

c. To develop and expansion into such other allied activities as may be conducive for the promotion of edible oil industry, improvement of land, increase of productivity of oilseeds per hectare and economic development of those engaged in oilseeds production.

Seed Distribution Activity

KOF and its regional unions are distributing quality seeds to the farmers every year under the department of agriculture subsidy

programmes. The farmers are very happy regarding the quality of the seeds supplied by KOF and regional unions.

KOF and its regional unions have supplied together 1, 04,755 quintals of groundnut, sunflower and soybean seeds during 2009-10 for more than 1 lakh farmers. KOF and its regional unions are planning to increase the seed production activity and produce nearly two lakh quintals during the next year i.e., 2010-11.

Area Agronomic Centre and Training Centre, Keremathihalli, Haveri.

The Federation has been giving highest priority for increasing the supply of improved seed. Towards this end, the Federation has set up an Area Agronomic Centre at Haveri with net cultivable area of 37.80 ha, where various techniques for multiplication of breeder seeds and adaptive research is carried out. This farm is situated at Keremathihalli village in Haveri district where it also functions as demonstration centre for trials and improved methods of cultivation.

The federation has set up a training Centre along with the Area Agronomic Centre to train the field staff, society secretaries, demonstration growers, seed grower members etc.

Processing Details

The details of quantities of oilseeds procured for crushing at Davanagere oil complex and Raichur plant, resultant oil and cake obtained are as given below:

(Quantity in metric tonnes)

Sl.No	Year	Quantity processed		Oil produced	
		Groundnut	Sunflower	Groundnut	Sunflower
1.	2007-08	1864.22	553.950	509.85	176.35
2.	2008-09	1568.99	1818.00	390.72	554.520
3.	2009-10 (as on31.07.09)	143.520	----------	36.00	----------

Source: Hand-out of KOF Ltd.

The Federation under its direct control has a crushing unit situated at Davanagere acquired from Karnataka Co-operative Marketing Federation with 50 TDP Groundnut crushing capacity, during July 1992 at a total cost of Rs.1.25 cores.

Significance of the study

A Study on Procurement of oilseeds and sales management of edible oil by Karnataka Cooperative Oilseeds Growers Federation Limited (KOF), has special significance. Members (farmers) of the KOF are selling oilseeds to different agencies. They are not selling to the oilseeds growers co-operative societies of KOF. Sales promotion measures of KOF are not effective and competitive unlike the local competitors. Keeping this view, the following objectives are considered for the study.

Specific objectives:

i. To assess the procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by members to different agencies.

ii. To analyse the pricing strategy followed for edible oil by the KOF.

iii. To assess the sales promotion measures taken up by the KOF.

iv. To analyse the different channels of distribution of edible oil by the KOF.

Hypotheses of the study

i. The procurement strategy followed by the KOF is efficient.

ii. The pricing strategy followed for edible oil by the KOF is competitive.

iii. Sales Promotional measures undertaken by KOF are not effective.

iv. The channels of distribution of edible oil by KOF are not penetrative.

Review of Literature

CHAPTER II

REVIEW OF LITERATURE

A review of past research helps in identifying the conceptual and methodological issues relevant to the study. This will enable the researcher to collect relevant data and subject them to sound reasoning and meaningful interpretation. This chapter attempts a brief review of the relevant research literature related to the present study. Keeping in view of objectives of the study, reviews are presented under the following headings.

2.1 Procurement Strategy and factors influencing

2.2 Pricing Strategy

2.3 Sales Promotion Measures

2.4 Channels of Distribution

2.1 Procurement Strategy and factors influencing

Anonymous (1977) found a strong correlation between the quantity of milk procured and the price paid by the co-operatives, since private trade in the milk offered stiff competition to lure away the milk producers. Further, the study suggested for competitive pricing to capture market for milk from private traders.

Koli (1979) identified factors/reasons responsible for the weakness of dairy co-operatives in Maharashtra. The reasons identified are: severe competition by private vendors, poor managerial ability of the dairy co-operatives, lack of adequate transportation facilities and inadequate capital availability.

Singh *et al.* (1983) studied the management of milk procurement at village level by co-operative, private and public sectors by selecting three

villages in Kamal. They found that monthly variation in milk prices was almost constant by co-operatives, where as the private sector paid high prices during last three months of study period (April – June 1987) and the public sector varied the price quarterly. Among three sectors, co-operative sector paid highest price. Monthly variation in milk production was not much; the lowest and highest percent of milk procured in a month was 6.18 per cent (in December) and 12.59 per cent (in March) of yearly procurement by co-operatives, respectively.

Mukunda (1988) assessed the marketing challenges and constraints of milk and its products by 21st century. He estimated that there would be 200 milk sheds in 275 districts with 80,000 DCs and procuring 2 crore litres of milk per day by 2000 A.D. He reported that potential market for liquid milk is children under 14 years and the population is going to be reduced from 39.7 percent by 2000 A.D., he felt the need to have strategies to expand milk market. Milk and its product marketing in rural areas shall be given more attention, because there would be 390 million people below poverty line and need low volume / low priced milk products for this segment. He suggested that marketers of milk products should analyze the changes in consumption of traditional foods.

Nagaraj (1989) made an attempt to estimate the economics of fruit processing and to evaluate the performance of Karnataka Agro-Fruits Ltd., Bangalore. The results showed that the firm had procured about 691.9 tonnes of different varieties of fresh fruits valued at Rs.13.4 lakhs with an outturn of 400.62 tonnes of finished product worth Rs. 28.9 lakhs. All the fruits bearing mango were procured through Horticultural Produce Marketing Co-Operative Society, while mango was procured through tender system.

Mahadevan (1994) stated that face the future with great optimism as the opportunities within the country for dairy products are limitless. He listed four factors which greatly affect milk marketing efforts namely, growth in the population in both number and purchasing powers, technological progress in processing, material assurance and packaging and increasing consumer awareness on quality.

Chikka Reddy (1998) described that the regional oilseed grower's Co-operative federation in North Karnataka has launched a novel scheme for farmers on experimental basis. The scheme is running on barter system. If farmers supplied one quintal of oilseeds to the federation, they would be supplied with 31 litres of refined oil in packets in phases. The scheme was first started in Belvanaki village of Ron taluk. At present, the scheme is proved successful in many villages and the federation has decided to extend it to other villages in north Karnataka. The scheme had been launched to eradicate exploitation of farmers by businessmen in the open market.

Shobha (1998) in her study on performance of fruit and vegetable processing unit in co-operative and private sector in Uttar Kannada district found that the private sector processing unit procured fruits and vegetables to the tune of 187.098 metric tonnes valued at Rs. 8.37 lakhs. The procurement of fruits and vegetables by co-operative sector unit was 161 metric tonnes valued at Rs. 6.22 lakhs. Fresh fruits and vegetables constituted 87.58 percent of quantity while semi processed fruits and vegetables accounted for 12.42 percent of the total raw materials purchased.

Ramadev (1998) in his study on management appraisal of cashew nut processing industries in Uttar Kannada revealed that overall cost of cashew nut procurement was Rs. 324.12 per quintal. The total cost of procurement per quintal worked out to be the highest through interstate

import-processor at Rs. 434.41 followed by grower-trader-processor, grower small dealer-processor, grower's processor and international imports processor at Rs. 379.63, Rs. 342.45, Rs. 323.33 and Rs. 299.99 per quintal, respectively.

Veena and Tajindear (2000) studied performance of Bhogpur and Jargoan sugar mills in Punjab. The procurement pattern of these two sugar mills, the Jargoan mill crushed 2238.67 thousand tonnes of sugarcane and produced 191.93 thousand tonnes of sugar. The quantity of cane crushed and production of sugar were higher for Jargoan mill compare to the Bhogpur sugar mill. The quantity of cane crushed and the quantum of sugar production was higher for Jargoan mill by 38 and 35 per cent, respectively. The percentage recovery of sugar for Jargoan mill was 8.38 being lower compared with 8.57 for the Bhogpur sugar mill.

Emongor and Kirsten (2006) stated that supermarkets procured approximately 60 per cent of fresh fruits and vegetables from local farmers, though the bulk of these were from large-scale farms. Products not produced in the host countries were imported from South Africa and other countries. Supermarkets procure dairy products from large processors. Farmers access supermarkets through dairy processors. Small scale dairy processors do not access the supermarkets because of high transaction costs and lack of transport. Government involvement in the supply chain in terms of setting policies and regulatory frameworks are important in determining the type of procurement strategies that develop, whether local producers especially small-scale farmers and processors access and supply to supermarkets.

Suprabha (2009) studied the business performance analysis of Karnataka Oilseed Growers Federation Limited in Bangalore. The study revealed that KOF procured oilseeds through its own Oilseed Growers

Co-operative Societies (OGCS) and regulated markets. Further KOF also imported oil through State Trading Corporation (STC) Limited. KOF marketed its branded products through agencies like private companies wholesalers, retailers, Government organizations, etc. The KOF had registered an impressive performance in respect of sales with annual compound growth rate of 12.96. Federation was having comfortable liquidity to meet short and long-term financial obligations. The gross profit margin increased over the years, but net profit margin remained almost constant, implying that the operating expenses relative to sales have been increasing over the years.

2.2 Pricing Strategy

Kahlon and Singh (1966) studied seasonal price fluctuations of groundnut of Khanna market in Ludhiana and he identified that the seasonal price was lowest in the month of October and November and highest in the month of August. June to August is most favourable months for groundnut marketing. Appreciable price differences were also noticed between small and large markets due to greater concentration of demand in big markets.

Singh and Chandra (1975) analysed the arrivals and prices of rapeseed and mustard and found that these increased simultaneously over the period 1967-75 in selected markets of Rajasthan. They attributed this phenomenon to the general increase in the price level due to inflation. However, they had also noticed that the prices were the highest during March – June and during October – January, when arrivals were observed to be lowest. On the basis of these trends a significant negative correlation between arrivals and prices was reported.

Verma and Nigam (1979) in their study on arrivals and prices of groundnut in Kanpur district found that arrivals in the mandi were

higher during december and february accounting for 56.48 percent of the total arrivals while prices were low. During that period, the prices were higher in off season, thereby indicating the negative character of relationship between arrivals and prices. The warehousing and storage facilities had to be increased both in mandi and village markets to reduce price fluctuations over time.

Awasthi *et al*. (1985) studied the relationship between arrivals and prices of groundnut in three groundnut markets in western region of M.P. and observed an abrupt and sudden decline in the price of groundnut, just after the harvest period and subsequently moderate price increase up to February. The prices after this period increased sub stantially till August. However the researchers reported a positive association between the prices and arrivals of the produce during the study period.

Bhupinder (1992) reported that marketing system is busy with routine work to educate consumers on benefits of purchasing milk from organised sector. He suggested inspiring, motivating and diverting towards attainment of goals to the marketing staff.

The study made the following recommendations while pricing the product.

i. Don't change price frequently
ii. Keep consumer in mind before price raise
iii. Announce price increase to reach 48 hours in advance
iv. Forecast trend in price based on seasonality of milk
v. Print the price on pouch or pack
vi. Attempt to sell low volume pouches or packs

Philip Kotler (1993) states that Sears companies found that its everyday low price strategy did not seem to be working. Their volume was not building up and their margins were lower. Sears apparently did not lower its prices significantly; many shoppers reported that sears low prices were still higher than competitors. One reason was that sears selling and administrative expenses round about 30 percent of sales, as compared with about 23 percent at rival K-mart. He suggested that in order to be successful with everyday low prices, sears first had to achieve everyday low costs.

Singhal (1995) stated that the union government had introduced a market intervention operation (MIO) in edible oils several years ago to stabilise and stop wide fluctuations in prices of edible oils in the country through NDDB. The NDDB was buying oil from the market from time to time whenever the prices are low and selling it when the prices are high. The board incurred huge losses which accumulated to Rs. 300 crores in the past five years due to the price spread which was about 100 percent to 300 percent during the same season or year to year was brought down to 25 percent to 50 percent by the board.

He further stated that, when the wide fluctuations in the prices of edible oil noticed due to uncertain crop prospects, the NDDB import edible oil to meet shortages and counter price risk.

Anonymous (1998) observed that groundnut oil raised close to all time high level of Rs.575 per kg on the oilseeds market today (August 20) due to several reasons like higher up country advises, thin supply because of poor stock position and heavy festive demand.

Chitra Phandis (1998) observed that KOF's products were priced higher than the products from private companies; being a co-operative, it faces some unique problems. For instance, Co-operatives, unlike

companies can't go public and raise cheap finance. They have to depend on bank for funds with heavy interest rates which have consistently pulled down its margins. There was also a problem with local taxes around two years ago. There is no way of opting out of paying the seven percent tax which eats in to the margins of the KOF.

Anonymous (1999) observed that the Gujarat Co-operative Milk Marketing Federation (GCMMF) has slashed the prices of all varieties of Dhara edible oil. This initiative has been taken in the face of below par performance of Dhara during 1998-99 and due to the overall quit in the market mainly on account of the availability of imported palmolien at cheaper prices in the Mumbai market.

Bolton and Venkatesh Shankar (2003) studies retailer pricing and promotions at a brand-store level. They examined 1,364 brand-store combinations from 17 chains, 212 stores and six categories of consumer package goods in five U.S. markets. Retailer pricing and promotion strategies are found to be based on combinations of four underlying dimensions: relative price, price variation, deal intensity and deal support. At the brand-store level, retailers practice five pricing strategies, labeled exclusive, moderately promotional, high-low, EDLP and aggressive pricing. The most prevalent pricing strategy is characterized by average relative brand price, low price variation, medium deal intensity and medium deal support. The findings suggest that retailers should closely monitor their competitor's price decisions at the brand level.

2.3 Sales Promotion Measures

Jennings (1970) studied various communications media; T.V. was undoubtedly the most potent and effective medium of advertising products and idea. The economic outcome of T.V. advertising was so

impressive that some of the companies have been transformed into major concerns by the use of communication effectively.

Aktin (1975) studied that the amount of exposure to television advertising and its effect on various behaviors and attitudes have been investigated; the results had indicated that frequent viewers reported more liking for frequently advertised foods.

Nageshwar Rao (1987) observed that massive advertising campaign had given boost to the sales of soft drinks in India. The young and educated turn to what the advertisements describes on refreshing soft drinks. Further, he observed that excessive consumption of soft drinks has adverse effect on human health due to acid; saccharin etc. still due to the advertising, the habit of taking soft drinks was catching up in small towns and villages.

Shivakumar (1987) explained importance of advertising as a tool of marketing and means of communication. He defined advertising as a mass media which will influence the consumption pattern of people, attitudes and underlying values. He reported that advertising is most effective source of information than other sources. The author stated that, advertisement gives teeth to marketing and sharpens competition, expands market and increases the sales. Lastly he added that advertising creates consumer awareness about choice, enables to take more rational decisions.

Dave Dyer (1988) reported that advertising and promotion boost consumption of dairy products, helping both the farmers and consumers. He cautioned that promotions shall be cost effective. Mandatory participation by all milk producers in national promotion programme, with a promotion check to know the effect of promotion would result

better. He suggested one should not increase the funds for promotion unless the evidence of increase in sale due to measures are obtained.

Rogers (1993) observed that advertising was a major competitive strategy among leading US food processors with the food processing sector outspending every other sector of the economy. The study examined the advertising of branded products by agricultural cooperatives in food processing over a 20- year period, from 1967 to 1987. The related issue of generic, industry-wide advertising by associations or boards received less attention. Such advertising sought to expand industry demand for the commodity as opposed to influencing a consumer's brand choice among the various sellers. The 1987 data, unlike the 1967 data, allowed some observations to be drawn about non-brand advertising done on behalf of an entire industry, but the primary focus was on brand-specific advertising that attempted to build and maintain product differentiation.

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Ravichandran and Narayanarajan (2004) found that advertisement played a vital role in influencing the purchase decision of a particular brand. Socio-economic factors such as sex, age, education, occupation and income influenced the brand preference and motivated the buyer to choose a particular brand. Quality of product also largely determines the buyer market.

Vasan *et al*. (2006) found that introduction of hygienic and attractive packaging without increasing the price would attract more consumers. Introduction of combo packs with discounts would help to build brands in an equal manner. Television advertisements were a major factor in purchase decisions compared to other mediums. Children had a positive influence in purchase decision of biscuits.

Anuradha Kalhan (2007) reported 71 per cent sample decline in sales, out of which 14 per cent were introduced new sales promotion initiatives viz., tele orders, home delivery and sales on credit due to the low capital base, low profit margin and poor availability of skilled man power.

Daniel *et al*. (2007) studied on impact of super markets on traditional markets in Indonesia, the results shows that the strategies used to attract buyers are politeness, quality merchandise, discount, more merchandise, variety and better management of merchandise home delivery. Almost 40% of respondents states politeness as key to their business success.

2.4 Channels of Distribution

Anonymous (1980) while studying the marketing of onion in Coimbatore identified two marketing channels. One was producer to village trader who in turn, sold to the commission agent. From the commission agents, products shifted to the wholesale traders and to the

retailers. In other channel, producer himself sold to the commission agent, thereby eliminating village trader.

Lal (1980) analysed costs, margins and price spread of Gur and Khandsari in three different markets of UP. The investigation revealed three important channels of trade.

Channel I: Sugarcane producers – Gur & Khandsari producers – Retailers in villages – Consumers in villages

Channel II: Sugarcane producers – Gur/Khandsari producers – Wholesalers in Lucknow Market - Retailers in Lucknow market – Consumers in Lucknow market

Channel III: Sugarcane producers – Gur/Khandsari producers – Wholesalers in Lucknow market – Wholesalers in Calcutta market- Retailers in Calcutta – Consumers in Calcutta

Due to difficulty in obtaining factory purchasing slip, urgent cash needs, late payments by factories and transportation problems, the farmers were selling their produce to either gur or khandsari unit at a lower price than that paid by the factories. The producer's share in consumer's rupee in channel I, II & III for Gur and Khandsari were 71.11, 60.00, 52.32, 75.00, 67.41 and 60.00 per cent respectively. The share of manufacturing costs of gur and khandsari in the above channels were 9.99, 10.46, 9.13, 7.98, 8.58 and 7.63 per cent respectively in the same order. The margins of gur and khandsari producers were 8.11, 7.05, 6.15, 8.30, 7.60 and 6.76 per cent respectively in the above channels.

Ipte and Borude (1982) in their study on economics of marketing and processing of cashew nut in Ratnagiri and Sidurg districts of Maharashtra observed three channels of marketing namely,

I – Direct sale of nuts to factories by cashew growers

II – Sale of nuts to local merchants and itinerant traders and

III - Sale of nuts through the agents of factories

The study revealed that the sale of nuts through local merchants and itinerant traders was a common practice and 55.68 per cent of the total quantity of nuts was sold through this channel. The total cost of marketing incurred by the cashew growers who sold their nuts directly to factories (channel I) was Rs. 40.17 per quintal. It was Rs. 34.11 per quintal, when nuts were sold through itinerant traders and merchants (channel II). The total cost of marketing of two tins (22.86kg) of processed nuts obtained from one quintal of raw nuts worked out to Rs. 71.90. The major items of cost were transport including loading and unloading (13.20%) and sales tax (68.09%) which was about 5 per cent of the value of the processed nuts. Other items of cost were octroi (7.07%), commission to agents (5.55%) and other charges (6.09%). The growers share was more (61.55%) when he sold his produce directly to the factory (channel I). The share was reduced to 43.46 per cent when intermediaries like local merchants, itinerant traders and wholesalers came in between growers and factories in channel II and III. The cost incurred by the factories as processing and marketing costs were 22.95 per cent while, the margin to the factories was 11.5 per cent.

Nandal (1986) in his study on marketing of rapeseed and mustard in Hissar district of Haryana State identified the following marketing channels.

Producer – Wholesaler – Oil expeller – Retailer – Consumer.

Kiresur (1987) in his study on marketing of vegetables in Dharwad and Hubli markets found the existence of two channels namely,

Channel I: Producer – Commission agent – Wholesaler – Retailer – Consumer.

Channel II: Producer – Village merchant - Commission agent cum Wholesaler – Retailer – Consumer. Of the two main channels identified, channel I was found to be more efficient in terms of the net price received by the producer – seller and the price spread. Channel I was also found to be more popular than channel II in terms of number of farmers and quantity sold.

Raju and Ramesh (1989) analysed the cost and returns of jaggery production and marketing in east Godavari district of Andhra Pradesh. The cost of production of jaggery per hectare of sugarcane was Rs. 28,497. Out of this, the cost of production of sugarcane accounted for 70 per cent of cost followed by cost of human labour, crusher rent charges, chemical ingredient charges etc. The average physical returns of jaggery were 93.28 quintals from one hectare of sugarcane amounting to Rs. 33,724. The net returns were Rs. 5,227 per hectare. Two marketing channels were identified.

Channel I: Farmers – Commission agents at regulated markets – Wholesalers – Retailers – Consumers

Channel II: Farmers – Village merchants - Wholesalers at unregulated markets – Retailers – Consumers

The producer's share in consumer's rupee was more in channel I i.e., 87 per cent. The input - output ratio, when cane was sent to sugar factory and converted to jaggery was 1:1:10 and 1:1:8 respectively. The study concluded that the jaggery preparation was more profitable than selling cane to sugar factory.

Mattigatti *et al.* (1992) analysed the marketing of milk in Dharwad district and found three channels of milk marketing by the milk producers. The effective channels were through co-operatives where producers received highest share in consumer's rupee. The study revealed that the co-operatives paid higher price.

Ramana and Naidu (1992) found two channels of milk marketing in East Godavari district of Andhra Pradesh. One through co-operative societies, another through milk vendors. The result revealed that 70 percent of producers sold through first channel but producer's share was low in this channel even then producers preferred co-operative channel because of technical services provided by it.

Dibakar and Niranjan (1995) studied marketing of milk in Khudra district of Orissa. They found 7 channels of milk distribution of which four were operating through Orissa Milk Federation (OMFED). In the marketing channels of milk, middlemen vary from one to three. They concluded that producer get higher share if there is no middlemen in the marketing of milk and the share decreases as number of middlemen increases.

Teggi *et al.* (1998) analysed the marketing of jaggery in Ghataprabha command area of Karnataka. Mudhol and Jamakhandi jaggery markets were selected for the study. The jaggery producers were selling jaggery immediately after manufacturing due to need of funds or due to lack of storage facility. Three major marketing channels were identified.

Channel I: Producer – Commission agent – Wholesaler – Retailer – Consumer

Channel II: Producer – Wholesaler – Retailer – Consumer

Channel III: Producer – Retailer – Consumer

In case of Jamakhandi market, 62 per cent of processors sold 77 per cent of their produce through channel II and in Mudhol market, 25 per cent of the producers disposed 76 per cent of the produce through channel II. This was due to high price realized by processors in respective channels. The producer's share in consumer's rupee in channel I at Mudhol and Jamakhandi market was Rs. 86.55 and 87.36 per quintal respectively. In channel II, it was Rs. 88.68 and Rs. 89.04 in the above order of markets.

Durga (1999) identified two important channels namely,

Channel I: Producer – Wholesaler – Retailer – Consumer

Channel II: Producer – Consumer, in the marketing of vegetables in Vishakhapatnam.

The producer's share in consumer's rupee was found to be 100 percent in all the vegetables when sold through channel II in Ryta Bazaar as against 70.89, 69.72, 65.89 and 48.74 percents in potato, onion, tomato, brinjal respectively in channel I.

Singh and Singh (1999) in their study on production and marketing of vegetable crops in Varanasi district of Uttar Pradesh identified the following three important channels.

Channel I: Producer – Consumer

Channel II: Producer – Retailer – Consumer

Channel III: Producer – Wholesaler – Retailer – Consumer

The share of producer's in consumer's rupee was found to be higher in channel I (89% to 96%) as compared to channel II (68.50% to 83.60%) and III (62.70% to 73.15%). However, channel II was found to be

popular among the farmers than the other two channels in terms of higher quantity disposed.

Vasudev and Chowdry (1999) identified two marketing channels which were predominant in marketing of tomato in all the three regions (Coastal Andhra, Rayalaseema and Telangana) viz., of Andhra Pradesh.

Channel I: Producer – Commission agent – Secondary wholesaler – Retailer – Consumer

Channel II: Producer – Commission agent – Primary wholesaler – Retailer – Consumer

The producer's share in consumer's rupee was found to be substantially higher in channel I over channel II in all the regions indicating better efficiency of channel I over channel II in all the regions.

Mohapatra (2001) conducted a study on production and marketing of onion in Bolangir District of Orissa, the following marketing channels have been identified in the market of onion in the study are:

Channel I: Producer – Consumer

Channel II: Producer – Trader – Consumer

Channel III: Producer – Trader – Wholesaler – Retailer - Consumer

Sowmya Shankar *et al.* (2008) conducted a study on marketing of grapes in Karnataka: A case study of Bangalore and Bijapur district found the different channels through which grape flows from the point of production to the point of consumption were identified and then are categorized in the following channels.

Channel I: Farmers – Pre - harvest contractor – Wholesaler – Retailer – Consumer

Channel II: Farmers – Commission agent – Wholesaler – Retailer – Consumer

Channel III: Farmers – HOPCOMS – Consumer

Channel IV: Farmers - Consumer

Methodology

CHAPTER III

METHODOLOGY

The present study was carried out to analyse the procurement strategy of oilseeds, pricing strategy of edible oil, sales promotional measures and channels of distribution of edible oil by the KOF. This study also focuses on the factors influencing the sales of oilseeds by member farmers to different agencies. This chapter presents a brief discussion of the methodology used in the study under the headings indicated below.

3.1 Description of the study area/unit

3.2 Sampling procedure

3.3 Collection of data

3.4 Analytical tools and techniques employed

3.5 Definitions of terms and concepts used

3.1 Description of the study area/unit

The study covers Karnataka Cooperative Oilseeds Growers Federation Limited (KOF), Bengaluru and Challakere taluk of Chitradurga district.

Brief description of the Federation

Government of India in mid 1980's started the "Technology Mission on Oilseeds and Pulses" (TMOP) in order to enhance productivity in oilseeds and make India self - sufficient in edible oil. On 22.8.1984 Government of Karnataka approved the implementation of National Dairy Development Board's (NDDB) project "Restructuring Edible Oil and Oilseeds Production and Marketing' in Karnataka. Keeping in view the objectives laid down in the TMOP. The Karnataka Co-operative Oilseeds

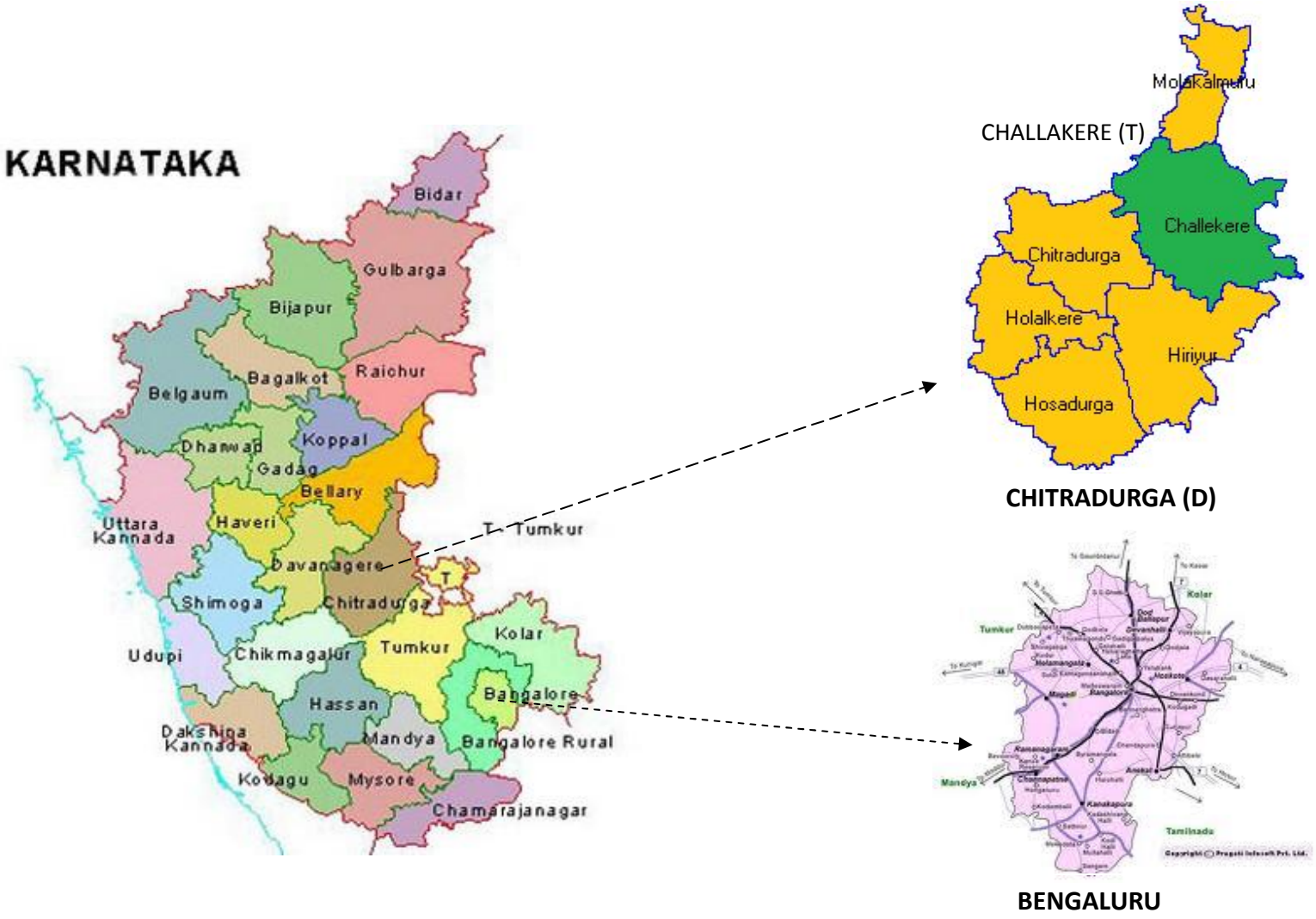

Fig. 1 : Map showing study areas Challakere and Bengaluru

Grower's Federation Limited (KOF), the agency entrusted with implementation of the Project. The KOF was registered on 26th October 1984, under the Karnataka Co-operative Societies Act. The project, which was inspired by the Anand Model of Milk Co-operatives, is designed to create an integrated Co-operative system of production, procurement, processing of Oilseeds and marketing of edible oil and its by-products.

The Karnataka Co-operative Oilseeds Grower's Federation Limited, (KOF) has shown a good progress in physical terms over the years. The number of Primary Oilseeds Grower's Co-operative Societies (OGCS) increased many folds from 35 during 1984-85 to 352 during 2008-09, number of villages covered increased from 145 to 3197 and oilseeds area covered increased from 12,000 hectares to 3, 65,315 hectares during 2008-09. Procurement of oilseeds increased from 316 metric tonnes during 1984-85 to 1234.27 metric tonnes during 2009-10.

The Three Regional Unions, registred on 3rd June 1990, are as shown below

i. Raichur Regional Union covering the districts of Raichur, Gulbarga, Koppal and Bidar districts.

ii. Chitradurga Regional Union covering the districts of Chitradurga, Bellary, Davanagere and Tumkur districts

iii. Dharwad Regional Union covering the districts of Dharwad, Bijapur, Haveri, Gadag, Bagalkot and Belgaum districts.

There are 352 Oilseeds Growers Co-operative Societies working under the above three unions with 1, 46,483 farmer members.

The major activities of the Federation and the Unions are:

a. Service oriented activities

Supply of seeds to farmers, production enhancement activities, seed production, seed multiplication and distribution/marketing, demonstrations, training programmes and field days etc.

b. Commercial oriented activities

KOF is earning income from marketing of quality edible oils in consumer packs under SAFAL brand in various sizes to meet the administrative overhead, working capital and to meet the future objectives.

c. Procurement and processing of oilseeds

KOF and its regional unions have supplied together 1, 04,755 quintals of groundnut, sunflower and soybean seeds during 2009-10 for more than 1 lakh farmers. KOF and its regional unions are planning to increase the seed production activity and produce nearly two lakh quintals during the next year i.e., 2010-11.

Price Support Scheme Operation

KOF is the agent of NAFED (National Agricultural Cooperative Marketing Federation of India Limited) for procurement of oilseeds under Government of India price support scheme. To avoid any distress sale by the farmers whenever markets rates rule below the support price, KOF will intervene and procure oilseeds under price support scheme in Karnataka State. KOF has procured huge quantities of oilseeds during 1999-2000 up to 2002-2003. During the Kharif 2008-09, KOF through regional unions has procured 4598.75 metric tonnes of sunflower under price support scheme operation. The total value of the material procured was Rs. 10.18 crores.

Marketing Performance

KOF is marketing its edible oils under the flagship brand “SAFAL”. The edible oil in the refined form under consumer marketing activities, even under stiff competition from MNCs (Multi-National Companies) and local players; KOF is the brand leader for AGMARK quality edible oil and SAFAL is the household name in the State of Karnataka. This is possible because of its professional management, marketing intelligence and strong marketing distribution network.

KOF and its regional unions have sold 23075 metric tonnes of edible oil during the year 2008-09 with an average of 1923 metric tonnes per month. KOF is aiming to double the volume of sales and margins in the next 5 years by adding range of products and increased market penetration. KOF markets following edible oils under the corporate brand name of "Safal" in consumer packs:

Safal - Refined/Filtered Groundnut Oil

Safal Sunglod - Sunflower Oil

Safal premium - Refined Sunflower Oil

Safal - Pure Coconut Oil

Safal health - Refined Rice bran oil

Uttam - Refined Palmolien oil

Suguna - Refined Soybean oil

Nutrich - Refined blended oil

Safal Deepa - Refined blended oil

All these Products carry the Government of India’s "AGMARK" seal which is a certification that ensure the purity and quality of the products.

Financial Performance

KOF and its three Regional Unions started posting profits consistently from the last four years. During the year 2002-03, KOF and regional unions have posted the net profits. Though the vegetable oil industry is sick due to edible oils imports under OGL, KOF and its Regional Oil Unions have survived and started posting net profits. This achievement is possible to KOF because of dynamic and dedicated Board, officers, employees, strong marketing network and grass root village level farmers networks to source the raw materials.

Total turnover of KOF and its regional union during 2008-09 was 18799.14 lakhs. Net profit was 420.05 lakhs during 2008-09. KOF and its regional unions have projected to double its turnover and net profits in the next five years.

Oil Packaging Station (OPS)

KOF has modern edible oil packaging plant at Whitefield Bangalore. Various types of edible oils are packed in sachets, bottles, jerry cans and barrels to suit the requirement of the market or the customer. Bottles were used for 50ml, 100ml, and 1ltr packaging of coconut oil. The 3 layered film used for packaging ½ and 1ltr oil. Three layered film roles were used to pack ½ltr and 1ltr of various edible oils where as the cans and pet jars were used for packing 5ltr. Cartons were used while transportation of packaged materials. Barrels and tins were used for bulk packaging. Out of the packaging materials used, barrels and tins were reusable up to 10 times. The damage during packing in the packaging department is just 1 per cent and the total of around 55 to 60 tonnes of oil is packed every day.

Challakere Taluk

Challakere has total cultivable area of 1, 07,935 hectares. Oilseeds account for an area of 91,972 hectares. Groundnut itself accounts for 90,689 hectares out of total cultivable area. The productivity level of groundnut is 8 quintals per hectare. Sunflower has an area of 731 hectares. The major growing crops in Challakere, apart from groundnut, paddy (4441 ha), red gram (3463 ha), maize (2582 ha), ragi (1128 ha) and sunflower (731 ha). The federation (KOF) has distributed 9349.80 quintals of groundnut seeds (TMV-2) to the farmers through Raitha Samparka Kendra in Challakere taluk during the year 2010-11. The numbers of beneficiaries (farmers) are 4021.

3.2. Sampling procedure

Sample comprises of, member farmers of KOF, personnel of KOF working in the field and distributors, stockists and retailers etc. Thirty member farmers of KOF from the Challakere taluk of Chitradurga district were randomly selected. The necessary details were collected from 15 personnel of the KOF who are working in the field of procurement, inputs and marketing divisions. Three respondents each from distributors, stockists, retailers, own retail outlets and modern retail outlets of Bengaluru were selected. Thus, forming a sampling size of a total of 60 respondents.

3.3 Collection of data

The detailed information required for the research is collected from both primary and secondary data in order to accomplish the objectives.

The primary data regarding factors influencing the sales of oilseeds to different agency are collected by the member farmers of the KOF. Primary data regarding procurement strategy of oilseeds and edible oil, pricing strategy of edible oil, sales promotional measures and channels of

distribution of edible oil are collected by canvassing a structured schedule and data were collected from the personnel of KOF who are working in the field of procurement and inputs, marketing and other divisions. Further, primary data were collected from distributors, stockists, retailers, own retail outlets and modern retail outlets (organised retailers) regarding channels of distribution of edible oil of the KOF.

The secondary data regarding procurement of oilseeds, processing, seed distribution, prices of edible oil, net sales of edible oil over the years, and other necessary details were collected from the annual reports, records, handouts of the KOF and other published sources. The details regarding area, production, productivity, exports, imports and other necessary details were collected from the website of the Directorate of Economics and Statistics and from the office of the Assistant Agricultural Officer, Challakere.

3.4 Statistical Tools and Technique used

The following statistical tools and techniques were employed to analyze and interpret the data.

3.4.1. Descriptive statistics

3.4.2. Garret's ranking technique

3.4.3. Time series analysis

3.4.4. Compound Growth rate analysis

3.4.1 Descriptive statistics

This technique was employed to analyse or compare the procurement of oilseeds and edible oil, pricing strategy of edible oil, product segmentation of edible oil of the KOF, sales promotion expenses,

distribution of edible oil and product wise comparison of margins to stockists / wholesalers and retailers etc.

The data were summarised with the aid of statistical tools like averages, percentages, etc., to obtain meaningful results.

3.4.2 Garret's ranking technique

Garret's ranking technique was used to rank the factors influencing the sales of oilseeds to different agencies and the constraints faced in marketing of oilseeds by the sample respondents.

According to this technique, the orders assigned to the different factors by the respondents were converted into ranks by using the formula.

$$\text{Per cent position} = \frac{100 \times (R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij}= rank given for i^{th} factor by j^{th} individual

N_j= number of factors ranked by j^{th} individual

By referring to the Garrett's table, the per cent position estimated were converted into scores (APPENDIX XII). Thus, for each factor the scores of the various respondents were added and the mean score was estimated. The means thus obtained for each of the attributes were arranged in a descending order. The attribute with highest mean value was considered as the most important one and the others followed in order.

3.4.3 Time series analysis

This technique was employed to study seasonal indices for sales of edible oil of KOF in metric tonnes.

To measure the seasonal variations in sales of edible oil of the KOF, seasonal indices were calculated employing twelve months ratio to moving average method.

The seasonal indices were calculated by adopting the following steps.

i. Generate a series of 12 months moving totals.

ii. Generate a series of 12 months moving averages: A series of 12 months moving averages is generated by dividing 12 months moving totals by 12.

iii. Generate a series of centered 12 months moving averages. There are no corresponding moving averages for the first six and last six months.

iv. Express each original value as a percentage of corresponding centered moving average. The percentage of moving average represents indices of seasonal and irregular components combined.

v. The next step involves removing the irregular component.

vi. Arrange the percentages of moving averages in the form of monthly arrays.

vii. Next, the average index for each month is calculated.

viii. These averages are to be adjusted in such a way that their sum becomes 1200. This can be done by working out of correction factor and multiplying the average for each month by this correction factor.

The correction factor (K) is worked out as follows.

$$K = \frac{1200}{S}$$

Where, K is correction factor and S is sum of averages indices for 12 months, multiply K with the percentage of moving average for each month to obtain the seasonal indices.

3.4.4 Compound Growth Rates

The compound growth rate was estimated for the sales of edible oil packaged by the federation during 2001-02 to 2010-11.

The exponential function of the following type was employed to estimate the growth rate.

$Y = ab^t$ ----------> (1)

Where, Y= Net sales

a = Constant

b = Regression coefficient (Rate of Change of Y per unit of time)

t = time (year)

Annual average compound growth rate in percentage was calculated as follows:

CGR = (Antilog b-1) *100 ----------> (2)

The accounting year of the KOF is 1st April to 31st March. The analysis has covered the data for 10 years during 2001-02 to 2010-11. The compound growth rate of the variable indicates the rate of change in each year. The exponential function assumes constant growth rate, and it is obtained by deducting unity from the co-efficient 'b'. Hence, if 'b' is greater than one, the growth rate would be positive.

3.5 Definitions of terms and concepts used

Federation

It refers to the Karnataka Co-operative Oilseeds Grower's Federation Limited (KOF).

Peak procurement season

It is defined as the peak procurement season for groundnut and sunflower seeds. The peak seasons are September to December for kharif and March to May for summer.

Lean procurement season

The periods between January to February and June to August are referred to as lean seasons.

Village traders

Village traders are petty merchants who move from village to village, and directly purchase the produce from the farmers.

Commission Agent

A commission agent is a person operating in the APMC or wholesale market who acts as the representative of either a seller or a buyer.

Minimum support price

This is the price fixed by the Government to protect the producer-farmers against excessive fall in price during bumper production years.

Value added tax

A tax on the amount by which the value of an article has been increased at each stage of its production or distribution.

Distributor

A middlemen who procures edible oil from the federation (KOF) and sells to the retailers or consumers.

Wholesaler / stockist

A middlemen who sells mainly to retailers or institutions, rather than consumers.

Retailer

A retailer buys edible oil in large quantities from distributors or wholesalers and then sells small quantities to the general public or end users, usually in a shop or store.

Channels of distribution

It refer to the route taken by goods as they flow or move from the point of production to the point of consumption.

Results

CHAPTER IV

RESULTS

The results of the study are presented under the following headings.

4.1 Procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by the members to different agencies

4.2 Pricing strategy followed for edible oil by the KOF

4.3 Sales promotion measures

4.4 Channels of distribution of edible oil of the KOF

4.1 Procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by the members to different agencies

4.1.1 Procurement strategy of oilseeds

KOF has three regional unions namely at Raichur, Chitradurga and Dharwad**.** All the three regional unions independently carry out their procurement and marketing operations**.** Karnataka Oilseeds Federation Ltd., (KOF) procures oilseeds from the Agricultural Produce Market Committee (APMC) through commission agents. It procures oilseeds in different APMC's namely Challakere, Chitradurga, Gadag, Raichur, Bagalkot, Bellary and other APMC's. The quantity of oilseeds to be procured was decided by KOF Board at the head office Bengaluru. KOF board considers the opinion of management heads of procurement & inputs and marketing. Later on, collective decision will be taken and then purchased through APMC's depending upon the price movements of oilseeds in the market.

Physical parameters were duly considered while purchasing of oilseeds. For groundnut seeds, shelling should be 75 per cent, moisture

content should be 6 per cent and refractions should be 0 per cent. For sunflower seeds, bulk density should be 0.4 and above, moisture content should be 8 per cent and 0 per cent refractions. These physical parameters are judged by the visual appearance.

Peak procurement season for groundnut and sunflower seeds are September to December for kharif and March to May for summer. The periods between January to February and June to August are referred to as lean seasons. Procurement of oilseeds is done through tender system in the APMC's. KOF paying 2 per cent commission to commission agents for procurement of oilseeds. Mode of payment is through open cheque. Open cheque will be given to the commission agents at the APMC's from whom the oilseeds were purchased.

4.1.2 Procurement of oilseeds by federation

It could be seen from the Table 4.1 and Fig.2 that the quantity of groundnut seeds procured was maximum during the year 2002-03 accounted for 2797.17 metric tonnes. This was followed by the quantity procured during the year 2007-08 (1879.07 metric tonnes), 2008-09 (1506.87 metric tonnes), 2001-02 (1369.02 metric tonnes), 2009-10 (1234.27 metric tonnes), 2003-04 (825.64 metric tonnes), 2006-07 (595.04 metric tonnes) and then by 2004-05 (513.05 metric tonnes). The quantity of groundnut seeds procured was least during the year 2005-06 which accounted for 223.48 metric tonnes.

In the case of sunflower seeds, the quantity procured was maximum during 2006-07 accounting for 553.95 metric tonnes. This was followed by the quantity procured during the year 2004-05 (425.16 metric tonnes). The quantity of sunflower seeds procured was least during the year 2003-04 which accounted for 208.71 metric tonnes.

Table 4.1: Procurement of oilseeds by Federation

(Quantity in metric tonnes)

Particulars	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Sunflower seeds	-	-	208.71	425.16	-	553.95	-	-	-
Groundnut seeds	1369.02	2797.17	825.64	513.05	223.48	595.04	1879.07	1506.87	1234.27
Total procurement of oilseeds	1369.02	2797.17	1034.35	938.21	223.48	1148.99	1879.07	1506.87	1234.27

Source: Audit Reports of KOF Ltd., (2001-02 to 2009-10)

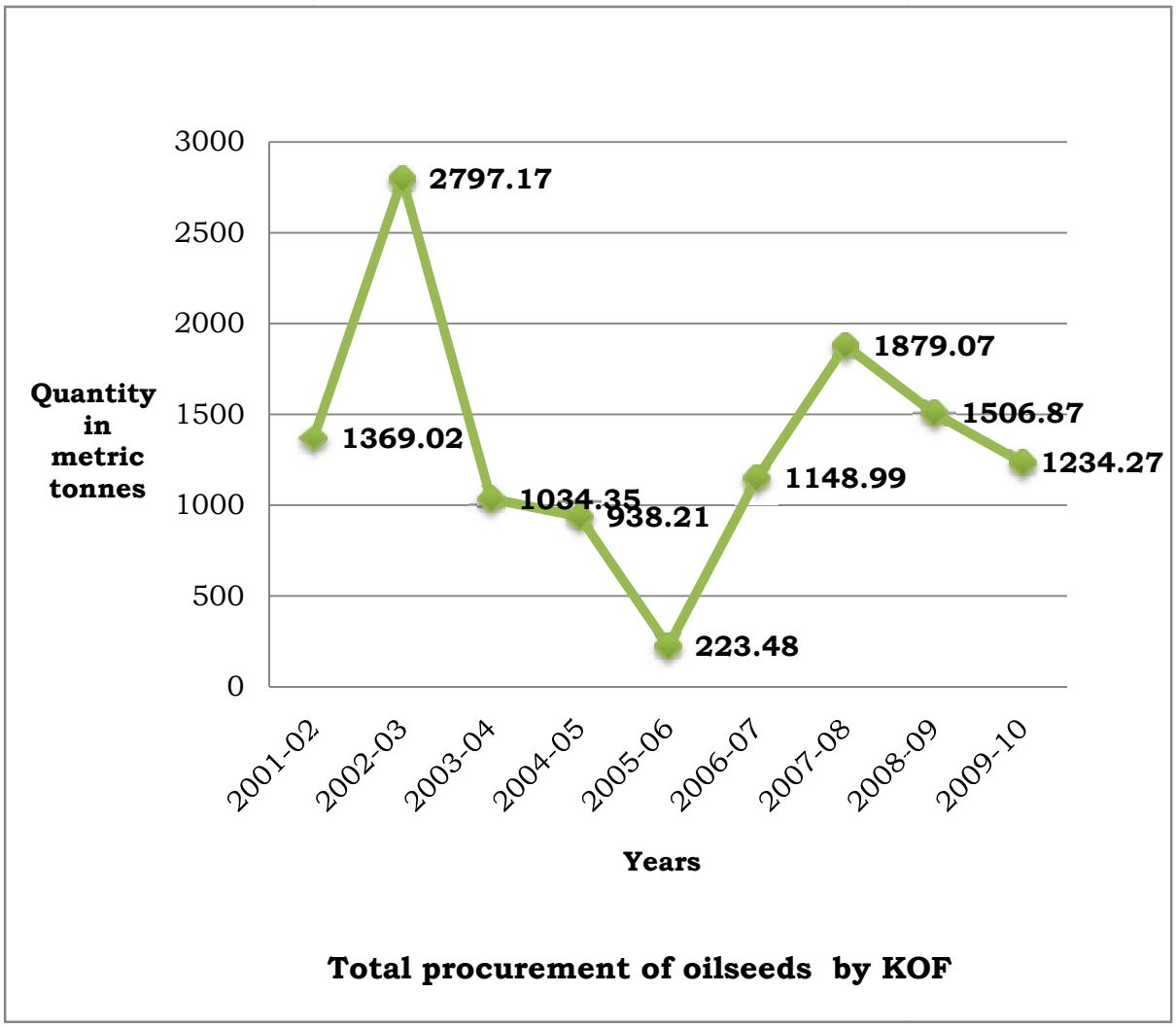

Fig. 2: Procurement of oilseeds by the Federation

Further it could also be seen that in the case of total oilseeds (sunflower and groundnut seeds) the quantity procured was highest during the year 2002-03 which accounted for 2797.17 metric tonnes. The quantity of procurement of total oilseeds was least during the year 2005-06 which accounted for 223.48 metric tonnes.

4.1.3 Procurement of oilseeds by federation under Price Support Scheme Operation

KOF is an agent of NAFED for the procurement of oilseeds under Government of India price support scheme. To avoid any distress sale by the farmers whenever markets rates rule below the support price, KOF will intervene and procure oilseeds under price support scheme in Karnataka State. It could be seen from the Table 4.2 and Fig.3 that the quantity of sunflower seeds procured under the price support scheme operation was maximum during the year 2000-01 which accounted for 22,824.912 metric tonnes. This was followed by the quantity procured during the year 1999-00 (17,680.476 metric tonnes), 2008-09 (4598.756 metric tonnes) and then by 2005-06 (3121.216 metric tonnes). The quantity of sunflower seeds procured was least during the year 2004-05 which accounted for 30.362 metric tonnes.

Similarly, the quantity of groundnut seeds procured under the price support scheme operation was the highest during the year 2001-02 accounted for 3225.986 metric tonnes. This was followed by 1171.202 metric tonnes during the year 2005-06. The least procurement of groundnut seeds was observed during the year 2000-01 which accounts for about 609.181 metric tonnes. In the case of safflower seeds, the quantity procured was highest during the year 2005-06 which accounted for 11530.579 metric tonnes. The quantity of safflower seeds procured was least during the year 2002-03 which accounted for 1217.555 metric

Table 4.2: Procurement of oilseeds by Federation under price support scheme

(Quantity in metric tonnes)

Particulars	1999-00	2000-01	2001-02	2002-03	2004-05	2005-06	2008-09
Sunflower seeds	17680.476	22824.912	-	-	30.362	3121.216	4598.756
Groundnut seeds	-	609.181	3225.986	-	-	1171.202	-
Safflower seeds	-	2568.447	1654.182	1217.555	5970.791	11530.579	-
Soybean	963.434	748.225	-	-	-	-	-
Total procurement of oilseeds	18643.91	26750.765	4880.168	1217.555	6001.153	15822.997	4598.756

Source: Audit Reports of KOF Ltd., (1999-00 to 2008-09)

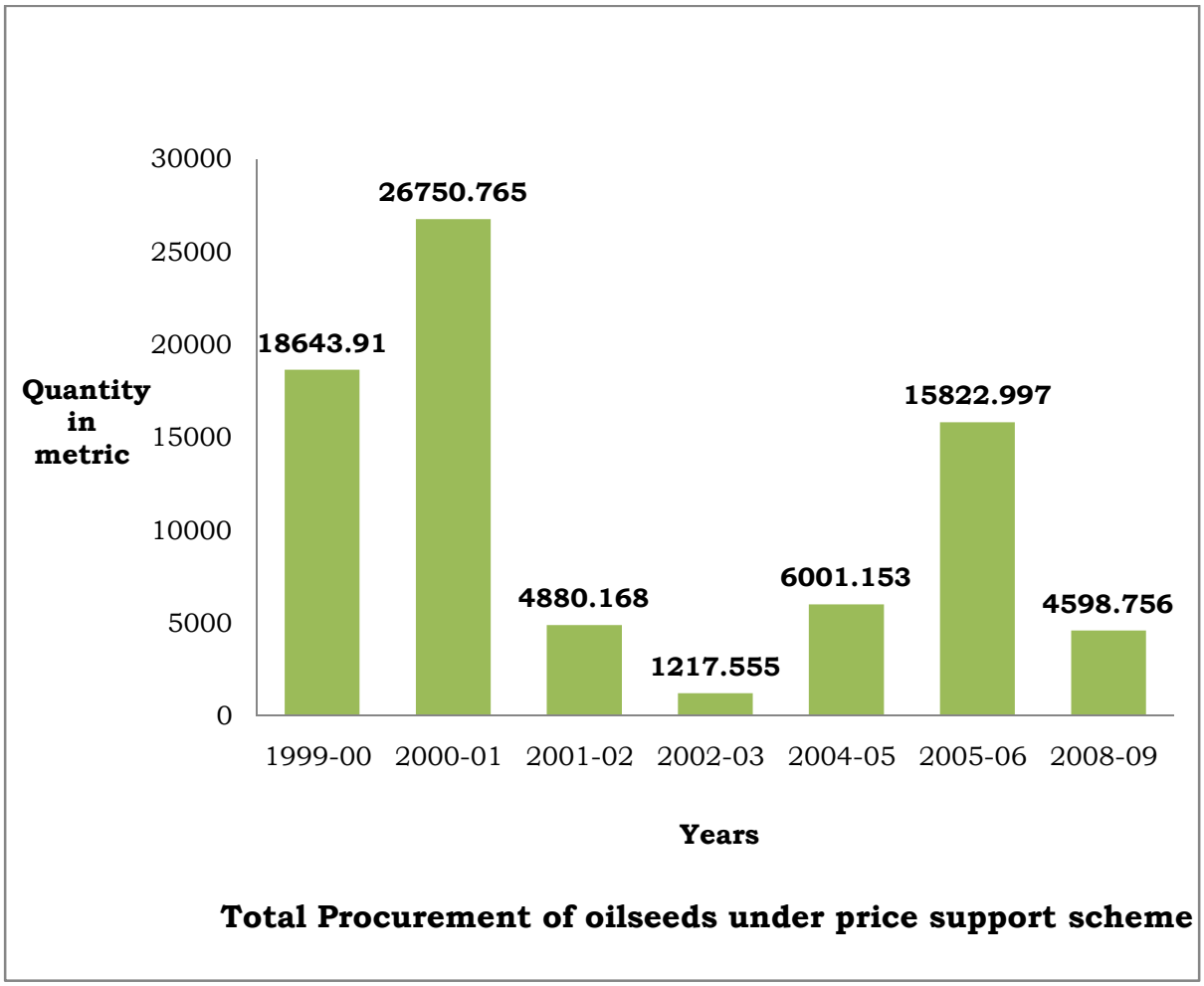

Fig. 3: Procurement of oilseeds by Federation under price support scheme

tonnes. During the year 1999-00, KOF procured 963.434 metric tonnes of soybean seeds.

Further, it could also be seen that the total quantity of oilseeds (sunflower, groundnut, safflower and soybean seeds) procured was highest during the year 2000-01 which accounted for 26750.765 metric tonnes. This was followed by procurements during the year 1999-00 (18643.91 metric tonnes), 2005-06 (15822.997 metric tonnes), 2004-05 (6001.153 metric tonnes), 2001-02 (4880.168 metric tonnes) and 2008-09 (4598.756 metric tonnes). The quantity of procurement was least during the year 2002-03 which accounted for about 1217.555 metric tonnes.

4.1.4 Grade specifications for oilseeds under price support scheme operations

Grade specifications are prescribed by Government of India (GOI) for procurement of each type of oilseeds under price support scheme operation. It also announces minimum support prices for each category of oilseeds in order to protect the farmers from distress sales. The required grade specifications were followed for each oilseeds prescribed by the Government of India under price support scheme during 2008-09 marketing season are given in APPENDIX VII, VIII and IX.

4.1.5 Procurement of edible oil by Federation

It could be seen from the Table 4.3 and Fig.4 that sunflower oil procured was maximum during the year 2007-08 which accounted for a value of Rs. 3409.58 lakhs. This was followed by 2003-04 (Rs.2901.22 lakhs), 2006-07 (Rs.2637.53 lakhs) and 2005-06 (Rs.2006.27 lakhs). Sunflower oil procured was least during the year 2004-05 which accounted for a value of Rs.1909.58 lakhs. Palmolein oil was procured for Rs.1225.37 lakhs in 2003-04 and during 2007-08 its procurement

Table 4.3: Procurement of edible oil by Federation

(Value in lakh rupees.)

Sl. No.	Particulars	2003-04	2004-05	2005-06	2006-07	2007-08
1.	Sunflower oil	2901.22	1909.58	2006.27	2637.53	3409.58
2.	Palmolein oil	1225.37	1113.61	1070.00	1538.14	1988.37
3.	Groundnut oil	994.93	904.18	949.97	1248.87	1614.43
4.	Soybean oil	74.00	66.70	70.08	92.13	119.10
5.	Coconut oil	48.07	43.68	45.89	60.33	77.99
6.	Rice bran oil	5.83	5.30	5.57	7.32	9.48
	Total procurement	**5249.42**	**4043.05**	**4147.78**	**5584.32**	**7218.95**

Source: Audit Reports of KOF Ltd., (2003-04 to 2007-08)

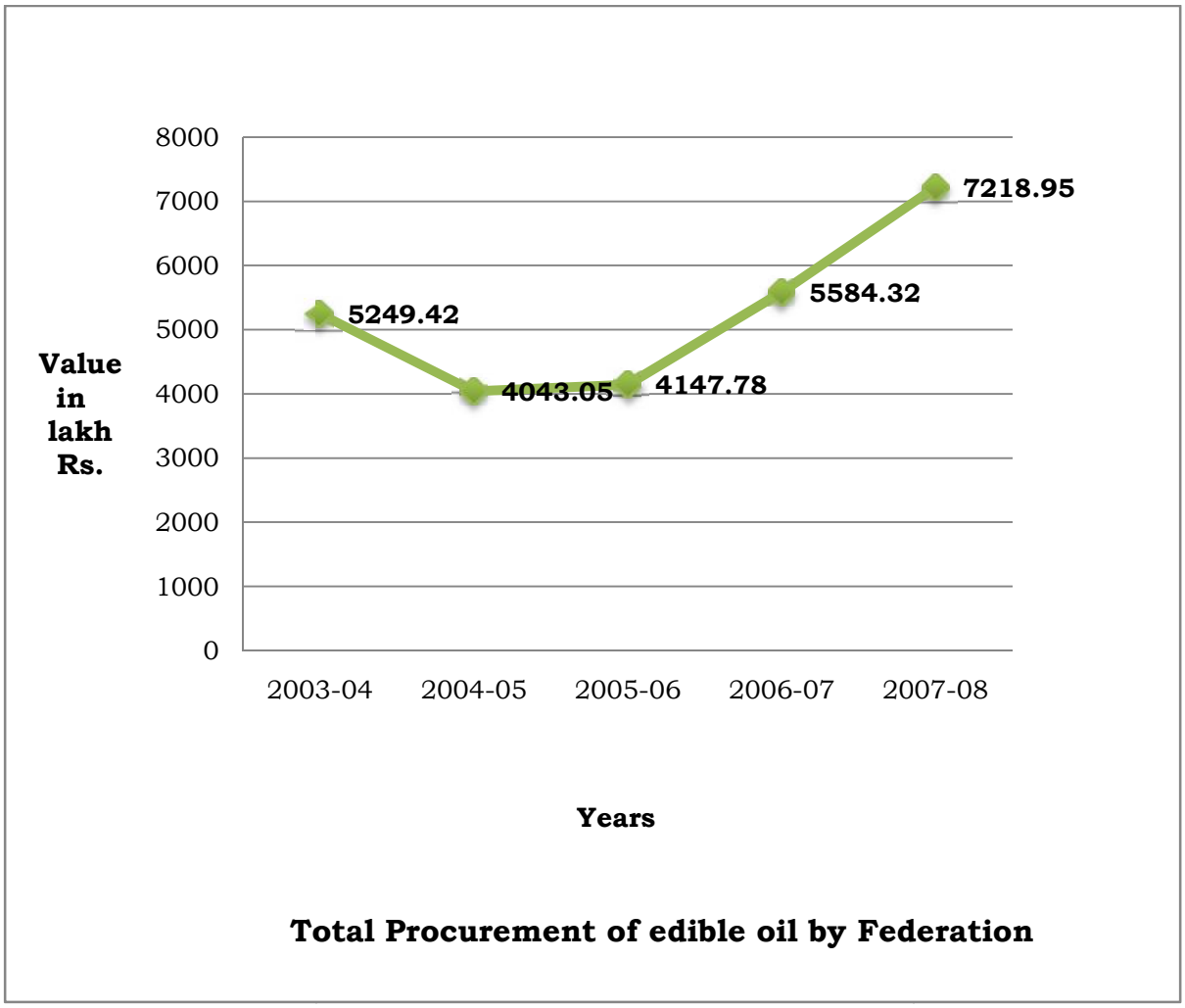

Fig. 4: Procurement of edible oil by Federation

was Rs.1988.37 lakhs. Groundnut oil procured was maximum during the year 2007-08 which accounted for a value of Rs.1614.43 lakhs.

Groundnut oil procured was least during the year 2004-05 which accounted for a value of Rs.904.18 lakhs. Soybean oil was procured for a value of Rs.74.00 lakhs during 2003-04 and its procurement increased to a value of Rs.119.10 lakhs in 2007-08. Coconut oil was procured for a value of Rs.48.07 lakhs during 2003-04 and its procurement was increased to a value of Rs.77.99 lakhs during 2007-08. Rice bran oil procured was maximum during the year 2007-08 accounted for a value of Rs.9.48 lakhs.

Further, it could also be seen that in case of total procurement of edible oil, the value procured was highest during the year 2007-08 which accounted for Rs.7218.95 lakhs. The value of procurement of edible oil was least during the year 2004-05 which accounted for Rs.4043.05 lakhs.

4.1.6 Factors influencing the sales of oilseeds by members (farmers) to different agencies

Members (farmers) are selling the oilseeds to village trader only. They are not selling to other agencies. The factors influencing the sales of oilseeds by members (farmers) to village trader in the study were analyzed using Garret's ranking technique and the same are presented in the Table 4.4. From the table, it is clear that better price realization was observed as first important factor with mean score of 62.5. Less risky was considered as second most important factor with mean score of 56.36. The other important factors which influences sales of oilseeds by members (farmers) to village trader in the ascending order of importance are absence of middlemen, immediate cash payment, smaller quantity of

Table 4.4: Factors influencing the sales of oilseeds by members (farmers) to village trader

Sl. No.	Particulars	Mean score	Rank
1.	Better price	62.5	I
2.	Less risky	56.36	II
3.	Absence of middlemen	53.4	III
4.	Immediate cash payment	52.23	IV
5.	Smaller quantity of produce	51.93	V
6.	Absence of marketing costs	49.36	VI
7.	Proximity	38.83	VII
8.	Social attachment	28.93	VIII
9.	Advance loan	15.1	IX
10.	Lack of market information	11.03	X
11.	Previous agreement	6.03	XI

produce, absence of marketing costs, proximity, social attachment, advance loan, lack of market information and previous agreement.

4.1.7 Constraints faced by the members / farmer respondents in marketing

Members of KOF / farmer respondents are asked to rank the constraints faced by them in marketing of oilseeds. The same is presented in the Table 4.5.

An illegal deduction by the middle men to the farmers was observed as first important marketing constraint with mean score of 68.87. High commission charges were considered as the second most important constraint with mean score of 61.19. Fluctuation in the prices, faulty system of weighment, delayed cash payment, markets are far away and lack of market information were ranked third, fourth, fifth, sixth and seventh ranks, respectively.

4.2 Pricing strategy followed for edible oil by the KOF

4.2.1 Pricing strategy for edible oil

The whole pricing strategy for procurement of oilseeds depends on the demand and supply of oilseeds in the open market. KOF procures two kinds of oilseeds namely groundnut and sunflower seeds through Agricultural Produce Market Committee (APMC) in the State. KOF crushes groundnut and sunflower seeds for its requirement of oil in Davanagere oil complex. It also outsources the oil from regional unions and oil mills etc.

KOF pricing strategy for edible oil depends on various components. Pricing strategy includes cost of oil, packing cost, transportation, interest @ 15% for 30 days, cost incurred on van sales / leakage allowance, incentive to distribution, bad debts provision / fixed cost / sales

Table 4.5: Constraints faced by the members / farmer respondents in marketing:

Sl. No.	Particulars	Mean score	Rank
1.	Illegal deductions	68.87	I
2.	High commission charges	61.19	II
3.	Fluctuation in the prices	55.54	III
4.	Faulty system of weighment	55.00	IV
5.	Delayed cash payment	40.93	V
6.	Markets are far away	25.74	VI
7.	Lack of market information	22.38	VII

promotion, value added cost (VAT), stockists margin, retailer margin, and then finally it fixes Maximum Retail Price (MRP). Cost of oil includes procurement cost of oilseeds / oil, processing cost and transportation cost. It considers open market prices of edible oil, international prices of edible oil, prices of rival firms while fixing the price for the packaged edible oil.

The prices of edible oil of KOF Ltd. for the various products is clearly given in the Table 4.7 and bulk oil prices are also given in the Table 4.8. All the prices presented in the Table 4.7 and 4.8 are inclusive of all taxes, leakages and FOR destination. Rs.0.60 per litre / kg is proposed as transportation rebate for the parties who lift material from the oil packaging station in respect of outstation parties and Rs.0.40 per litre in respect of local parties.

4.2.2 Pricing strategy for groundnut and sunflower oil (1 litre sachet) of KOF

Pricing strategy for groundnut and sunflower oil (1 litre sachet) of KOF is presented in the Table 4.6. Cost of oil accounts for Rs.66.00 and Rs.63.10 for safal filtered groundnut oil and sungold refined sunflower oil respectively. Packing cost, transportation, van sales/leakage allowance and interest on working capital are same for both safal filtered groundnut oil and sungold refined sunflower oil which account for Rs. 3.00, Rs.0.90, Rs.0.10 and Rs.0.76 respectively. The total cost of the packed oil for one litre safal filtered groundnut oil and sungold refined sunflower oil are Rs.70.76 and Rs.67.86, respectively. Value Added Tax (VAT) accounts for Rs.3.53 and Rs.3.39, respectively for safal filtered groundnut oil and sungold refined sunflower oil.

Margin of KOF for safal filtered groundnut oil is Rs.3.71 where as sungold refined sunflower oil accounts Rs.4.24. Issue price for safal

Table 4.6: Pricing strategy for groundnut and sunflower oil (1 litre sachet) of KOF.

(Value in rupees)

Sl. No.	Particulars	Safal filtered groundnut oil	Sungold refined sunflower oil
1.	Cost of oil	66.00	63.10
2.	Packing cost	3.00	3.00
3.	Transportation	0.90	0.90
4.	Van sales/Leakage allowance	0.10	0.10
5.	Interest on working capital	0.76	0.76
6.	Cost of packed oil	70.76	67.86
7.	VAT 5%	3.53	3.39
8.	Margin of KOF	3.71	4.24
9.	Issue price	78.00	75.50
10.	Stockiest margin	3.00	2.25
11.	Retailer issue price	81.00	77.75
12.	Retailer margin	5.00	12.25
13.	MRP	86.00	90.00

Source: Hand-out of KOF Ltd., (2011)

Table 4.7: Prices of edible oil of KOF

Product genera	Product name	MRP (Rs.)
Coconut oil	Coco- 210ml bottle Coco- 500ml bottle Safal- coconut oil- 1 ltr sac Safal- coconut oil- ½ ltr sac	40.00 79.00 139.00 70.00
Deepa lighting oil	Safal- deepa lighting oil- 1ltr sac Safal- deepa lighting oil- 1/2ltr sac	85.00 43.00
Filtered groundnut oil	FGNO- 1ltr sachet FGNO- 1/2 ltr sachet FGNO- 5ltr j/can	86.00 43.50 440.00
Gingelly oil	Safal - Gingelly oil - 1 ltr sac Safal - Gingelly oil – 1/2 ltr sac	153.00 79.00
Nut Rich	Nut Rich- edible oil- 1ltr sac Nut Rich- edible oil- 1/2ltr sac Nut Rich- edible oil- 5ltr j/can	80.00 40.50 395.00
RBDPalmolien	RBDP- 1ltr sachet Swagat- RBD palm oil -897 ml sac	75.00 67.00
RB rice bran oil	Safal- rice bran oil- 1ltr sac Safal- rice bran oil- 1/2ltr sac Safal- rice bran oil- 5ltr j/c	80.00 40.50 410.00
Refined groundnut oil	RGNO- 1ltr sachet RGNO- 5ltr j/c	106.00 535.00
Refined sunflower oil	Sungold- 1ltr sachet Sungold-1/2ltr sachet Sungold- 5ltr j/c/plastic jar	90.00 45.50 475.00
Refined sunflower oil premium	Premium- 1ltr sachet	90.00
Soya oil	Suguna- refined soybean oil- 1/2ltr Suguna- Soya- 1ltr sachet Suguna- Soya- 5ltr j/c	42.00 83.00 425.00
Sun Safal sunflower oil	Sun Safal- 1ltr sachet Sun Safal- 5ltr j/c Sun Safal- 1/2ltr sac	89.00 460.00 45.00

Source: Hand-out of KOF Ltd., (2011)

Table 4.8: Bulk Oil Prices of KOF

Product genera	Product name	MRP (Rs.)
Coconut oil	Coco- 1kg jar	164.50
	Coco- 15kg tin	1902.50
	Coco- 5kg j/can	679.50
Filtered groundnut oil	FGNO- 15kg tin	1168.00
	FGNO- 15ltr tin	1087.00
Gingelly oil	Safal Gingelly oil-15kg tin	1825.00
	Safal Gingelly oil-15ltr tin	1675.00
Nutrich	Nutrich – 15ltr tin	1195.00
RBD Palmolien	RBDP- 15kg tin	1225.00
	RBDP- 15ltr tin	1160.00
RB rice bran oil	Safal- Rice bran- 15kg tin	1225.00
	Safal- Rice bran- 15ltr tin	1160.00
Refined groundnut oil	RGNO- 15kg tin	1630.00
	RGNO- 15 ltr tin	1565.00
Refined sunflower oil	Sungold- 15kg tin	1405.00
	Sungold- 15ltr tin	1340.00
Soya oil	Soya- 15kg tin	1247.00
	Soya- 15ltr tin	1182.00
Sun Safal sunflower oil	Sun Safal- 15kg tin	1375.00
	Sun Safal- 15ltr tin	1310.00

Source: Hand-out of KOF Ltd., (2011)

filtered groundnut oil and sungold refined sunflower oil accounts for Rs.78.00 and Rs.75.50 respectively. Stockists margin for safal filtered groundnut oil is Rs.3.00 where as for sungold refined sunflower oil is Rs.2.25. Retailer's margin for safal filtered groundnut oil and sungold refined sunflower oil is Rs.5.00 and Rs.12.25, respectively. Maximum Retail Price (MRP) for 1 litre sachet accounts for Rs.86.00 and Rs.90.00 respectively for safal filtered groundnut oil and sungold refined sunflower oil.

4.2.3 Product Segmentation of edible oil of the KOF

Product segmentation of edible oil of the KOF is presented in the Table 4.9 and Fig. 5. The product segments constituted sunflower, groundnut, palmolein, rice bran oil, soya oil, nutrich (blended veg oil), deepa (lighting oil), coconut oil and gingelly oil. The sunflower oil alone constituted 58.062 per cent (10140 metric tonnes) of the total quantity of edible oil sold during the 2010-11. This is followed by palmolein oil (17.338 per cent), groundnut oil (10.157 per cent), rice bran oil (6.138 per cent), soya oil (3.034 per cent), nutrich (blended veg oil) (2.433 per cent), deepa lighting oil (1.389 per cent), coconut oil (1.351 per cent) and gingelly oil (0.098 per cent) respectively.

4.3 Sales promotion measures

KOF undertakes sales promotion strategies to attract the attention of ultimate customers. The sales promotional strategies motivate distributors, wholesalers and retailers to maintain the stock and push their brand to ultimate customers.

4.3.1 Sales promotional measures / strategies of KOF

i. **Discount sales:** KOF gives discount to the distributors. It provides one rupee discount per litre of edible oil. It varies from one rupee to

Table 4.9: Product Segmentation of edible oil of the KOF

Particulars	Quantity sold during 2010-11(MT)	Product segmentation (percentage)
1. Sunflower oil		
a. Sungold Refined sunflower oil	5209	29.827
b. Sun Safal sunflower oil	3154	18.060
c. Refined sunflower oil premium	1777	10.175
Total sunflower oil	10140	**58.062**
2. Palmolien oil	3028	**17.338**
3. Groundnut oil		
a. Filtered groundnut oil	1314	7.524
b. Refined groundnut oil	460	2.633
Total groundnut oil	1774	**10.157**
4. Rice bran oil	1072	**6.138**
5. Soya oil	530	**3.034**
6. Nutrich (blended veg oil)	425	**2.433**
7. Deepa (lighting oil)	242	**1.389**
8. Coconut oil	236	**1.351**
9. Gingelly oil	17	**0.098**
Total	**17464**	**100.00**

Source: Audit Reports of KOF Ltd., (2011)

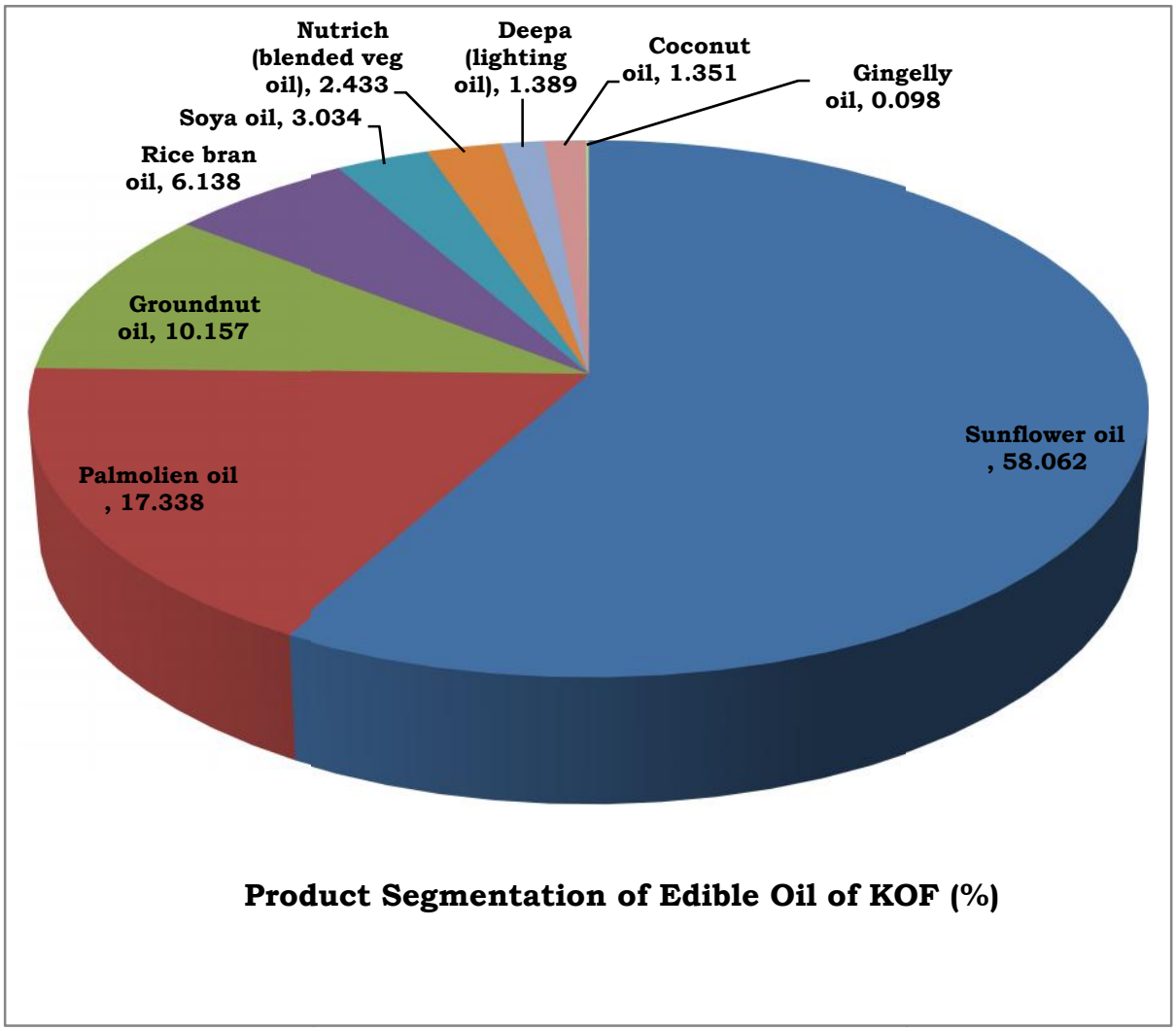

Fig. 5: Product Segmentation of Edible Oil of KOF (%)

5 rupee depending upon the sales. If the target is not reached then they will go for discount sales.

ii. **Quantity based discounts:** If distributor of KOF achieves 10 per cent increase in the volume of sales over a period, it may be 1 month, 2 months or 3 months then KOF gives 25 paise per litre as discount. If the distributors achieve 20 per cent, KOF gives Rs. 0.50 per litre. Likewise, it provides depending upon the volume of sales by the distributor.

iii. **Scratch card scheme:** This scheme is for both wholesalers and retailers. For every one case of edible oil, there will be an offer of either Rs.10 or Rs.50 in each box. One case means ten pouches / sachets of edible oil in one box.

iv. **Product wise offers:** If retailer buys Rs.1000 worth of edible oil then KOF will give plastic boxes, glasses, filters and hot boxes etc.

v. **Festival offers:** If customer buys 5 litre sachets then they will get 500 ml coconut oil free. If he buys 2 litre of edible oil, one shampoo or 5 rupees masala powder will be given.

vi. **Gift vouchers:** KOF is giving some amount as gifts for retailers for the participation in the "Festival Bonanza from the House of the Safal" scheme during 2010-11.

4.3.2 Sales promotion expenses through different media

Sales promotion measures undertaken by the federation were advertising in the television (ETV, Z Kannada and Suvarna channels), radio, magazines (Sudha, Taranga and Gruhashobha), boards (Hoarding) at busy roads, exhibitions, pamphlets, leaflets and wall painting.

Table 4.10: Sales promotion expenses incurred through different media in 2009-10

Sl. No.	Particulars	Sales promotion expenses (Rs. In lakhs)
1.	Television	10.0 (41.32)
2.	Radio	1.0 (4.13)
3.	Boards	5.0 (20.66)
4.	Leaflets	0.2 (0.82)
5.	Pamphlets	0.5 (2.06)
6.	Exhibitions	2.5 (10.33)
7.	Magazines	1.0 (4.13)
8.	Wall painting	4.0 (16.52)
	Total	**24.20 (100.00)**

Source: Audit Reports of KOF Ltd., (2009-10)

Note: Figures in parenthesis indicate the percentage to the total sales promotion expenses.

Sales promotion expenses incurred through different media in 2009-10 is presented in the Table 4.10. It may be noted from the table that the sales promotion expenses which were incurred through different media found to be maximum on television which accounted for 41.32 per cent (Rs. 10.0 lakhs). This was followed by boards (20.66 per cent), wall painting (16.52 per cent), exhibitions (10.33 per cent), radio (4.13 per cent) and magazines (4.13 per cent) respectively. Sales promotion expenses which were incurred found to be minimum on leaflets and pamphlets which accounted for 0.82 and 2.06 per cent respectively.

4.3.3 Growth rate of net sales of edible oil

The compound growth rate of net sales of edible oil of Karnataka Oilseed Federation (KOF) was presented in the Table 4.11. The growth rates were computed for the period 2001-02 to 2010-11.

The compound growth rate of net sales of edible oil of KOF for the period of 2001-02 to 2010-11, (Table 4.11) reveal that during 2001-02 to 2010-11, KOF registered compound growth rate of 8.30 per cent of sales.

4.3.4 Seasonal Indices of Sales of Edible Oil of KOF

The sales of KOF have shown pronounced seasonal variations with regard to the edible oil, is presented in Table 4.12 and Fig. 6. It may be noted from the table that the seasonal indices of sales of edible oil of KOF were found to be maximum in the month of January which worked to 106.49 metric tonnes followed by 104.56 metric tonnes in October. The seasonal indices of sales of edible oil of KOF were found to be minimum in the month of April which worked to 93.36 metric tonnes.

4.4 Channels of distribution of edible oil

Channels of distribution refers to the route taken by goods as they flow or move from the point of production to the point of consumption. In

Table 4.11: Net Sales of Edible Oil of KOF

Sl. No.	Year	Net Sales (metric tonnes)
1.	2001-02	8237
2.	2002-03	9292
3.	2003-04	10072
4.	2004-05	10606
5.	2005-06	11953
6.	2006-07	13051
7.	2007-08	13654
8.	2008-09	14062
9.	2009-10	16174
10.	2010-11	17464
	Compound Growth Rate (%)	**8.30***

Source: Audit Reports of KOF Ltd., (2001-02 to 2010-11)

Note: * Statistically significant at 1 per cent level.

Table 4.12: Month wise Sales of Edible Oil by KOF

Month / year	Jan	Feb	Mar	April	May	June	July	August	Sep	Oct	Nov	Dec
2001-02	722	714	768	588	687	568	718	712	743	683	717	617
2002-03	791	750	725	769	797	731	786	804	691	852	779	817
2003-04	849	787	826	682	807	868	895	892	859	909	834	864
2004-05	918	912	890	797	826	867	865	818	904	914	957	938
2005-06	986	996	1076	928	932	943	938	1042	1012	1145	965	990
2006-07	1135	1003	1076	985	1034	1016	1006	1140	1199	1178	1131	1088
2007-08	1165	1080	1135	1090	1138	1214	1049	1212	1151	1189	1201	1030
2008-09	1257	1188	1277	966	1212	1216	1064	1162	1214	1188	1180	1139
2009-10	1377	1384	1446	1315	1284	1268	1321	1347	1220	1496	1408	1309
2010-11	1447	1294	1415	1367	1469	1476	1497	1565	1481	1650	1377	1426
Seasonal index	**106.49**	**100.29**	**104.00**	**93.36**	**98.86**	**99.28**	**97.27**	**101.35**	**99.43**	**104.56**	**99.78**	**95.27**

Source: Audit Reports of KOF Ltd., (2001-02 to 2010-11)

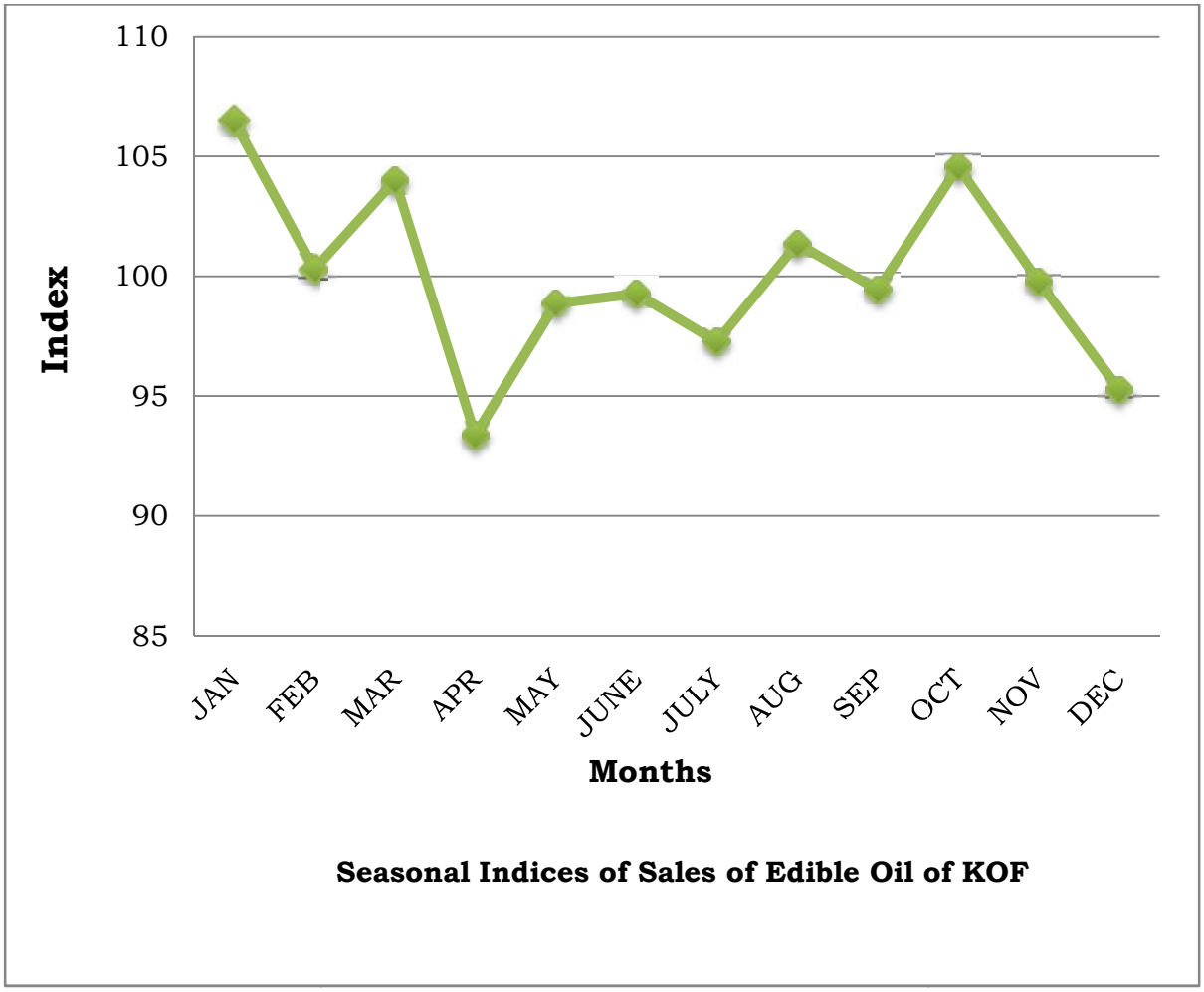

Fig. 6: Seasonal Indices of Sales of Edible Oil of KOF

other words, it is the pipeline for goods in their flow from producers to the final consumers. In short, it is the route through which the title to the product passes from the producer, the first owner, to the ultimate consumer, the last owner. The channels of distribution for a product begins with the producer and ends with the ultimate consumers of the product.

4.4.1 Channels of distribution of edible oil

Channels of distribution play a very important part in the marketing of goods. Distribution is one of the elements of marketing mix. It stands for making arrangements of the smooth flow of goods and services from the producers to the consumers.

Channel I: KOF- Consumers

Under this channel, the KOF sells its products directly to the final consumers without the help of any middlemen. Under this channel, goods move from the producer (KOF) to the final consumers directly without any middlemen.

Direct selling by producer's (KOF) to consumers may take any of the following forms:

i. Sale at the producer's factory or production point.
ii. Sale through manufacturer's or own retail outlets of KOF opened at different places.
iii. House-to-house sales or door-to-door sale through own sales arrangement.
iv. Sale at the point of important people gathering points through its own van. (van sales)

Channel II : Manufacturer (KOF) –Distributor – Retailer - Consumer

It is one of the types of indirect selling method, in which instead of using the wholesaler, the producers use the services of the distributors for the distribution of his goods to the retailers especially large retailers. The retailers, in turn sell the goods to the ultimate consumers. That means, under this channel the wholesalers are eliminated and the functions of the wholesalers are performed by the distributor. Selection of distributor depends on his feasibility study. He must be a local person, he must financially be sound and availability of adequate infrastructural facilities etc. such willing aspirants should approach the marketing department of KOF in the head office at Shivajinagar, Bengaluru. The prescribed registration form had to be duly filled with all the necessary details to get the registration and to become a distributor.

Channel III : Manufacturer (KOF) – Wholesaler/stockists – Retailer-Consumer.

Under this channel, goods move from the manufacturer to the wholesalers to the retailer and from the retailers to the ultimate consumers or users. This is the traditional and most common channel of distribution of edible oil.

Channel IV: Manufacturer (KOF) - Institutions.

This is one of the important distribution channels in mass contact method, in which the manufacturer directly sells their products to big institutions or big organizations. Here, instead of using different distributors, wholesalers, retailers, etc. they sell their goods directly to the big institutions or organizations.

i. **Government Industries:** BHEL, HAL, Bharat Electronics, BEML, VISL and the West Coast Paper Mills Ltd etc.

Government Industries:

Private Industries:



IT Companies

Hotels:

Temples:

Hospitals:

Colleges:

Others:

Fig. 7: Major Clients of KOF

ii. **Private Industries:** Volvo, Escorts, Vetcare, Parle Products Ltd, Larson and Tubro Ltd, Himalaya Herbal Healthcare Ltd, Toyota, Titan and the MTR**.**

iii. **IT Companies:** Wipro, Tata Consultancy Services, Satyam and American power conversion.

iv. **Hotels :** The Leela Palace, Eagleton, Le Meridian, BJN Group, Orange Country, Sothern Star hotel, Comfort Inn, Dominos and Karnataka State tourism development corporation.

v. **Temples :** Iskon

vi. **Hospitals and colleges:** Manipal, Apollo and Horizon College of English.

Channel V : Manufacturer (KOF) - Distribution network – Organised retailers (Modern retail outlets)

This is the latest distribution channel which is newly introduced in the market, It is one in which is type of e-commerce in which manufacturer distribute or sell his product through the means of e-network which means through internet websites, on-line marketing etc…instead of using distributors, wholesalers and retailers, in which it is less time consuming and easy to trade in the market. Organised retailers like Big Bazaar, Food world, Star Bazaar, Metro Cash and Carry and reliance etc.

4.4.2 Distribution of Edible oil by KOF to Bengaluru and other than Bengaluru areas (non - project areas)

Distribution of edible oil in respect of Bengaluru and other than Bengaluru was made after the summation of groundnut, sunflower, gingelly, coconut, soya, Palmolein, rice bran and deepa lighting oil which was sold by the federation which is presented in Table 4.13. Other than

Table 4.13: Distribution of Edible oil by KOF to Bengaluru and other than Bengaluru areas (non project areas)

Particulars	Year wise distribution of edible oil (metric tonnes)					
	2006-07	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**Average quantity of distribution of edible oil per year**
Bengaluru	6518	6972	7035	8130	8759	7482.8 (50.28)
Other than Bengaluru	6533	6682	7027	8044	8705	7398.2 (49.72)
Total	13051	13654	14062	16174	17464	14881 (100.00)

Source: Audit Reports of KOF Ltd., (2006-07 to 2010-11)

Note: Figures in parenthesis indicate the percentage to the average quantity of distribution of edible oil per year.

Bengaluru in this context means non - project areas. Non - project areas include 13 districts which are not covered by the regional unions.

The quantity of distribution of edible oil of the KOF to the Bengaluru was maximum during the year 2010-11 which accounted for 8759 metric tonnes. This was followed by the 2009-10 (8130 metric tonnes), 2008-09 (7035 metric tonnes) and 2007-08 (6972 metric tonnes) respectively. The quantity of distribution of edible oil in the Bengaluru was least during the year 2006-07 which accounted for 6518 metric tonnes.

Similarly in other than Bengaluru (non - project areas), the quantity of distribution of edible oil was maximum during the year 2010-11 which accounted for 8705 metric tonnes. The quantity of distribution of edible oil to the other than Bengaluru was least during the year 2006-07 which accounted for 6533 metric tonnes. The total quantity of distribution of edible oil of KOF was maximum during the year 2010-11 which accounted for 17464 metric tonnes.

It was also revealed from the table, the average quantity of distribution of edible oil per year to the Bengaluru was 7482.8 metric tonnes (50.28 per cent) to the total distribution by the KOF. On the other hand, other than Bengaluru areas accounts for about 7398.2 metric tonnes (49.71 per cent) to the total distribution of edible oil by the KOF.

4.4.3 Product - wise comparison of margins to Stockists / Wholesalers and Retailers

Table 4.14 and Fig 8. shows the product - wise comparison of margins to stockiest / wholesalers and retailers for the products of KOF. The stockists/wholesalers average margin for coconut oil was 4.89 per cent, whereas the retailer's average margin was 15.62 per cent. Retailer's margin was three times higher than the stockists margin for coconut oil.

Table 4.14: Product - wise comparison of margins to stockists/wholesalers and retailers

(Value in Rs)

Product genera	Product name	Issue price	Stockist margin	Stockists (%)	Retailer issue price	Retailer margin	Retailer margin (%)	MRP
Coconut oil	Coco- 210ml bottle	32.90	3.30	8.25	36.20	3.80	9.50	40.00
	Coco- 500ml bottle	64.00	5.00	6.32	69.00	10.00	12.65	79.00
	Safal- coconut oil- 1 ltr sac	107.0	3.50	2.51	110.50	28.50	20.00	139.0
	Safal- coconut oil- ½ ltr sac	54.00	1.75	2.50	55.75	14.25	20.35	70.00
Deepa lighting oil	Safal- deepa lighting oil- 1ltr sac	63.00	2.00	2.35	65.00	20.00	23.52	85.00
	Safal- deepa lighting oil- 1/2ltr sac	31.50	1.00	2.32	32.50	10.50	24.41	43.00
Filtered groundnut oil	FGNO- 1ltr sachet	78.00	3.00	3.48	81.00	5.00	5.81	86.00
	FGNO- 1/2 ltr sachet	39.25	1.50	3.44	40.75	2.75	6.32	43.50
	FGNO- 5ltr j/can	400.0	15.00	3.40	415.00	25.00	5.68	440.0
Gingelly oil	Safal - Gingelly oil - 1 ltr sac	116.0	6.00	3.92	122.00	31.00	20.26	153.0
	Safal - Gingelly oil – 1/2 ltr sac	58.00	3.00	3.79	61.00	18.00	22.78	79.00
Nut Rich	Nut rich- edible oil- 1ltr sac	66.50	2.25	2.81	68.75	11.25	14.06	80.00
	Nut rich- edible oil- 1/2ltr sac	33.75	1.10	2.71	34.85	5.65	13.95	40.50
	Nut rich- edible oil- 5ltr j/can	342.0	12.00	3.03	354.50	40.50	10.25	395.0

RBDPalmolien	RBDP- 1ltr sachet	63.50	1.50	2.00	65.00	10.00	13.33	75.00
	Swagat – RBD- palm oil-879 ml sac	56.37	1.50	2.23	57.87	9.13	13.62	67.00
RB rice bran oil	Safal- rice bran oil- 1ltr sac	66.00	2.25	2.81	68.25	11.75	14.68	80.00
	Safal- rice bran oil- 1/2ltr sac	33.50	1.00	2.46	34.50	6.00	14.81	40.50
	Safal- rice bran oil- 5ltr j/c	340.0	11.25	2.74	351.25	58.75	14.32	410.0
Refined groundnut oil	RGNO- 1ltr sachet	95.00	3.00	2.83	98.00	8.00	7.54	106.0
	RGNO- 5ltr j/c	486.0	14.00	2.61	500.00	35.00	6.54	535.0
Refined sunflower oil	Sungold- 1ltr sachet	75.50	2.25	2.50	77.75	12.25	13.61	90.00
	Sungold-1/2ltr sachet	37.75	1.10	2.41	38.85	6.65	14.61	45.50
	Sungold- 5ltr j/c/plastic jar	398.0	12.00	2.52	410.00	65.00	13.68	475.0
Refined sunflower oil premium	Premium- 1ltr sachet	75.50	2.25	2.50	77.75	12.25	13.61	90.00
Soya oil	Suguna- refined soybean oil- 1/2ltr	33.25	1.00	2.38	34.25	7.75	18.45	42.00
	Suguna- Soya- 1ltr sachet	66.50	2.00	2.40	68.50	14.50	17.46	83.00
	Suguna- Soya- 5ltr j/c	347.5	12.00	2.82	359.50	65.50	15.41	425.0
Sun Safal sunflower oil	Sun Safal- 1ltr sachet	74.50	2.00	2.24	76.50	12.50	14.04	89.00
	Sun Safal- 5ltr j/c	390.0	12.00	2.60	402.00	58.00	12.60	460.0
	Sun Safal- 1/2ltr sac	37.25	1.00	2.22	38.25	6.75	15.00	45.00

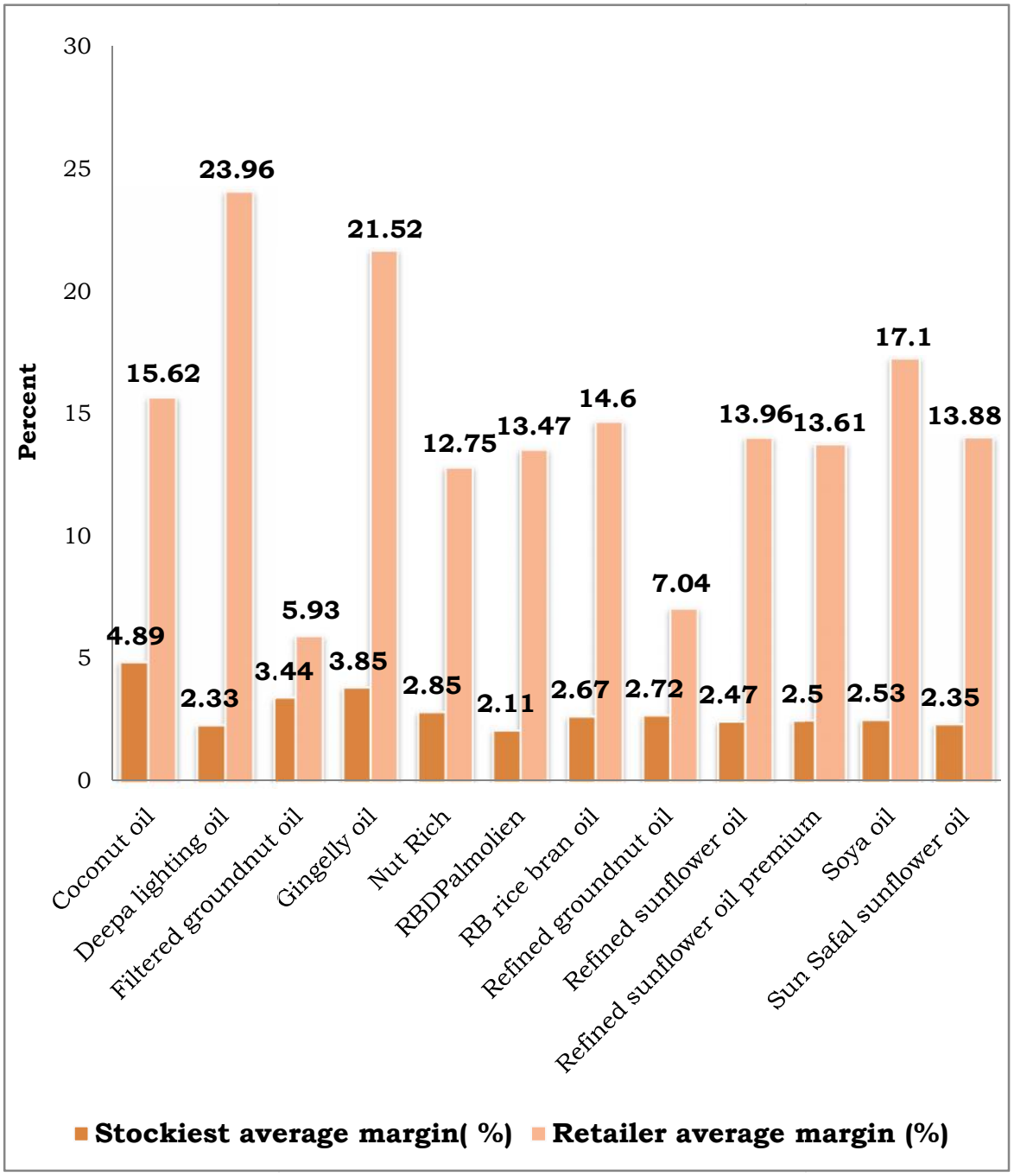

Fig. 8: Product wise comparison of margins to Stockists / Wholesalers and Retailers

Fig. 9: Brands of KOF

In case of deepa lighting oil, stockiest margin was accounted for 2.33 per cent and retailer's margin accounted for about 23.96 per cent. For filtered groundnut oil, the stockists and retailer's margins are 3.44 per cent and 5.93 per cent respectively. In case of gingelly oil, the stockists and retailer's margins accounted for 3.85 and 21.52 per cent respectively. The stockists and retailer's margins accounted for 2.85 and 12.75 per cent respectively for nut rich. In case of palmolein oil, the stockists and retailer's margins were 2.11 and 13.47 per cent respectively.

For rice bran oil, the stockists and retailer's margins accounted for about 2.67 and 14.6 per cent respectively. Similarly, for refined groundnut oil, stockists and retailer's margins accounted for about 2.72 and 7.04 per cent respectively. The stockists margin for refined sunflower oil was 2.47 per cent and retailer's margin was 13.96 per cent. For refined sunflower oil premium, stockists and retailer's margins accounted for about 2.5 and 13.61 per cent respectively. In case of soya oil, the stockists and retailer's margins were 2.53 and 17.1 per cent respectively. Similarly, for sun safal sunflower oil, the stockists and retailer's margins were 2.35 and 13.88 per cent respectively.

The stockists average margin was found to be maximum on coconut oil which accounted for about 4.89 per cent. The stockists average margin was found to be minimum on palmolein oil which accounted for about 2.11 per cent. Similarly, the retailer's average margin was found to be maximum on deepa lighting oil which accounted for 23.96 per cent. The retailer's average margin was found to be minimum on filtered groundnut oil which accounted for 5.93 per cent.

Discussion

CHAPTER V

DISCUSSION

The results of the investigation presented in the previous chapter are discussed in this chapter under the following headings.

5.1 Procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by the members to different agencies

5.2 Pricing strategy followed for edible oil by the KOF

5.3 Sales promotion measures

5.4 Channels of distribution of edible oil of the KOF

5.1 Procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by the members to different agencies

5.1.1 Procurement strategy of oilseeds

Karnataka Oilseed Federation (KOF) procures oilseeds from the Agricultural Produce Market Committee (APMC) through commission agents in different APMC's namely Challakere, Chitradurga, Gadag, Raichur, Bagalkot, Bellary and other APMC's. KOF board considers the opinions of management heads of procurement & inputs and marketing for procurement of oilseeds. KOF paying two per cent commission to commission agents for procurement of oilseeds Physical parameters were duly considered while purchasing of oilseeds. These physical parameters are judged by the visual appearance by the personnel of KOF.

5.1.2 Procurement of oilseeds by federation

The oilseeds namely, groundnut and sunflower were procured by the federation. The quantity of groundnut, sunflower seeds procured by

the federation was maximum during the year 2002-03 accounted for 2797.17 metric tonnes and 2006-07 accounting for 553.95 metric tonnes respectively. It may be due to less competition in procurement of oilseeds, excess production of oilseeds, increased needs of the business, business parity and more market demand for oil.

Similarly the quantity of groundnut and sunflower seeds procured by the federation was least during the year 2005-06 which accounted for 223.48 metric tonnes and 2003-04 which accounted for 208.71 metric tonnes respectively which may be due to more competition in procurement of oilseeds, less production of oilseeds, less needs of the business, no business parity and less market demand for oil. Similarly, in case of total oilseeds (sunflower and groundnut seeds) the quantity procured was highest during the year 2002-03 which accounted for 2797.17 metric tonnes. The quantity of procurement of total oilseeds was least during the year 2005-06 (223.48 metric tonnes). Among the oilseeds, the groundnut seeds procured were more than the sunflower seeds. This is because of the same reasons discussed above. The results of this study are in line with the results of previous studies by Mohammad Yusuf (2000) and Shobha (1998).

5.1.3 Procurement of oilseeds by federation under Price Support Scheme Operation

The oilseeds procured by the federation under the price support scheme operation are namely, groundnut, sunflower, safflower and soybean seeds. The quantity of sunflower, groundnut, safflower and soybean seeds procured by the federation were maximum during the year 2000-01 (22824.912 metric tonnes), 2001-02 (3225.986 metric tonnes), 2005-06 (11530.579 metric tonnes) and 963.434 (metric tonnes) respectively. This is because of excess / bumper production of oilseeds in

the State due to use high yielding varieties which in turn leads to fall in the prices of oilseeds below the minimum support prices.

The quantity of sunflower, groundnut, safflower and soybean seeds procured by the federation were minimum during the year 2004-05 (30.362 metric tonnes), 2000-01 (609.181 metric tonnes), 2002-03 (1217.555 metric tonnes) and 2000-01 (748.225 metric tonnes) respectively. In case of total oilseeds (sunflower, groundnut, safflower and soybean seeds) the quantity procured was highest during the year 2000-01 which accounted for 26750.765 metric tonnes. The quantity of procurement was least during the year 2002-03 which accounted for about 1217.555 metric tonnes. Among the total oilseeds (sunflower, groundnut, safflower and soybean seeds), the procurement under price support scheme operation was maximum in sunflower seeds. KOF has procured huge quantities of oilseeds during 1999-2000 up to 2002-2003. During the Kharif 2008-09, KOF through regional unions has procured 4598.75 metric tonnes of sunflower seeds under price support scheme operation. This is because of the bumper production of oilseeds in farmers field. Due to more arrivals of produce to the market, the prices will fall below the minimum support prices. In order to protect the interests of farmers from the distress sales, KOF acting as an agent of NAFED for procurement of oilseeds under Government of India price support scheme.

5.1.4 Grade specifications for oilseeds under price support scheme operations

Grade specifications are prescribed by Government of India (GOI) for procurement of each type of oilseeds under price support scheme operation has been clearly shown in the appendix VII, VIII and IX respectively. It also announces minimum support prices for each

category of oilseeds in order to protect the farmers from distress sales. Grade specifications ensure the quality of oilseeds procured.

5.1.5 Procurement of edible oil by federation

The value of Sunflower, palmolien, groundnut, soybean, coconut and rice bran oil procured by the federation was maximum during the year 2007-08 (3409.58 lakh Rs), 2007-08 (1988.37 lakh Rs), 2007-08 (1614.43 lakh Rs), 2007-08 (119.10 lakh Rs), 2007-08 (77.99 lakh Rs) and 2007-08 (9.48 lakh Rs) respectively which may be due to more demand for branded edible oil of the KOF, increased population in the State, more availability of edible oil and due to availability of edible oil at cheaper prices.

The value of Sunflower, palmolien, groundnut, soybean, coconut and rice bran oil procured by the federation was minimum during the year 2004-05 (1909.58 lakhs Rs), 2005-06 (1070.00 lakh Rs), 2004-05 (904.18 lakh Rs), 2004-05 (66.70 lakh Rs), 2004-05 (43.68 lakh Rs) and 2004-05 (5.30 lakh Rs) respectively which may be due to less demand for branded edible oil of the KOF, lesser population in the State and due to lesser availability of edible oil and high procurement prices of edible oil.

Among the edible oils, the sunflower oil procured was more than the groundnut, palmolein, rice bran, coconut and soybean oil. Sunflower oil alone constitutes an value of 3409.58 lakh rupees out of the total value of 7218.95 lakh rupees during 2007-08. This is because of more demand for sunflower oil by the consumers due to its taste, flavor and quality etc. The results of this study are in line with the results of previous studies by Suprabha (2009).

5.1.6 Factors influencing the sales of oilseeds by members (farmers) to different agencies

All the members (farmers) of the KOF are selling their produce to village trader only. They are not selling to others due to various factors. The results indicated that better price was observed as first important factor with mean score of 62.5. This is because of better price for oilseeds by village trader to the members / farmers than the other agencies like APMC's, oil mills and other middlemen. Less risky was considered as second most important factor with mean score of 56.36. This is because, the burden of member / farmer reduces if he sells his produce to village trader. The other important factors which influences sales of oilseeds by members (farmers) to village trader in the ascending order of importance are absence of middlemen, immediate cash payment, smaller quantity of produce, absence of marketing costs, proximity, social attachment, advance loan, lack of market information and previous agreement with a mean score of 53.4, 52.23, 51.93, 49.36, 38.83, 28.93, 15.1, 11.03 and 6.03 respectively.

5.1.7 Constraints faced by the members / farmer respondents in marketing

An illegal deduction out of the total quantity purchased by the middlemen from the farmers was observed as first important marketing constraint with mean score of 68.87. They deduct 2-5 per cent of the total quantity of the produce per quintal. High commission charges were considered as the second most important constraint with mean score of 61.19. This is due to market intermediaries / middlemen who are taking 4 per cent commission from the farmers. Fluctuation in the prices, faulty system of weighment, delayed cash payment, markets are far away and lack of market information were ranked third, fourth, fifth, sixth and

seventh ranks with a mean score of 55.54, 55.00, 40.93, 25.74 and 22.38 respectively.

5.2 Pricing strategy followed for edible oil by the KOF

5.2.2 Pricing strategy for groundnut and sunflower oil (1 litre sachet) of KOF

The total cost of the packed oil for one litre sachet of safal filtered groundnut oil was maximum (Rs.70.76) than sungold refined sunflower oil (Rs.67.86). This is because of the high cost of the oil, which may be due to high procurement cost of oilseeds and processing cost etc. Packing cost, transportation, van sales/leakage allowance and interest on working capital are same for both safal filtered groundnut oil and sungold refined sunflower oil which accounts Rs.3.00, Rs.0.90, Rs.0.10 and Rs.0.76 respectively.

Value Added Tax (VAT) for one litre sachet of safal filtered groundnut oil was maximum (Rs.3.53) than the sungold refined sunflower oil (Rs.3.39). This is because of high cost involved in packing of one litre sachet of safal filtered groundnut oil. Maximum Retail Price (MRP) was maximum on one litre sachet of sungold refined sunflower oil (Rs.90.00) than the safal filtered groundnut oil (Rs.86.00). This is because of high retailers margin (Rs.12.25) for sungold refined sunflower oil of the KOF due to its competitors where they give high margins for their brands on one litre sachet of sunflower oil. The similar results were also noticed by Suprabha (2009).

5.2.3 Product Segmentation of edible oil of the KOF

The sunflower oil constituted largest segmentation of edible oil of the KOF which worked out to 58.062 per cent (10140 metric tonnes) of the total quantity of edible oil sold during the 2010-11. This is followed by palmolein oil (17.338 per cent), groundnut oil (10.157 per cent), rice

bran oil (6.138 per cent), soya oil (3.034 per cent), nut rich (blended veg oil) (2.433 per cent), deepa lighting oil (1.389 per cent) and coconut oil (1.351 per cent) respectively and the least 0.098 per cent (17 metric tonnes) in gingelly oil. Preference for the usage of different oils is due to factors such as price, flavor, quality and health consciousness. It is implied that among the oils which were sold by the federation, groundnut oil was most preferred than other oils. This is because of its taste, flavor, quality, price, brand and other attributes. The results of this study are in line with the results of previous studies by Mohammad Yusuf (2000).

5.3 Sales promotion measures

5.3.1 Sales promotional measures / strategies of KOF

KOF adopted various sales promotion strategies to attract the attention of ultimate customers. KOF is providing discount sales, price offers, festival offers, coupons, gift voucher and scratch cards to distributors, wholesalers, retailers and to consumers. This has helped to improve the sales of edible oil by the KOF. Sales promotion measures / strategies are necessary to motivate distributors, wholesalers and retailers to maintain the stock and push their brand to ultimate customers.

5.3.2 Sales promotion expenses through different media

The sales promotion expenses which were incurred through different media found to be maximum on television which accounted for 41.32 per cent (Rs. 10.0 lakhs). This is because of high advertisement costs on television. Cost of the advertisements in the TV depending upon the time/period which may be seconds or minutes. Costs of advertisements also depending upon the channels. This is followed by the boards which accounted for 20.66 per cent (Rs.5.0 lakhs). This is because, the boards are permanent one, the frequencies of displaying the

products are more than any other media. This was followed by wall painting (16.52 per cent), exhibitions (10.33 per cent), radio (4.13 per cent) and magazines (4.13 per cent) respectively. The products of the KOF were advertised in the magazines at the time of the festivals.

The minimum sales promotion expenses were found to be on leaflets, pamphlets and magazines. It is because these promotional measures / strategies incurred low cost and also reach fewer consumers. It is implied that the federation is now needed to concentrate on plan to advertise their products in all film talkies and in television during the interval times of serials. Advertising on bus panel is very useful, cheaper and ideal way to convey the message. Jennings (1970) studied various communications media; T.V. was undoubtedly the most potent and effective medium of advertising products and idea. Nageshwar Rao (1987) observed that massive advertising campaign had given boost to the sales of soft drinks. Shivakumar (1987) explained importance of advertising as a tool of marketing and means of communication.

5.3.3 Growth rate of net sales of edible oil

The results indicated that compound growth rate was positive and statistically significant at 1% level. The compound growth rate of net sales of edible oil of the KOF was 8.30 per cent. It may be due to increased demand for edible oil of the KOF from the consumers, increased awareness about the quality and brands etc.

5.3.4 Seasonal Indices of Sales of Edible Oil of KOF

The sales of KOF shown pronounced seasonal variations with regard to the sales of edible oil. The results indicated that, monthly seasonal indices of sales of edible oil of KOF found to be maximum in the month of January which worked to 106.49 metric tonnes, followed by 104.56 metric tonnes in the month of October. It is due to more demand

from the consumers due to festivals, more discounts and offers from the KOF and lesser price for the products of the KOF when compared to others. The seasonal indices of sales of edible oil of KOF were found to be minimum in the month of April which worked to 93.36 metric tonnes. This is because of less demand for edible oil of the KOF from the consumers, less discounts by the KOF and higher prices.

Peak season for sales of edible oil of the KOF was January, March, August and October respectively. The lean seasons for sales of edible oil of the KOF were April, May, July and December respectively. This is because of the same reasons discussed above.

5.4 Channels of distribution of edible oil

5.4.2 Distribution of Edible oil by KOF to Bengaluru and other than Bengaluru areas (non - project areas)

The quantity of distribution of edible oil of the KOF to the Bengaluru and other than Bengaluru (non - project areas) was maximum during the year 2010-11 which accounted for 8759 metric tonnes and 8705 metric tonnes respectively. It may be due to more availability of oilseeds and edible oil, more demand of oil due to less fluctuation of oil prices and huge population requirements. The least quantity of distribution of edible oil of the KOF to the Bengaluru and other than Bengaluru (non project areas) was during the year 2006-07 which accounted for 6518 metric tonnes and 6533 metric tonnes respectively. It may be due to less availability of oilseeds and oil, less demand due to high fluctuations of oil prices. Non project areas include 13 districts. The remaining districts are covered by the three regional unions.

The results also indicated that the average quantity of distribution of edible oil to the Bengaluru was 7482.8 metric tonnes (50.28 per cent) to the total distribution by the KOF. On the other hand, other than

Bengaluru areas accounts for about 7398.2 metric tonnes (49.71 per cent) to the total distribution of edible oil by the KOF. There is no significant difference between the distribution of edible oil by KOF to Bengaluru and other than Bengaluru areas (non project areas).

5.4.3 Product-wise comparison of margins to Stockists /Wholesalers and Retailers

The stockists average margin was found to be maximum on coconut oil which accounted for about 4.89 per cent and the retailer's average margin was found to be maximum on deepa lighting oil which accounted for 23.96 per cent. This is because of the competitors, where they give higher margins for their brands of coconut and lighting oil to the stockists and retailers. Therefore, the stockists average and retailers average margins are maximum on coconut and deepa lighting oil of KOF.

The stockists average margin was found to be minimum on palmolein oil which accounted for about 2.11 per cent and the retailer's average margin was found to be minimum on filtered groundnut oil which accounted for 5.93 per cent. This is because of the competitors, where they give lesser margins for their brands of palmolien and filtered groundnut oil to the stockists and retailers. Therefore, the stockists average and retailers average margins are minimum on palmolien and filtered groundnut oil of KOF.

The results also indicated that the stockists and retailers margin in case of 1 litre sachet was maximum on gingelly oil which accounted for Rs.6.00 and Rs.31.00 respectively. The stockists and retailers margin in case of 1 litre sachet was minimum on palmolien oil which accounted for Rs.6.00 and on filtered groundnut oil which accounted for Rs.5.00 respectively. It is because of the same reasons discussed above. The retailers have higher margins than stockists in all size of consumer

packs of KOF. This is because, the retailer is nearer to the consumer and consumers are highly influenced by the retailer. The federation may provide higher margins to stockists and retailers so that they can increase sales volume of the edible oil. The results of this study are in line with the results of previous studies by Suprabha (2009).

Summary & Policy Implications

CHAPTER VI

SUMMARY AND POLICY IMPLICATIONS

Oilseeds occupy an important position in the Indian economy, as they provide the much needed protein, fat and energy to the human and livestock population and also earn precious foreign exchange to the country. No other farm commodity can really meet simultaneously in such a large quantity the energy and protein requirements of human body as oilseeds do. There are two sources of oils – primary source and secondary source. The primary sources are nine principal oilseeds viz. groundnut, rapeseed / mustard, soybean, sunflower, sesame, niger, safflower, castor and linseeds. Edible oils obtained through secondary source include coconut, cottonseed, rice bran and oilseed cakes.

Oilseeds and edible oils are two of the most sensitive essential commodities. India is one of the largest producers of oilseeds in the world and this sector occupies an important position in the agricultural economy.

Government of India in mid 1980's started the "Technology Mission on Oilseed and Pulses" (TMOP) in order to enhance productivity in oilseeds and make India self sufficient in edible oil. On 22.8.1984 Government of Karnataka approved the implementation of National Dairy Development Board's (NDDB) project “Restructuring Edible Oil& Oilseeds Production and Marketing” in Karnataka keeping in mind the objectives laid down in the TMOP.

The Karnataka Cooperative Oilseeds Growers Federation Limited (KOF), the agency entrusted with implementation of the Project, was registered on 26th October 1984, under the Karnataka Co-operative Societies Act. The project, which was inspired by the Anand Model of Milk Co-operatives, is designed to create an integrated Co-operative

system of production, procurement, processing of Oilseeds and marketing of edible oil and its by-products. KOF has modern edible oil packaging plant at Whitefield, Bangalore. Various types of edible oils are packed in sachets, bottles, jerry cans and barrels to suit the market requirements.

A Study on Procurement of Oilseeds and sales management of edible oil by Karnataka Cooperative Oilseeds Growers Federation Limited (KOF), has special significance. Members (farmers) of the KOF are selling oilseeds to different agencies. They are not selling to the oilseeds growers cooperative societies of KOF. Sales promotion measures of KOF are not effective and competitive unlike the local competitors. Keeping this view, the following objectives are considered for the study.

i. To assess the procurement strategy of oilseeds by the KOF and the factors influencing the sales of oilseeds by members to different agencies.
ii. To analyse the pricing strategy followed for edible oil by the KOF.
iii. To assess the sales promotion measures taken up by the KOF.
iv. To analyse the different channels of distribution of edible oil by the KOF.

The study was carried out in Karnataka Cooperative Oilseeds Growers Federation Limited (KOF), Bengaluru and Challakere taluk of Chitradurga district. The necessary details were collected from primary sources by discussion and personal interviews with members/farmers, personnel of the KOF who are working in the field of procurement, inputs and marketing divisions, distributors, stockists, retailers, own retail outlets and modern retail outlets (organised retailers) and secondary data were obtained from the annual reports, records, handouts of the KOF,

office of the Assistant Agricultural Officer, Challakere and other published sources.

The data were analysed using various analytical techniques viz., descriptive statistics, garret's ranking, Time series analysis (seasonal index) and compound growth rate analysis.

Findings of the study

The important findings of the study are summarized and suitable conclusions are drawn and presented below.

1. Karnataka Oilseed Federation (KOF) procures oilseeds from the Agricultural Produce Market Committee (APMC) through the commission agents. It procures groundnut and sunflower seeds.
2. The quantity of total oilseeds (sunflower and groundnut seeds) procured was highest during the year 2002-03 which accounted for 2797.17 metric tonnes. The quantity of procurement of total oilseeds was least during the year 2005-06 which accounted for 223.48 metric tonnes. Among the oilseeds, procurement was maximum in groundnut seeds.
3. KOF is acting as an agent of NAFED for procurement of oilseeds under Government of India price support scheme in order to protect the interests of farmers from the distress sales whenever market rates rule below the support price.
4. The quantity of total oilseeds (sunflower, groundnut, safflower and soybean seeds) procured under price support scheme operation was highest during the year 2000-01 which accounted for 26750.765 metric tonnes. During 2008-09, KOF procured 4598.756 metric tonnes of sunflower.

5. Government of India prescribed grade specifications for procurement of oilseeds under price support scheme operation.

6. KOF procuring oil from its own processing unit, regional unions and also from private oil mills. There is an increased trend in the procurement of edible oil by the KOF over the years.

7. Better price, less risky and absence of middlemen were the important factors which influences the sales of oilseeds by farmers/members to village trader.

8. An illegal deduction of oilseeds by the middlemen to the farmers/members was observed as first important marketing constraint with mean score of 68.87 followed by high commission charges which considered as the second most important constraint with mean score of 61.19.

9. The total cost of the packed oil for one litre sachet of safal filtered groundnut oil was maximum (Rs.70.76) than sungold refined sunflower oil (Rs.67.86). This is because of the high cost of the oil, which may be due to high procurement cost of oilseeds, processing etc.

10. Maximum Retail Price (MRP) was maximum on one litre sachet of sungold refined sunflower oil (Rs.90.00) than the safal filtered groundnut oil (Rs.86.00).

11. The sunflower oil constituted largest segment of edible oil of KOF accounting for 58.062 per cent (10140 metric tonnes) of the total quantity of edible oil sold during the year 2010-11. This is followed by palmolein oil (17.338 per cent), groundnut oil (10.157 per cent), rice bran oil (6.138 per cent), soya oil (3.034 per cent), nut rich (blended veg oil) (2.433 per cent), deepa lighting oil (1.389 per cent), coconut oil (1.351 per cent) and gingelly oil (0.098 per cent) respectively.

12. Sales promotion expenses which were incurred through different media found to be maximum on television which accounted for 41.32 per cent (Rs. 10 lakhs) followed by boards (20.66 per cent). Sales promotion expenses which were incurred found to be minimum on leaflets and pamphlets which accounted for 0.82 and 2.06 per cent respectively.

13. KOF is giving discount sales, scratch card scheme, offers and gifts to distributors, retailers and consumers in order to increase the sales of edible oil.

14. The compound growth rate of net sales of edible oil of the KOF was statistically significant at 1% level (8.3 per cent) during the period 2001-02 to 2010-11.

15. Monthly seasonal indices of sales of edible oil of KOF found to be maximum in the month of January. It is due to more demand from the consumers due to festivals, more discounts and offers from the KOF. The seasonal indices of sales of edible oil of KOF were found to be minimum in the month of April.

16. KOF is distributing the packaged edible oil to the consumers through its own retail outlets, distributors, wholesalers, retailers and through modern retail outlets.

17. Average quantity of distribution of edible oil per year to the Bengaluru was 7482.8 metric tonnes (50.28 per cent) to the total distribution by the KOF. On the other hand, other than Bengaluru areas accounts for about 7398.2 metric tonnes (49.71 per cent) to the total distribution of edible oil by the KOF.

18. The stockists average margin was found to be maximum on coconut oil which accounted for about 4.89 per cent and the retailer's average margin was found to be maximum on deepa lighting oil which accounted for 23.96 per cent. The stockiest and retailers

average margin was found to be minimum on palmolein oil (2.11 per cent) and filtered groundnut oil (5.93 per cent) respectively.

Policy Implications

1. The Federation may procure oilseeds directly from the farmers / members instead of commission agents where it has to give two per cent commission to the commission agents.
2. Create awareness about the products of KOF by using effective sales promotion techniques like advertising the products of KOF on bus panel, through movies, hoarding at nearby railway and bus stations, strategic points on the roads and advertising during the intervals of popular serials in the television.
3. The Federation may provide high promotion strategies/measures like discounts, gift vouchers and offers to distributors, stockists/ wholesaler, retailers and to the consumers in order to increase the sales of edible oil.
4. The Federation may establish its own retail outlets in different places, so that the consumers will buy at factory rates which avoids margins spread between stockiest and retailers which in turn leads to increase in the sales of edible oil when compared to other competitors.

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CHAPTER VII

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Appendices

APPENDIX I

All India Area, Production and Yield of Nine Oilseeds

Year	Area (Million hectares)	Production (Million tonnes)	Yield (Kg / ha)
2000-01	22.77	18.44	810
2001-02	22.64	20.66	913
2002-03	21.49	14.84	691
2003-04	23.66	25.19	1064
2004-05	27.52	24.35	885
2005-06	27.86	27.98	1004
2006-07	26.51	24.29	916
2007-08	26.69	29.76	1115
2008-09	27.56	27.72	1006
2009-10*	26.11	24.93	955

* Fourth Advance Estimates as released on 19.07.2010.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation**.**

APPENDIX II

All India Area, Production and Yield of Groundnut

Year	Area (Million hectares)	Production (Million tonnes)	Yield (Kg/ha)
2000-01	6.56	6.41	977
2001-02	6.24	7.03	1127
2002-03	5.94	4.12	694
2003-04	5.99	8.13	1357
2004-05	6.64	6.77	1020
2005-06	6.74	7.99	1187
2006-07	5.62	4.86	866
2007-08	6.29	9.18	1459
2008-09	6.16	7.17	1163
2009-10*	5.47	5.51	1007
2010-11**	4.93	5.64	1144

* Fourth Advance Estimates as released on 19.07.2010.

** First Advance Estimates as released on 23.09.2010.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation.

APPENDIX III

All India Area, Production and Yield of Sunflower

Year	Area (Million hectares)	Production (Million tonnes)	Yield (Kg/ha)
2000-01	1.07	0.65	602
2001-02	1.18	0.68	577
2002-03	1.64	0.87	531
2003-04	2.01	0.93	464
2004-05	2.17	1.19	549
2005-06	2.34	1.44	615
2006-07	2.16	1.23	567
2007-08	1.91	1.46	765
2008-09	1.81	1.16	639
2009-10*	1.48	0.90	607
2010-11**	0.31	0.16	506

* Fourth Advance Estimates as released on 19.07.2010.
** First Advance Estimates as released on 23.09.2010.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation**.**

APPENDIX IV

Area, Production and Yield of Nine Oilseeds during 2007-08 and 2008-09 in major Producing States

Area – million hectares
Production – million tonnes
Yield – Kg/ha

2008-09				2007-08		
State	**Area**	**Production**	**Yield**	**Area**	**Production**	**Yield**
Madhya Pradesh	6.4896	6.9769	1075	6.26	6.35	1015
Rajasthan	4.649	5.1784	1114	4	4.2	1051
Gujarat	2.9848	4.0159	1345	2.92	4.73	1618
Maharashtra	3.98	3.4097	857	3.83	4.87	1274
Andhra Pradesh	2.599	2.1891	842	2.66	3.39	1276
Karnataka	2.178	1.212	556	2.28	1.55	681
Uttar Pradesh	1.3462	1.1645	865	1.34	1.15	856
Tamil Nadu	0.5854	1.043	1782	0.66	1.15	1739
Haryana	0.5413	0.9328	1723	0.53	0.64	1214
West Bengal	0.7037	0.5826	828	0.71	0.71	997
Orissa	0.2983	0.1803	604	0.32	0.2	608
Bihar	0.1381	0.138	999	0.14	0.14	979
Assam	0.2547	0.1379	542	0.27	0.14	523
Punjab	0.0597	0.0762	1276	0.06	0.08	1288
Others	0.75	0.4817	@	0.71	0.46	@
All India	**27.5578**	**27.719**	**1006**	**26.69**	**29.76**	**1115**

@ - Since area/ production is low in individual states, yield rate is not worked out.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation**.**

APPENDIX V

Area, Production and Yield of Groundnut during 2008-09 in major Producing States

Area – million hectares
Production – million tonnes
Yield – Kg/ha

State	Area	% to All - India	Production	% to All - India	Yield
Gujarat	1.9074	30.93	2.661	37.12	1395
Andhra Pradesh	1.766	28.64	1.5541	21.68	880
Tamil Nadu	0.4901	7.94	0.9746	13.59	1989
Rajasthan	0.3215	5.21	0.5368	7.48	1670
Karnataka	0.85	13.78	0.501	6.98	589
Maharashtra	0.318	5.15	0.355	4.95	1116
Madhya Pradesh	0.1997	3.23	0.2276	3.17	1140
Orissa	0.0835	1.35	0.0965	1.34	1156
Uttar Pradesh	0.095	1.54	0.067	0.93	705
Others	0.1337	2.16	0.1945	2.71	@
All India	**6.1649**	**100**	**7.1681**	**100**	**1163**

@ - Since area/ production is low in individual states, yield rate is not worked out.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation**.**

APPENDIX VI

Area, Production and Yield of Sunflower during 2008-09 in major Producing States

Area – million hectares
Production – million tonnes
Yield – Kg/ha

State	Area	% to All - India	Production	% to All - India	Yield
Karnataka	1.001	55.21	0.496	42.83	496
Andhra Pradesh	0.419	23.11	0.326	28.15	778
Maharashtra	0.264	14.56	0.155	13.38	587
Tamil Nadu	0.0258	1.42	0.03	2.96	1329
Haryana	0.02	1.10	0.03	2.84	1650
Bihar	0.0224	1.23	0.03	2.68	1388
Uttar Pradesh	0.009	0.49	0.017	1.46	1889
Others	0.0516	2.84	0.0656	5.66	@
All India	**1.8128**	**100**	**1.158**	**100**	**639**

@ - Since area/ production is low in individual states, yield rate is not worked out.

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation**.**

APPENDIX VII

Grade Specifications of Groundnut-In-Shell Prescribed by the Government of India under price support scheme during 2008-2009 Marketing Season

Sl No	Special characteristics	Maximum limits of tolerance (% by weight per qtl.) for FAQ	
		Bold	Ginny
		FAQ	FAQ
1.	Foreign matter	2	2
2.	Damaged pods	2	2
3.	Shrivelled & immature pods	4	4
4.	Pods of other varieties	4	4
5.	Shelling (kernels/pods)	65 & above	70 & above
6.	Moisture contents	8	8

DEFINITIONS:

a. Foreign matters mean dust, dirt, stones, lumps of earth, chaff, stem, straw or any other impurity.
b. Damaged pods are those pods that are damaged mechanically or by mould, weevil or any other insect attack insect attack or those showing internal discolouration of kernels materially affection the quality of the pods.
c. Shrivelled & immature pods are those pods which are imperfectly developed.

APPENDIX VIII

Grade Specifications of Sunflower seed prescribed by the Government of India under price support scheme during 2008-2009 marketing season

Sl No	Special characteristics	Maximum limits of tolerance (% by weight per qtl.) for FAQ
1.	Impurities	2
2.	Split or cracked seeds	3
3.	Damaged & Weevilled	4
4.	Immature & shrivelled	5
5.	Moisture contents	6

DEFINITIONS:

a. Foreign matters shall be the leaves, stems, stones, straw, chaff, lumps of earth, non edible or and other impurity.
b. Damaged and weevilled seeds shall be the seeds which are internally damaged for discoloured, broken and/or wholly or partly bored/ eaten by the weevil, materially affecting the quality.
c. Shrivelled & immature shall be the grains which are not properly developed and/or shrunken.
d. Slightly damaged shall be the grains which are externally or partly damaged or discoloured without affecting the quality materiality.

APPENDIX IX

Grade Specifications of Soybean prescribed by the Government of India under price support scheme during 2008-2009 marketing season

Sl. No	Special characteristics	Maximum limits of tolerance (% by weight per qtl.) for FAQ
1.	Foreign matter & impurities	2
2.	Shrivelled & immature beans	5
3.	Damaged & Weevilled beans	3
4.	Mechanically damaged beans(Spilt, broken & crack)	15
5.	Moisture contents	12

DEFINITIONS:

a. Foreign matters mean dust, dirt, stones, lumps of earth, chaff, stem, straw or any other impurity.
b. Damaged & weevilled (ISI) beans or pieces of these which have sprouted or are internally damaged as a result of heat, moisture, insect of microbial action.
c. Shrivelled & immature beans (ISI) that are shrunk, out of shape, or are not fully mature or developed and are often discoloured.

APPENDIX X

Minimum Support Prices for oilseeds

(Rupees / Quintal)

Year	Groundnut	Sunflower	Soybean	Safflower
2002-03	1355	1195	855	1300
2003-04	1400	1400	930	1305
2004-05	1500	1340	1000	1500
2005-06	1520	1500	1010	1550
2006-07	1520	1500	1030	1565
2007-08	1550	1510	1050	1650
2008-09	2100	2215	1390	1650
2009-10	2100	2215	1390	1680
2010-11	2300	2350	1440	

As on 10.06.2010

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation.

APPENDIX XI

Standard Specifications of Edible Oil of KOF

Sl No	Parameters	Standard Specification						
		Groundnut oil (R)	**Groundnut oil expeller**	**Sunflower oil (R) Grade-I**	**Sunflower oil (R) Grade-II**	**Soybean oil (R)**	**Rice bran oil (R)**	**RBD palmolein oil**
1	Visual appearance	Clear	Clear	Clear	Clear	Clear	Clear	Clear
2	Organoleptic test	Bland	Bland	Bland	Bland	Bland	Bland	Bland
3	Moisture & volatile matter	Max 0.10%	Max 0.10%	Max 0.10%	Max 0.10%	Max 0.10%	Max 0.10%	Max 0.10%
4	Sediments	Nil	0.1%, above buyer option	Nil	Nil	Nil	Nil	Nil
5	Colour in 5¼" cell as (Y+5R)	7.5, above buyer option	7.5, above buyer option	10, above buyer option	15, unit base. Buyer's option up to 20 units	Max 5.0 units	15, (max) above buyer option	7.5, up to 8.5 buyer option
6	F.F.A.	Max 0.15%	1% above buyer option	Max 0.25%	Max 0.15%	Max 0.25%	Max 0.25%	-
7	Refractive index at 40 degree c	1.4620-1.4640	1.4620-1.4640	1.4640-1.4697	1.4640-1.4691	1.4650-1.4710	1.4600-1.4700	1.4550-1.4610
8	Saponification value	188-195	188-195	188-194	188-194	189-195	180-195	195-205
9	Un- sap	Max 0.80%	Max 1.0%	Max 1.5%	Max 1.5%	Max 1.0%	Max 3.5%	Max 1.2%
10	Iodine value	87-98	87-98	105-144	105-144	120-141	90-105	54-62
11	Peroxide value	Max 10.0mg/kg	Max 10.0mg/kg	Max 10.0mg/kg	Max 10.0mg/kg	Max 10.0mg/kg	Max 10.0mg/kg	Max 10.0mg/kg

Continued...

12	B.T.T Degree c	39-41 deg c	39-41 deg c	N.A	N.A	N.A	N.A	N.A
13	Flash point at 250 degree c	Nil	Nil	Nil	Nil	Nil	Nil	Nil
14	Wax content	N.A	N.A	Nil	Nil @ 15 degree c	N.A	N.A	N.A
15	Adulteration test							
A	Castor oil test	Negative	Negative	Negative	Negative	Negative	Negative	Negative
B	Cotton seed oil test	Negative	Negative	Negative	Negative	Negative	Negative	Negative
C	Mineral oil test	Negative	Negative	Negative	Negative	Negative	Negative	Negative
D	Argemone oil test	Negative	Negative	Negative	Negative	Negative	Negative	Negative
E	Linseed oil test	Negative	Negative	Negative	Negative	Negative	Negative	Negative
F	Baudin test (for till oil)	Negative	Negative	Negative	Negative	Negative	Negative	Negative

Note: N.A= Not applicable, c= Celsius

Source: Hand-out of KOF Ltd.

APPENDIX XII

Garret's Ranking Table

PERCENTAGE	SCORE	PERCENTAGE	SCORE
0.09	99	52.02	49
0.20	98	54.03	48
0.32	97	56.03	47
0.45	96	58.03	46
0.61	95	59.99	45
0.78	94	61.94	44
0.97	93	63.85	43
1.18	92	65.75	42
1.42	91	67.48	41
1.68	90	69.39	40
1.96	89	71.14	39
2.28	88	72.85	38
2.63	87	74.52	37
3.01	86	76.12	36
3.43	85	77.68	35
3.89	84	79.12	34
4.38	83	80.61	33
4.92	82	81.99	32
5.51	81	83.31	31
6.14	80	84.56	30
6.81	79	85.75	29
7.75	78	86.89	28
8.33	77	87.96	27
8.17	76	88.97	26

10.16	75	89.94	25
11.03	74	90.83	24
12.04	73	91.67	23
13.11	72	92.45	22
14.25	71	93.19	21
15.44	70	93.86	20
16.69	69	94.49	19
18.01	68	95.08	18
19.39	67	95.62	17
20.93	66	96.11	16
22.32	65	96.57	15
23.88	64	96.99	14
25.48	63	97.37	13
27.15	62	98.72	12
28.86	61	98.04	11
30.61	60	98.32	10
32.42	59	98.58	9
34.25	58	99.82	8
36.15	57	99.03	7
38.06	56	99.22	6
40.01	55	99.39	5
41.97	54	99.55	4
43.97	53	99.68	3
45.97	52	99.80	2
47.98	51	99.91	1
50.00	50	100	0

DEPARTMENT OF AGRICULTURAL MARKETING, COOPERATION AND BUSINESS MANAGEMENT, U.A.S, G.K.V.K, BENGALURU

A Study on Procurement of Oilseeds and Sales Management of Edible Oil by Karnataka Co-operative Oilseeds Grower's Federation Limited (KOF)

Schedule for Members of Oilseed Grower's Co-Operative Society Ltd.

I. General Information :

a. Name: b. Village:

c. Taluk: d. District:

e. Age: f. Family size:

g. Main occupation: h. Subsidiary occupation:

i. Experience in farming :____(years) j. Contact No:

k. Education: Illiterate/Primary/Higher/College/other

II. Details of Land holding:-

A. Farm size:

1) Total: _____ acre/s
2) Irrigated : _____ acre/s
3) Unirrigated: _____ acre/s

B. Cropping pattern:

Season/ crop	Variety	Area (acre)	Production (Qtl)	Quantity retained for consumption (Qtl)	Marketable surplus	Yield/ acre
I. kharif a) b) c)						
II. Rabi a) b) c)						
III. Summer a) b) c)						

III. To whom the Oilseeds are sold:

Through whom or to whom do you sell your crop	Place of sale & distance	Quantity	Price/ Qtl	Mode of payment
1. Village trader				
2. Oil mills				
3. OGCS				
4. Trader in APMC				
5. Any other, specify a.				

IV. Reasons for sale of your produce to a particular agency: Ranking given by the Farmers.

Reasons	Village trader	Oil mills	OGCS	Trader in APMC	Others
a. Proximity					
b. Previous agreement					
c. Better price					
d. Smaller qty of the produce					
e. Lack of market information					
f. Low marketing costs					
g. Social attachment with intermediaries					
h. Immediate cash payment					
i. advance loan					
j. storage facilities					
k. Less risky					
l .nearness of market					
m. lack of transportation facilities					
n. less interruption of middleman					

V. Details of oilseeds sold: Time of sale and quantity:

Oilseeds	Immediately after harvest	after 1 month	after 2 months	after 3 months	after 4 months & above
1.Sunflower (Qty)					
2.Groundnut (Qty)					

Do you store the produce after harvest? Yes / No

***If yes, reasons for storing*,**

i. Expectation of better price in future
ii. Present prices are not remunerative
iii. Adequate availability of storage facilities
iv. Any other, please specify:
    a.
    b.

If no, reasons:

i. Immediate cash needs
ii. Prior commitments to traders/ merchants
iii. Fear of price fall in future
iv. Lack of storage facilities
v. Any other, please specify
    a.
    b.

VI. Constraints faced by the members of KOF in marketing of oilseeds and their rankings:

	Constraints	Ranking
i.	Fluctuation in prices	
ii.	Delayed cash payment	
iii.	Markets are far away	
iv.	High commission charges	
v.	Faulty system of weighment	
vi.	Illegal deductions while selling	
vii.	Lack of market information	
viii.	Any other, please specify:-	
	a) …….	
	b) …….	
	c) ……..	

VII. Opinion of members about OGCS:

a. Merits:

b. Demerits: