

**BUSINESS PERFORMANCE ANALYSIS
OF
THE CAMPCO CHOCOLATE FACTORY**

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UNIVERSITY OF AGRICULTURAL SCIENCES
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Project Report submitted to the

University of Agricultural Sciences, Bangalore

In partial fulfillment of the requirements for the degree of

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(Agri-Business Management)

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Affectionately dedicated

To

My Parents,

Beloved Sister

**DEPARTMENT OF AGRICULTURAL MARKETING, CO-OPERATION
AND BUSINESS MANAGEMENT**

**UNIVERSITY OF AGRICULTURAL SCIENCES
GKVK, BANGALORE - 560065**

CERTIFICATE

This is to certify that the Project Report entitled, “**BUSINESS PERFORMANCE ANALYSIS OF THE CAMPCO CHOCOLATE FACTORY**” Submitted by **Mr. PRASANNA KUMAR, H.N.**, in partial fulfillment of the requirement for the degree of **MASTER OF BUSINESS ADMINISTRATION (AGRI BUSINESS MANAGEMENT)** to the University of Agricultural Sciences, Bangalore, is a record of *bonafide* research work done by him during the period of his study in this University under my guidance and supervision and the Project Report has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.

Bangalore
July, 2010

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BANGALORE

PRASANNA KUMAR, H. N.

BUSINESS PERFORMANCE ANALYSIS

OF

THE CAMPCO CHOCOLATE FACTORY

PRASANNA KUMAR, H.N.

ABSTRACT

Campco chocolate factory is a subsidiary of the CAMPCO Ltd. located in Kemminje, Puttur and 52km away from the coastal city Mangalore. Perceiving the future necessity of cocoa products and to create a steady market for cocoa, with the support from the central and state governments of Karnataka and Kerala, CAMPCO had carved a niche by establishing the biggest chocolate factory in South East Asia. This study focuses on the Business performance of Campco Chocolate Factory. Financial statements were collected from the audited annual reports of CAMPCO for the financial year ending 2000 to 2009. The details regarding marketing strategies and methods were collected by discussing with marketing managers. To study the economics of cocoa bean production was studied by contacting a random sample of 40 farmers from Dakshina Kannada and Shimoga Districts. The results of the study revealed that the Campco chocolate factory registered an impressive performance with annual compound growth rates of 10.36, 16.12 and 16.14 per cent for production, quantity of own brand sold and sales value of Campco products, respectively. Further, Campco chocolate factory is in a comfortable position to meet its long-term financial obligations. Campco chocolate factory is procuring cocoa beans directly from Cocoa division which in turn procures from member farmers. Campco chocolate factory is marketing its campco branded chocolates and cocoa based products through various channels to different customers like private companies wholesalers, retailers. In the case of economics of cocoa bean production the annual net returns over total cost was higher in Dakshina Kannada (Rs. 161652) compared to Shimoga farms (Rs. 131587) owing to yield differences in these regions.

Signature of the student

**Dr. C.P. Gracy
(Major Advisor)**

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CHAPTER I

INTRODUCTION

Agriculture provides livelihood security for over 58.4 per cent of India's population. Agriculture accounts for about 10 per cent of the total export earnings and provides raw material to a large number of agro based industries. Low and volatile growth rates and the recurring agrarian crisis in several parts of the Indian countryside are a threat not only to national food security, but also to the economic well-being of the nation as a whole.

Agriculture and allied sectors contributed nearly 17.8 and 17.1 per cent of Gross Domestic Product (GDP) during 2007-08 and 2008-09 respectively. The agricultural output, however, depends on distribution of monsoon as nearly 55.7 per cent of area sown is rainfed. An all time record production of food grains of 233.88 million tonnes in 2008-2009.

India is the third largest producer of agricultural commodities in the world after China and the USA. India produces 16 per cent of the world's milk, 41 per cent of mangoes, 30 per cent of cauliflowers, 28 per cent of tea, 23 per cent of bananas, 24 per cent of cashew nuts, 36 per cent of green peas and 10 per cent of onions. This strong base in agriculture provides a large and varied raw material supply for food processing. Strong agricultural production performance can not only feed India's large and growing consumption base, but also be a prospective supplier of food to the world. Although, India's current share of world agricultural and food exports is about 1.6 per cent, there is potential for a multi-fold increase in food exports (Ashok, 2009).

Horticulture and allied sector are an integral component of food and nutritional security of the country. In the recent past horticulture has emerged as a sunshine sector for rural development. All these are

regarded as the essential ingredients of economic security. A careful mix of agricultural and horticultural crops would reduce vulnerability of rural households. Cultivation of these crops provides employment opportunities at different stages of marketing. Thus, horticultural crops play a vital role in the prosperity of a nation, and also directly linked with the health and happiness of people.

The wide range of agro-climatic regions of India is conducive for growing a number of horticultural crops, including, Root and Tuber crops, Mushroom, Ornamental, Plantation crops like coconut, arecanut, cashew and cocoa.

Plantation crops in India are considered to be the pulse of horticulture crops. They play an important role in the agricultural and industrial development of the country as a whole. They play an important role in view of their export potential as well as domestic requirements and in employment generation and poverty alleviation programmes particularly in rural sector. The major Plantation crops include Coconut, Arecanut, Oil palm, Cashew, Tea, Coffee and Rubber; and the minor plantation crops include cocoa.

Cocoa- A Plantation Crop

Cocoa (*Theobroma cacao L.*) a native of Amazon base of South America got its entry into India in the early part of the 20th century. It supports chocolate and other confectionary manufacturing industry of India. Cocoa beans are the primary raw material for confectioneries, beverages, chocolates and other edible products.

Cocoa cultivation is of recent origin in India; being an inter crop in areca and coconut plantations, it has a great potential for growth in the vast plantations of southern states of Kerala, Karnataka, Tamil Nadu and Andhra Pradesh. During 2008-2009, India produced 11820 metric tonnes of cocoa from an area of 34049 hectares (Ha.) with a productivity of 550 kg/Ha.

Cocoa beans undergo a series of processing steps before it can be used in food processing. Thus, the quality of cocoa bean primarily depends on careful and systematic processing.

Indian Food Processing sector

Food processing involves any type of value addition to agricultural or horticultural produce and also includes processes such as grading, sorting, and packaging which enhance shelf life of food products. The food processing industry provides vital linkages and synergies between industry and agriculture. The food processing industry sector in India is one of the largest in terms of production, consumption, export and growth prospects. The government has accorded it a high priority, with a number of fiscal reliefs and incentives to encourage commercialization and value addition to agricultural produce. India's food processing sector covers a wide range of products like fruit and vegetables, meat and poultry, milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolate and cocoa products, Soya-based products, mineral water and high protein foods.

Indian food processing industry is widely recognized as a 'sunrise industry' having huge potential for uplifting agricultural economy, creation of large scale processed food manufacturing and food chain facilities, and the resultant generation of employment and export earnings. The industry size is estimated to be worth around Rs. 313359 crores including Rs. 102894 crores of value added products, and employing about 13 million people directly and about 35 million people indirectly. The food processing sector in India is geared to meet the international standards. Food Safety and Standards Authority of India has the mandate to develop standards and also to harmonise the same with International Standards consistent with food hygiene and food safety requirement and to the conditions of India's food industry.

While India has an abundant supply of food, the food processing industry is still nascent. Only two per cent of fruits and vegetables; and 15 per cent of milk produced are processed. Despite this, the processed food industry ranks fifth in size in the country, representing 6.3 per cent of GDP. It accounts for 13 per cent of the country's exports and 6 per cent of total industrial investment. This sector has been attracting FDI across different categories and countries.

The processed food segment in the Indian food market constitutes only 10 per cent while the semi-processed another 15 per cent. The food processing sector is dominated by unorganised sector units which account for 42 per cent of all units, the small scale sector for 33 per cent and the organised sector makes up 25 per cent of all food industry units.

Chocolate Industry

Chocolate dates back to ancient America when the Mayans, and later the Aztecs, ground the beans of the *Theobroma cocoa* tree into a bitter beverage, which they prized for its mystical and medicinal attributes. Chocolate's name comes from the Aztec word, xocolatl, which means bitter water. Cortes, the conqueror of the Aztecs, brought the beans to Europe in the 1500s, where the beans were used to treat anemia, fever, gout, haemorrhoids, poor digestion, depression, and heart ailments. Today, chocolate is usually a highly processed blend of chocolate liquor, cocoa butter, cocoa powder, sugar, emulsifiers, and milk—far different from its origin.

Chocolate market in India

The global chocolate market is worth Rs. 350775 crores while India's chocolate market is worth around Rs. 1500 crores growing at 18-20 per cent per annum. The per capita consumption of chocolate in India is 300 g compared to 1.9 kg in developed markets such as the United Kingdom. Over 70 per cent of the consumption is concentrated in the urban markets (Euromonitor, 2009). The margin in the

chocolate industry ranges between 10 to 20 per cent depending on the price band at which the product is placed. The chocolate wafer market (Ultra Perk etc.) is around 35 per cent of the total chocolate market and has been growing at around 13 per cent annually. The chocolate market in India has only three big players, viz., Cadbury, Nestle and Amul.

The Campco Limited, as a “Co-operative” is a success story of the people, by the people for the people. Campco is a fine and successful implementation of the vision and values of the great founders of this country, like Mahatma Gandhi.

The early 1970's showed a glut in the market and thereby the price of arecanut came down sharply and consequently the growers were put to misery and hardship. The solution for this crisis was found in the birth of 'CAMPCO' on 11th July 1973 and established itself as a multi state co-operative - a joint venture of the states of Karnataka and Kerala.

CAMPCO brand has become a household name that people learnt to trust through their own experience.

The main objectives of establishing the CAMPCO Limited were:

- a) To procure arecanut, cocoa and rubber of the members and if necessary, from other Growers on agency basis or on outright purchase basis.
- b) To arrange for sale of arecanut, cocoa and rubber and their products to the best advantage of the members and also to advance loans to members on the pledge of goods and to do all other things necessary to carry out the objectives.
- c) To promote and develop areca, cocoa & rubber production, marketing and processing. Cocoa procurement and processing objective has been included during 1979.

The area of operation of this Co-operative extends to the States of Karnataka and Kerala, and for the Marketing of Arecanut. Cocoa and Rubber and their products, the whole Country has been covered.

Background of Campco Chocolate Factory

Campco chocolate factory, a Joint Venture of Government of Karnataka and Government of Kerala is an enterprise to promote the welfare of cocoa growers of both the states. The chocolate manufacturing unit is located at Kemminje village near Puttur in Dakshina Kannada District, Karnataka, India.

It is the Biggest Factory of its kind in the Asian Continent with imported machineries from Italy, Denmark, Germany, Switzerland and Holland. The Factory produces cocoa butter, a major portion of which is exported. The different varieties of Chocolate produced here are having indigenous market and some portion is exported. The companies like Nestle and Cadbury make job contract agreements with Campco chocolate factory to produce chocolates according to their specifications. This chocolate factory has given a new life to the cocoa growers of Karnataka and Kerala states.

Ingress into cocoa procurement

A sudden withdrawal by the buyers of cocoa from the procurement operations due to price crash in the international market came as a shock to cultivators. Karnataka and Kerala Governments enthused, at this stage, the CAMPCO Limited to enter on the scene to rescue the farmers from distress. CAMPCO willingly took up the responsibility to enter the cocoa market and salvaged farmers.

As a strategy for survival in the International scene the CAMPCO played a major role in establishing a name for Indian cocoa, which hitherto had not been achieved. It procured cocoa pods from growers and by adopting scientific processing methods according to market standards, released dry cocoa beans matching in quality in the

world market equal to that of Ghana, Brazil and other cocoa cultivating nations.

After entering into the cocoa market the Co-operative was able to export cocoa beans worth Rs. 400 lakhs to European countries in the initial phase of operations. India was not known as a cocoa producer in the international Trading arena, since yearly production was hardly five to six thousand tonnes which was not even 0.3 per cent of the total world consumption.

Through sustained efforts, CAMPCO has been able to ensure reasonable prices to cocoa growers. The Co-operative had to face the problem of a limited internal market and an un-remunerative export market.

With a view to creating a permanent demand and a steady market for the beans, CAMPCO established a Chocolate Manufacturing Factory at Kemminje village in Puttur Taluk, 52KM from Mangalore in Dakshina Kannada District, adopting foreign technical advancement in chocolate making. With the setting up of the chocolate manufacturing facility, the Co-operative has been able to increase local consumption of cocoa based products and to export value added semi-finished products.

This venture is the symbol of a new era of enterprise and business for the cocoa grower who once faced the prospect of destruction and defeat. Inferring from changing consumption and income pattern, CAMPCO has been endeavoring to bring cocoa, which was christened in 18th century by Linnaeus as “theobroma - food of the gods”, within the reach of the common man.

Campco chocolate factory produces wide range of cocoa based products of consistent quality, colour and flavour to satisfy the wide spectrum of customers all around the globe. These include cocoa mass or liquor, cocoa powder, cocoa butter and other value added

cocoa based products. Although, there is significant progress in terms of quantum of cocoa beans procurement, chocolate production and trade, it is of interest to assess the business performance. Therefore, this project work was carried out to assess the Business Performance of Campco chocolate factory

The specific objectives are;

1. To document the establishment and growth of Campco chocolate factory
2. To analyze the financial performance of Campco chocolate factory
3. To study the marketing strategies of CAMPCO for chocolates and cocoa based products
4. To analyze the economics of cocoa bean production

Hypothesis

1. There is an increasing trend in production and sales of chocolate over the years
2. The Campco chocolate factory is earning continuous profits over the years
3. The CAMPCO has adopted innovative product diversification and sales strategies
4. Cocoa production is profitable across the districts

Limitations of the study

1. Time constraint and resource of the researcher has limited the sample area selection to Shimoga and Dakshina Kannada Districts. Hence results of the study are largely applicable to those areas where similar conditions prevail.
2. Campco chocolate factory unit is a subsidiary of CAMPCO Limited. Because of this reason it is not possible to obtain balance sheet separately for this firm as consolidated balance

sheets are prepared. Hence, financial analysis is done based on trading, profit and loss account data only.

Presentation of the study

The study is presented in the following ix chapters.

- The first chapter deals with the introduction and objectives
- Second chapter presents review of literature
- Third chapter outlines the features of the study area, sampling frame, analytical tools and the concepts used in the study
- The fourth chapter presents the results obtained in the study
- The fifth chapter presents the discussion of the results of the study
- The sixth chapter presents the summary and policy implications based on the findings of the study
- The seventh chapter lists references relating to the present study.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, an attempt has been made to critically review the literature of the past research work which has relevance to the present study. The reviews are presented under the following heads.

2.1 Growth rates

2.3 Ratio analysis

2.3 Marketing strategies and channels

2.4 Production Cost and Returns analysis

2.1 Growth rates

Chengappa (1982) studied the growth rates of area, production and productivity of coffee in India. Linear model of the type $Y_t = a + b_t$ and exponential model of the type $Y_t = ab^t$ were used to work out the growth rates. The exponential function indicated a good fit and an annual compound growth in production of 5.68 per cent for Arabica and 7.4 per cent for Robusta were reported. The combined growth rate was 6.1 per cent per annum.

Asfaw (2000) in his study on agricultural performance in Sub-Saharan African countries reported that during 1961-73 periods both area and yield contributed to increase total food grain production. Countries during 1974-84, all the countries had negative growth in area and production. During the third period (1985-98) all the countries experienced expansion in area and production under food grains. This is attributed to Structural Adjustment Policy (SAP) initiatives.

Lakhana (2003) studied production, price behaviour and export of groundnut in India with special reference to Gujarat state, for Pre-Technology Mission of Oilseeds (TMO) (1970-71 to 1985-86), Post-TMO (Technology Mission of Oilseeds) (1986-87 to 2001-02) and

for the entire period (1970-71 to 2002-02) of selected markets Rajkot, Junagadh, Kalawad and Amrelin. The post-TMO period had witnessed positive growth rates in area, yield and production. Growth rates of area for Junagadh and Rajkot Districts as well as for the state of Gujarat as a whole were positive and significant. However, growth rates of yield were negative throughout the study area during Pre-TMO. During Post-TMO, growth rates of all variables were found to be positive.

Varghese (2004) worked out the trends in area, production and productivity of cardamom in Kerala for the period from 1970-71 to 2002-03 using semi-logarithmic growth equation. The area under cardamom registered a negative growth rate (-1.2 %) which was significant. The output growth registered an average annual trend growth rate of 4.14 per cent while yield recorded an average annual growth rate of 5.51 per cent.

Lathika and Kumar (2005) analyzed the growth trends in area, production and productivity of coconut for different coconut producing states/union territories in India for two sub-periods; phase I (1951 to 1995) and phase II (1996 to 2002). Area showed positive growth in both phases for selected states except for the Andaman and Nicobar islands where the growth was negative (-9.69 %) in phase II. Production also showed a positive growth in all the states in both the phases and Andhra Pradesh had highest growth in II phase (16.69 %). The growth in productivity showed negative growth in Kerala and Orissa in the phase I; Karnataka in the phase II.

Khan (2007) studied growth rates in arecanut prices before Market Intervention Scheme (MIS) (1994-95 to 2001-02) and MIS (2002-03 to 2004-05) periods. In the period before MIS the growth rate was positive for both white chali variety and edi variety recording 4.87 per cent and 1.49 per cent respectively. Whereas for saraku and bette varieties it was negative with -0.49 per cent and -0.67 per cent

respectively. During the MIS period the growth rate was positive for all varieties with 0.36, 3.64, 4.06 and 6.24 per cent respectively for white chali, saraku, bette and edi varieties. The growth rate for the entire period was negative for saraku and bette varieties with -0.54 and -0.58 per cent respectively.

Ashok (2009) in his study on business performance of Paiyur Fruit Products Pvt. Ltd. on fruit processing in Krishnagiri District, Tamil Nadu, used the compound growth rate analysis for various physical indicators of the firm using exponential function of the following type $Y = ab^t$

2.2 Ratio analysis

Reddy (1994) studied the financial performance of Mulkarnoor Co-operative Rural Bank with the help of different financial ratios and revealed that the institution had very acceptable and appreciable values for different ratio (2.09) and quick ratio (1.74). He also showed that the profitability ratios were not up to the desired levels.

Arora *et al.* (1996) in their study on rural food processing in Rampur District of Uttar Pradesh concluded that even with low levels of operations, rural food processing complexes were making profit. Their annual net returns, operating profit to revenue ratio, net profit to revenue ratio, operation ratio and operating efficiency were 23.70, 25.03, 34.49 and 58.18, respectively. The working capital intensity, operating profit to capital employed, net profit to capital employed and interest coverage ratios of 51.16, 68.38, 57.01 and 5.90, respectively indicate their financial soundness.

Waris and Chowdhary (1997) studied the economic efficiency of milk products through co-operative societies in Northern Bihar concluded that the society was performing at level far below the minimum levels presented for different industries. They arrived at liquidity, profitability and debt-equity ratio for period of five successive years.

Ramandev (1998) used financial ratios to evaluate the financial performance of the cashew processing units in Uttara Kannada District. The study revealed that the large processing units were more efficient than the medium and small processing units.

Joshi *et al.* (1999) studied economics of processing of mango pulp in home, cottage, small and large units South Konkan region of Maharashtra state. The rate of capital turnover in home scale category was below 100 per cent and remaining categories it was above 100 per cent. On the whole, the rate of capital turnover was 133.76 per cent. As the units operated seasonally, the capital remained idle for greater part of the year and hence, the rate of capital turnover was low. In all the categories of processing units, the return on capital investment was more than the prevailing rate of borrowing indicating pulp making is quite profitable. The overall return on capital investment was 44.28 per cent. A capital of Rs. 100 investment resulted in realizing of Rs. 114, Rs. 88, Rs. 109 and Rs. 71 gross income in home, cottage, and small and large scale categories, respectively.

Ashraf (2000) used financial ratios as the main tool for analyzing and appraising the business performance of Co-operative Oil Mills in Gadag District of Karnataka and found that on the whole, the condition of large scale unit was very unsatisfactory, while that of the medium scale unit was just satisfactory.

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 compared to the Bhogpur sugar mill.

Rao and Madhu (2001) studied the financial performance of dairy co-operative (URMUL) in Rajasthan. The study revealed that milk products showed an annual growth rate of 11.22 per cent in milk

price, that of total amount paid to products per year increased from Rs. 8.40 crores to Rs. 34.39 crores over the period depicting compound growth rate of 14.84 per cent per year. Milk products sales increased at the rate of 69.33 per cent.

2.3 Marketing strategies and channels

Gronroos (1991) has presented the marketing strategy continuum concept and a number of marketing and management consequences. It demonstrates the need for a marketing concept which allows a variety of approaches to marketing. The nature of a relationship approach to marketing strategy is analysed in comparison with the nature of transaction approach to marketing strategy.

Venkatasheshiah (1992) while studying groundnut processing by different categories of traditional oil mills in Cuddapha District of Andhra Pradesh noticed three main channels, viz., Channel-I Producer – Wholesaler – Retailer – Consumer, Channel-II Producer – Retailer – Consumer, Channel-III Producer– Consumer. All the three channels were used for marketing of oil while only last two were used for marketing of oil caterers.

Dalvi *et al.* (1992) in their study on economics of processing of cashew nut in Sindhudurg District of Maharashtra found that the total marketing cost per tin was Rs. 44, the commission charges (50 %), transportation (10 %) and handling costs (3 %) were the important cost components.

Tamer and Zou (1994) found the relationship between marketing strategy and performance which has been well documented in the domestic marketing context. However, empirical work in the context of export marketing has been fragmented. The authors investigated the marketing strategy and performance relationship in the context of export ventures.

Maurya *et al.* (1995) studied the marketing of Anola products in Uttar Pradesh. He found that in marketing of Anola products, highest per centage of consumer's rupee (62 %) was processing cost followed by the cost of Kutch (16 %), retailers margin (11 %) manufacturers margin (9 %) and charges paid by retailers (3 %).

Malleswari (1996) reported that heavy production and distribution costs marked the domestic retailing of processed mango. A can containing 850 gram of pulp was sold at the retail outlets at Rs. 45, whereas the processing cost including the cost of packing was Rs. 18. The price spread between processor and consumer was therefore Rs. 27 per can. The retailer bought from the distributor at Rs. 38 per can. The price spread was therefore the widest between the processor and wholesale stockiest because branding, labeling, packing and sales promotion were done at this stage.

Rajesh and Joginder (1996) while studying the marketing pattern of processed fruits and vegetable products observed that Processor – Wholesaler – Retailer – Consumer, Producer – Retailer – Consumer and Processor – Consumer were the three main marketing channels. The medium sized units used the second and third channels while the small-scale units used only the third channel. Further, they also reported that large scale units marketed about 58 per cent of their produce through first channel. Similarly, the medium scale units marketed about 70 and 30 per cent through second and third channels, respectively.

Ramadev (1998) in his study on processing of cashew nut in Uttar Kannada District of Karnataka identified the following five main channels for marketing cashew kernels, viz., (Channel –I) Processor – Consumer, (Channel –II) Processor – Trader– Consumer, (Channel–III) Processor – Commission agent – Consumer, (Channel-IV) Processor – Exporter – Consumer, (Channel-V) Processor-cum-Exporter – Consumer. Further, it was observed that the highest quantity of

cashew kernels were marketed through Channel-III (36 %) and least was in Channel-IV (4 % sales). Among different costs, the sales tax, turnover tax, transportation and handling costs, commission charges and export expenses were the major components of the marketing cost. Total marketing costs amounted to Rs. 89 per tin. The highest cost of marketing was noticed in the case of Channel- III (Rs. 155/tin) and the least was observed in the Channel – V (Rs. 70/tin).

Shobha (1998) evaluated the performance of co-operative and private fruit and vegetable processing units in north Karnataka. The study revealed that, the marketing of processed products was through the following alternative channels, viz., (Channel-I) Processor – Wholesaler – Retailers – Consumer, (Channel-II) Processor – Retailer – Consumer, (Channel-III) Processor – Consumer, (Channel-IV) Processor – Wholesaler – Caterer, (Channel-V) Processor – Caterer. The private sector unit in the study was marketing the produce through the two channels (IV and V) by selling their produce to wholesaler at an average price of Rs. 3171 (64 %) and Rs. 3360 per quintal (36 %) respectively.

Gajanana and Subrahmanyam (2001) studied the marketing and exports of lemon grass oil from Kerala. They identified the two channels, viz., (Channel-I) Producer – Co-operative society – Processor/Exporter, (Channel-II) Producer – Private traders – Processor/Exporter. And they found that nearly 78 per cent of growers (including 22 per cent selling to co-operative society also) sold 59 per cent of the oil to private traders and 44 per cent of the growers sold 41 per cent of the oil to the co-operative society in Kavikadava village of Kerala state.

2.4 Production costs and returns

Raikar (1990) studied production and marketing of cashew in Karnataka. The study revealed that the per hectare annual maintenance cost of cashew plantation was higher on small size

(Rs.1674) plantation compared to large size plantation (Rs. 1303). The gross returns were Rs. 3234 for the overall size group of plantation. The net returns over total cost were found to be Rs. 1487, Rs. 801 and Rs. 1050 on small, large and overall size groups of plantations respectively.

Giriappa (1995) reported that in India the area under cocoa had increased from 698 Ha. (1976-77) to 1384 Ha. (1991-92) and the proportion of cocoa area to arecanut which was 5.7 per cent in 1976 had increased to 9.2 per cent during 1980-81. The price realized per kg of wet beans was Rs. 8 in 1985 and has increased to Rs. 22 in 1990-91. Further, he found that the average yield was 400-500 kg per hectare.

Maurya (1995) conducted study on production of Anola in Varanasi District of Uttar Pradesh. He found that on an average, the per hectare total cost of production of anola was Rs. 21536. On an average anola orchard farmer realized a net income of Rs. 27928 with a total output value at Rs. 49464.

Nagaraj *et al.* (1995) studied the economic feasibility of gherkin production in eastern zone of Karnataka, the total cost of cultivation per acre of gherkin was found to be Rs. 14614 and gross return was Rs. 45000. The farmers realized a net profit of Rs. 30386 per acre and also they indicated that this crop was highly water, nutritive exhaustive and labor intensive high value commercial crop.

Chitra *et al.* (1997) in the study on economics of ber production in and around Hyderabad city of Andhra Pradesh found that, the total costs of establishment in the first year was Rs. 7913 per hectare. The total cost incurred during the maintenance was Rs. 3483 per hectare. The total cost of cultivation worked out to Rs. 16737 per hectare. The payback period in ber cultivation was 4.42 years and the benefit cost ratio was 5.25 indicating the profitability of ber cultivation. Hence, the

results of the study indicated that profits were relatively higher in ber cultivation.

Chinnappa and Ramanna (1997) in their study on economic analysis of guava production revealed that per acre cost of establishment for the three year gestation period was Rs. 4237. The per acre cost of cultivation (4th to 25th year) was Rs. 5696. The main items of costs were labour costs, fencing and plant protection chemicals. The net return worked out at Rs. 2474 per acre per year.

Kerur *et al.* (1997) while studying the economics of sunflower production in north Karnataka observed that per hectare cost of production of sunflower were Rs. 5653, Rs. 5693 and Rs. 5588 for small, medium and large farmers, respectively. The average yield obtained for the overall sample was 8.99 quintal per hectare. The benefit cost ratio was found to be 1.88 indicating sunflower production was a profitable enterprise.

Madan (2004) studied the cost of cultivation of vanilla in Karnataka. The establishment cost worked out to be Rs. 46438 per acre and maintenance cost was Rs. 21084 per acre per year. The total cost of production per acre per year (700 vines) was Rs. 27542 and net return per acre per year was Rs. 62932.

CHAPTER III

METHODOLOGY

This chapter deals with the research methods followed in the present study, which includes the selection of the Campco chocolate factory, its description, sources of data and analytical techniques adopted.

3.1 Description of the study area and selected Campco chocolate factory

3.2 Data base

3.3 Method of analysis

3.1 Description of the study area and selected campco chocolate factory

The overall objective of the study was to examine the growth and performance of the Campco Chocolate Factory.

3.1.1 Description of the study area

Shimoga District is known as the Gateway to Malnad located in the central part of Karnataka state, lies between the latitudes 13°27' and 14°39' N and between the longitudes 74°38' and 76°04' E at a mean altitude of 640 metres above sea level. The Western Ghats or Sahyadri range and the numerous rivers that originate there provide Shimoga with abundant natural beauty. The numerous lakes, ponds and water bodies make the land very suitable for agriculture. Shimoga is called the rice bowl of Karnataka.

Dakshina Kannada is a coastal District in the state of Karnataka in India lies between the latitudes 12°36' and 12°6' N and between the longitudes 75°18' and 75°3' E. The main crops of Dakshina Kannada District are Paddy and Plantation crops like coconut, arecanut, black pepper and cocoa.

Cocoa cultivation is of recent origin in India; being an inter crop it has a great potential for growth in the vast plantations of areca and coconut in southern states of Kerala, Karnataka, Tamila Nadu and Andhra Pradesh. The area under cocoa cultivation in India is expanding over the years mainly due to consistent demand for chocolate and other cocoa based confectionary preparations. During 2008-2009 total area under cocoa cultivation in India was 34049 hectares (Ha.) with 11820 metric tonnes (MT) production. Andhra Pradesh produced 2600 MT from an area of 14061 Ha., Tamil Nadu produced 230 MT in an area of 2030 Ha., Kerala produced 6100 MT under the area of 10708 Ha., and Karnataka has sizeable area of 7250 Ha. under cocoa with a production of 2890 MT contributed mostly from Dakshin Kannada and Shimoga Districts. The Campco is the major buyer of cocoa in Karnataka. Perceiving the future necessity of cocoa products and market strategy for cocoa, with the support from the central and state governments of Karnataka and Kerala, The CAMPCO Limited. has carved a niche by establishing the biggest Chocolate Factory in south East Asia, located in Kemminje, Puttur a taluk headquarter located 52km away from the coastal city Mangalore, on the Mysore-Mangalore highway, in a hilly region between the coast and the Western Ghats. The factory unit is well equipped with suitable machineries for processing and packing various types of cocoa and chocolate products under the most hygienic and sanitary conditions.

There are ten listed cocoa grinders in India as per the Directorate of Cashewnut and cocoa Development.

3.1.2 Description of the selected campco chocolate factory

The principal buyers of cocoa till 1980 suddenly stopped buying cocoa during the peak cocoa season due to slump in international cocoa price. To safeguard the interests of its growers Campco had to enter into Indian cocoa market. Cocoa was bought in the form of wet beans from the farmers. The Campco was furnishing the cocoa

growers with cocoa saplings to the tune of 100000 at free of cost to promote the cultivation of cocoa during that time. Adopting scientific methods of fermentation and drying, campco could successfully export quality cocoa beans to European countries.

CAMPCO, through its undeterred efforts over the years has been able to instill a sense of confidence in the cocoa cultivators through its procurement policy that has ensured reasonable prices to them. In purport of this, CAMPCO has decided to establish cocoa liquor, butter and powder manufacturing facilities and a chocolate manufacturing plant as an extension of its activities for achieving its overall corporate objective of safeguarding the interests of cocoa growers with better economic returns.

CAMPCO has stepped into cocoa processing and chocolate manufacturing with a licensed capacity of 8800 MT (metric tonnes). However, the installed capacity surpasses and is around 13000 MT. with a cocoa beans crushing capacity to the tune of 9000 MT.

The factory manufactures

1. Cocoa Mass, cocoa Butter and cocoa Powder -Industrial Products for internal & export market.
2. Moulded chocolates, Enrobed chocolates, Chocolate Eclairs, Sugar Coated Chocolate buttons and instantised drinking chocolate - finished products for internal market and having export potential.

Keeping pace with the consumer needs of the new products, Campco has recently exported instantised milk flavouring beverage products and Chocolate Eclairs to Australia that are formulated at product development cell of chocolate factory. It exports cocoa butter to European countries.

Being a co-operative venture, this factory provides an opportunity to further strengthen the co-operative movement by bringing in the dispersed marginal and small cocoa growers under one umbrella.

The factory provides employees with a secure working environment. The different welfare acts followed in this factory are Factories act 1948, Minimum Wage Act 1948, Gratuity Act 1965, PF, ESI Act, Bonus Act 1965, and Companies Act 1956. This vision has led them to provide many perks such as accommodation and other facilities for employees. This has enabled the factory to obtain a large pool of experienced professionals and skilled work force who are dedicated to provide excellent quality products.

They have always been meticulous about quality of products and have maintained a hygienic and immaculate manufacturing unit, which has been inspected and approved by HACCP, ISO 22000 standards. It is for these reasons that Cadbury, Nestle, Lotus etc., choose Campco chocolate factory to produce their chocolates.

The present manpower in the unit is about 250 permanent workers and 150 contract workers consisting of skilled and semi-skilled workmen, supervisors, technical and managerial staff.

3.2 Selection of the campco chocolate factory and data base

The Campco chocolate factory was purposively selected for the study, the data relating to the production of chocolates and cocoa based products for the past ten years and statistics pertaining to the organizational, business and financial aspects of the unit were also collected from annual reports from the year 1999-2000 to 2008-2009. The marketing channels adopted by the Campco chocolate factory to sell their product were obtained from personal interview with the marketing branch and to study the economics of cocoa bean production a multi stage area sampling was adopted for selection of farmers. Two taluks from Dakshina Kannada and two taluks from

Shimoga Districts were purposively selected. A random sample of 40 farmers from the above four taluks were considered for survey. The detailed information on supplier profile and profitability of cocoa bean production were obtained using pre tested schedule.

Table 3.1: Distribution of sample farmers

Sl. No.	District	Taluk	Number of farmers
1.	Dakshina	Puttur	10
	Kannada	Sulya	10
2.	Shimoga	Sagara	10
		Thirthalli	10
Total			40



Plate No. 1: Campco Chocolate Factory entrance



Plate No. 2: Campco Chocolate Factory unit at Kemminje

Table 3.2: Description of the Campco Chocolate Factory

Sl. No.	ITEMS	PROCESSING UNIT
1.	Full form of campco	The Central Arecanut and Cocoa Marketing and Processing Co-operative Limited
2.	Registered Office	The CAMPCO Ltd. Varanashi Towers, Manglore, PIN 575001 Reg. No. RCS No.2598/73-74 No.L.11016/42/87-L&M
3.	Date of registration of the campco ltd.	11 th JULY 1973
4.	Year of establishment of Campco Chocolate Factory	1 st September 1986
5.	LOCATION	Kemminje, Puttur(taulk), Dakshina Kannada
6.	Type of organization	Co-operative
7.	Type of ownership	Semi-government
8.	Capacity utilization	100 %
9.	Licensed capacity	8800 MT
10.	Installed capacity	13000 MT
11.	Finished product	Chocolates & cocoa based products
12.	Brand name	CAMPCO
13.	Certification	HACCP, ISO 22000

3.3 Method of analysis

3.3.1 Growth rate analysis

Growth rates in production, quantity and sales value of Campco products were computed for a period of 10 years from 1999-2000 to 2008-2009. Growth rates were computed using the exponential growth function of the form:

$$Y = ab^t \dots\dots\dots (1)$$

Where,

Y= Dependent variable for which the growth rate is estimated

a= Intercept

b= Regression coefficient

t= Time variable

The compound growth rate was obtained from the logarithmic form of the equation (1) as below

$$\ln y = \ln a + t \ln b$$

The per cent compound growth rate (g) was derived using the relationship

$$g = (\text{Anti log of } b - 1) \times 100$$

3.3.2 Ratio analysis

The ratio analysis is carried out to evaluate critically the business performance of the selected unit. Relevant information was drawn from the Annual Reports of the CAMPCO Limited for the Campco chocolate factory from 1999-2000 to 2008-09. In the present study, financial ratios were computed to assess the business performance of the unit. The ratios were classified under three different heads namely leverage, activity and profitability ratios. The method of computing these ratios is given below. (Source: Financial Management, theory and practice by Prasanna Chandra)

3.3.2.1 Leverage ratios

The Campco chocolate factory's current debt paying ability and long term financial strengths are judged through financial leverage, or capital structure. This ratio indicates the mix of funds provided by owners and lenders. As a general rule, there has to be a proper blend of debts and owners' equity. Leverage ratio is calculated by profit and loss items by determining the extent to which operating profits are sufficient to cover the fixed charges. Long term creditors, like debenture holders, financial institutions etc. are more concerned with the Campco chocolate factory's long term financial strength. To judge the long term financial position of the firm, financial leverage, or capital structure ratios are calculated. This ratio indicates mix of funds provided by owners and lenders.

$$\text{i. Interest coverage ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

The interest coverage ratio or times interest-earned is used to test the Campco Chocolate Factory's debt-servicing capacity. The interest coverage ratio is computed by dividing earnings before interest and taxes (EBIT) by interest charges.

3.3.2.2 Activity ratios

Activity ratios are employed to evaluate the efficiency with which firm manages and utilize its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity ratios, thus, involves relationship between sales and assets.

$$\text{i. Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

This ratio indicates the efficiency of the firm in producing and selling its product. It is calculated by dividing the cost of goods sold by the average inventory.

The average inventory is the average of opening and closing balance of inventory and cost of goods sold includes raw material, manufacturing expenses.

$$\text{ii. Days of inventory holding (DIH)} = \frac{360}{\text{Inventory turn over ratio}}$$

$$\text{iii. Net assets turnover} = \frac{\text{Sales}}{\text{Net assets}}$$

$$\text{iv. Total assets turnover} = \frac{\text{Sales}}{\text{Total assets}}$$

This ratio shows the Campco chocolate factory's ability in generating sales from all financial resources committed to total assets.

3.3.2.3 Profitability ratios

Profit is the difference between revenues and expenses over a period of time (usually one year). Profits are essential, but it would be wrong to assume that every action initiated by the management of a company should be aimed at maximizing profits, irrespective of concerns for customers, employees, suppliers or social consequences. Profit is the ultimate output of a company, and it will have no future if it fails to make sufficient profits. The profitability ratios are calculated to measure the operating efficiency of the company. Besides the management of the company, creditors and owners are interested in the profitability of the firm.

Profitability reflects the final result of business operations. There are two types of profitability ratios: profit margin ratios and rate of return ratios. Profit margin ratios show the relationship between profit and sales. The two popular profit margin ratios are: gross profit margin ratio and net profit margin ratio. Rate of return ratios reflect the relationship between profit and investment.

The important rate of return measures are: return on total assets, earning power.

Profit margin ratios

i. Gross Profit Margin = $\frac{\text{Sales} - \text{Cost of goods sold}}{\text{Sales}}$

The gross profit margin ratio reflects the efficiency with which the management produces each unit of product. The ratio indicates the average spread between the cost of goods sold and the sales revenue.

ii. Net Profit Margin = $\frac{\text{Net Profit}}{\text{Sales}}$

Net profit is obtained when operating expenses, interest and taxes are subtracted from the gross profit.

Net profit ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products. This ratio is overall measure of the Campco chocolate factory's ability to turn each rupee sales into net profit. It also indicates the Campco chocolate factory's capacity to withstand adverse economic conditions.

The gross and net profit margin ratios provide a valuable understanding of the cost and profit structure of the firm and enable the analyst to identify the sources of business efficiency/inefficiency.

Rate of Return Ratios

Return on Total Assets

A commonly used rate of return measure, the return on total assets is defined as

iii. Return on Total Assets = $\frac{\text{Net Income(profit)}}{\text{Average total assets}}$

The net income to total assets ratio supposedly is a measure of how efficiently the capital is employed. In this the numerator measures the return to shareholders (equity and preference) and the denominator represents the contribution of shareholders as well as creditors.

Earning Power

A measure of operating profitability, the earning power is defined as:

$$\text{iv. Earning Power} = \frac{\text{Earnings Before Interest and Taxes}}{\text{Average Total Assets}}$$

The earning power is a measure of business performance which is not affected by interest charges and tax payments. It abstracts away the effect of financial structure and tax rate and focuses on operating performance. The numerator represents a measure of pre-tax earnings belonging to all sources of finance and the denominator represents total financing.

3.3.3 Costs and returns analysis of cocoa plantation

3.3.3.1 Tabular presentation

The data collected from cocoa sample respondents were presented in tabular form to facilitate easy comparison. Simple averages and per centages were computed and are presented.

3.3.3.2 Definitions of terms and concepts used in cost - returns analysis

Fixed cost

The various items viz., land preparation charges, pipeline cost, planting, fencing, land rent, land revenue, depreciation and also interest on investment were categorized under the fixed cost.

Variable cost

Variable cost includes the expenditure on labour and material input. The interest on working capital was also included under variable cost in cocoa production.

Hired human labour cost

Hired human labour cost was estimated in terms of man days wherein 8 hours of work in a day was considered as one man day. The wages were valued at Rs. 180-200 per day for men labour and Rs. 150 for women labour in Dakshina Kannada district and in Shimoga Rs. 150-180 for men labour and Rs.120 for women labour based on the prevailing wage rates in the study area during study period.

Planting material cost

Grafts/seedlings cost was worked out at the rate of Rs. 15 per grafts/seedlings based on prevailing rate in study area.

Farmyard manure

The prevailing price per cartload of farmyard manure was used to impute the value of own farmyard manure.

Fertilizer cost

The fertilizers cost was calculated at the actual price paid by farmers.

Irrigation charge

Cost of labours used for irrigation purpose was treated as irrigation charges.

Land rent

Land rent was calculated as per the rate prevailing for irrigated land in the study area.

Interest on fixed capital

Interest on fixed capital was calculated at the rate of 9.5 per cent, based on the prevailing bank rate for medium term investments.

Interest on working capital

Interest on working capital was charged at the rate of 7.5 per cent per annum, which was the rate at which the farmers received short term loans.

Family labour

Family labour cost was calculated on the basis of charges paid to hired labour

Depreciation

Depreciation was calculated by using straight line method.

$$\text{Depreciation} = \frac{\text{Purchase value} - \text{Junk value}}{\text{Life span (in years)}}$$

Amortization of establishment cost

The annual installment is arrived through the formula given below

$$I = B \frac{i}{1 - (1 + i)^{-n}}$$

Where, I = Annual Instalment in rupees

B = Establishment Cost

n = average life span of cocoa plantation

i = interest rate in fraction

The average life span of cocoa plantation was assumed to be 20 years. The interest rate was taken as 9.5 per cent to represent the rate of inflation on these items.

Gross returns

The gross return was calculated by multiplying the total output with price received by farmers.

Net returns

It is the returns obtained by subtracting total cost from gross returns.

$$\text{Net Returns} = \text{Gross Returns} - \text{Total Cost}$$

CHAPTER IV

RESULTS

The overall objective of the study was to evaluate the business performance of the Campco Chocolate Factory. The results of the study are presented under the following heads.

- 4.1 Establishment and growth of Campco Chocolate Factory
- 4.2 Financial performance of Campco Chocolate Factory
- 4.3 Marketing strategies of CAMPCO for chocolates and cocoa based products
- 4.4 Costs of and returns from cocoa plantation

4.1 Establishment and growth of Campco chocolate factory

The growth and financial performance of the Campco chocolate factory are assessed by computing compound growth rates and different financial ratios from the annual reports of the CAMPCO Limited.

4.1.1 Establishment of Campco chocolate factory

CAMPCO is a cooperative venture for promoting arecanut and cocoa production and marketing in the country. The Campco was encouraging the growers to cultivate cocoa as an intercrop in arecanut for enhancing profitability of the plantations as cocoa has global demand.

The principal buyers of cocoa till 1980 suddenly stopped buying operations during the peak cocoa season due to slump in international cocoa price. To safeguard the interests of its growers and with a view to creating a permanent demand and a steady market for cocoa, CAMPCO had to enter into Indian cocoa market with the supporting nod from the Central Government and State Governments of Karnataka and Kerala. It established a biggest chocolate factory in South East Asia, by adopting foreign technical advancement in

chocolate making. Campco Chocolate Manufacturing Factory is located at Kemminje village in Puttur Taluk in Dakshina Kannada District, 52 km away from the coastal city Mangalore. The Factory was set up in 1986 at an initial investment of Rs. 1167 lakhs. It imported machineries manufactured by the following 5 major companies for cocoa processing and chocolate manufacturing namely

M/s. Carle & Montanari Spa, Italy,
M/s. Aasted International APS, Denmark,
M/s. Otto Hansel Gmbh, Germany,
M/s. Sollich Gmbh & Co. kg, Germany,
M/s. Sig Swiss Industrial co., Switzerland,

With this Campco had stepped into cocoa processing and chocolate manufacturing with a licensed capacity of 8800 MT. However, the installed capacity is around 13000 MT with a cocoa beans crushing capacity to the tune of 9000 MT.

Nurtured by Sri. Varanashi Subraya Bhat, the Founder President, the factory with all imported machinery was completed in a record time of 4 years, with an additional financial assistance from a consortium of Industrial Development Bank of India [IDBI.], Industrial Credit and Investment Corporation of India [ICICI], and Industrial Finance Corporation of India [IFCI], The factory was commissioned by Sri Gaini Zail Singh, the then President of India on 1st September 1986. The Campco had a break through within 4 years on account of enthusiastic support from the chocolate consumers and traders. It netted a profit of Rs. 27.5 Lakh in the year 1990-91 and Rs. 2.89 crore in 2008-09. It has steered its way during last 30 years in placid as well troubled waters with a pledge to make the farmer members reach their destinations safely and satisfactorily.

4.1.2 Growth rates in production, sales and value realization

The annual compound growth rates of production, quantity sold and value realization of Campco products was estimated by using exponential growth functions for the period 1999-2000 to 2008-09. It could be observed from Table 4.1 that the Campco chocolate factory registered an impressive performance with annual compound growth rates of 10.36, 16.12 and 16.14 per cent for production, quantity sold on own and value realization of Campco products respectively.

4.2 Financial performance of the Campco chocolate factory

The financial performance is assessed by comparing various indicator ratios from the financial statements of the Campco chocolate factory which are discussed below.

4.2.1 Leverage ratios

The interest coverage ratio (ratio of operating profit to the interest) ranged from a minimum of 1.49 (2000-01) to a maximum of 2.13 (2008-09). The average value of interest coverage ratio for a period of ten years was 0.91.

4.2.2 Activity ratios

The operational efficiency of the processing unit was computed using the indicators such as inventory turnover, days of inventory holding, net assets turnover, and total assets turnover ratios.

The rate of inventory turnover ranged from 4.34 (2005-06) to 6.03 (2003-2004), while the average value for the entire period was 4.94 per cent. Higher ratio indicates adequate performance meaning that inventories are held for a shorter period of time.

The duration of inventory holding ranged from 59.66 days (2003-2004) to 82.88 days (2005-06) and the average days of inventory holding for the study period were 73.46.

Net assets turnover ratio indicates the extent of sales per rupee of net assets which ranged between 2.12 (2003-2004) to 2.95 (2008-2009) with an average value of 2.48 for the study period 2003-2009.

Total assets turnover ratio indicates the intensity of utilization of total assets by the processing unit which ranged between 1.75 (2003-2004) to 2.54 (2008-2009) with an average value of 2.16 for the study period 2003-2009.

4.2.3 Profitability ratios

The profitability of the Campco chocolate factory was assessed using four ratios namely gross profit margin, net profit margin, return on total assets and earning power.

The ratio of gross profit margin which indicates the gross profit or loss for each rupee of asset is presented in Table 4.2. The value of gross profit margin ratio ranged between 0.04 (2004-2005) to 0.35 (1999-2000) with an average value was 0.17 for the study period.

The ratio of net profit margin (net profit to sales) ranged from a minimum of -0.19 (2002-03) to a maximum of 0.06 (2001-02). The average value of the ratio of net profit margin was -0.0308 for the study period.

The ratio of return on total assets ranged from a minimum of -0.26 (2002-03) to a maximum of 0.12 (2008-09). The average Return on total assets was -0.0573 for the study period 2003-2009.

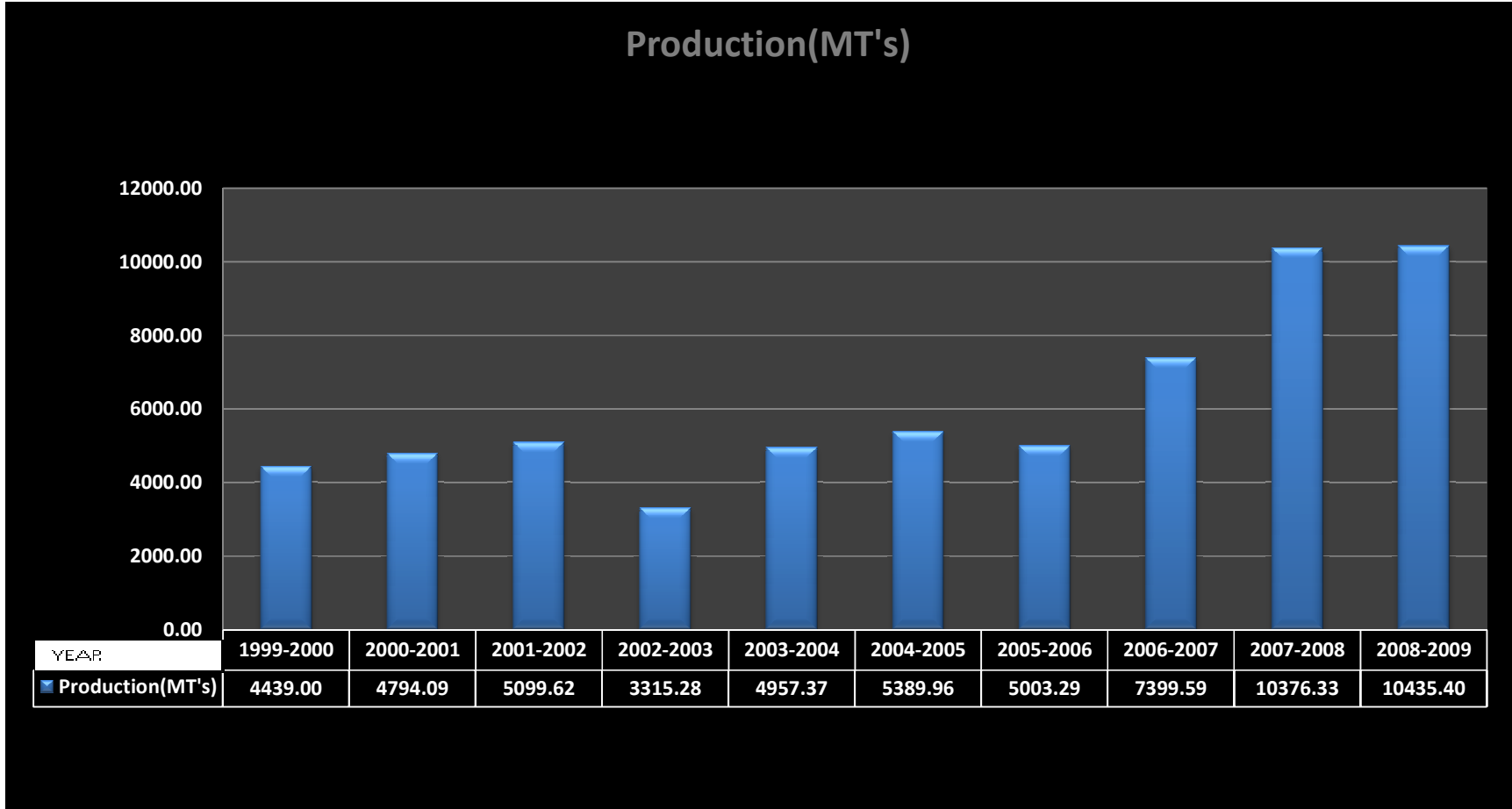
The earning power ratio ranged from a minimum of 1.37 (2002-03) to a maximum of 3.42 (2008-09). The average value of ratio of return on total assets was 1.55 for the study period 2003-2009.

Table 4.1 : Growth rates in production, sales and value realization

	Production	Sales	
Year	Production (MT)	Quantity (MT)	Values (Rs.in Lakhs)
1999-2000	4439.00	1604.00	2054.39
2000-2001	4794.09	2056.96	2506.71
2001-2002	5099.62	2626.47	3300.89
2002-2003	3315.28	2425.92	3319.18
2003-2004	4957.37	2596.73	3431.02
2004-2005	5389.96	3140.45	4316.86
2005-2006	5003.29	2824.95	3921.55
2006-2007	7399.59	4226.67	5100.81
2007-2008	10376.33	6509.51	7867.10
2008-2009	10435.40	7245.15	9498.58
Compound annual growth rate (%)	10.36***	16.12***	16.14***

Note: *** statistically significant at 1 % level

MT: Metric Tonnes



• *MT'S: METRIC TONNES

Fig. 4.1 : Year-wise Production performance of Campco chocolate factory (1999-2000 to 2008-2009)

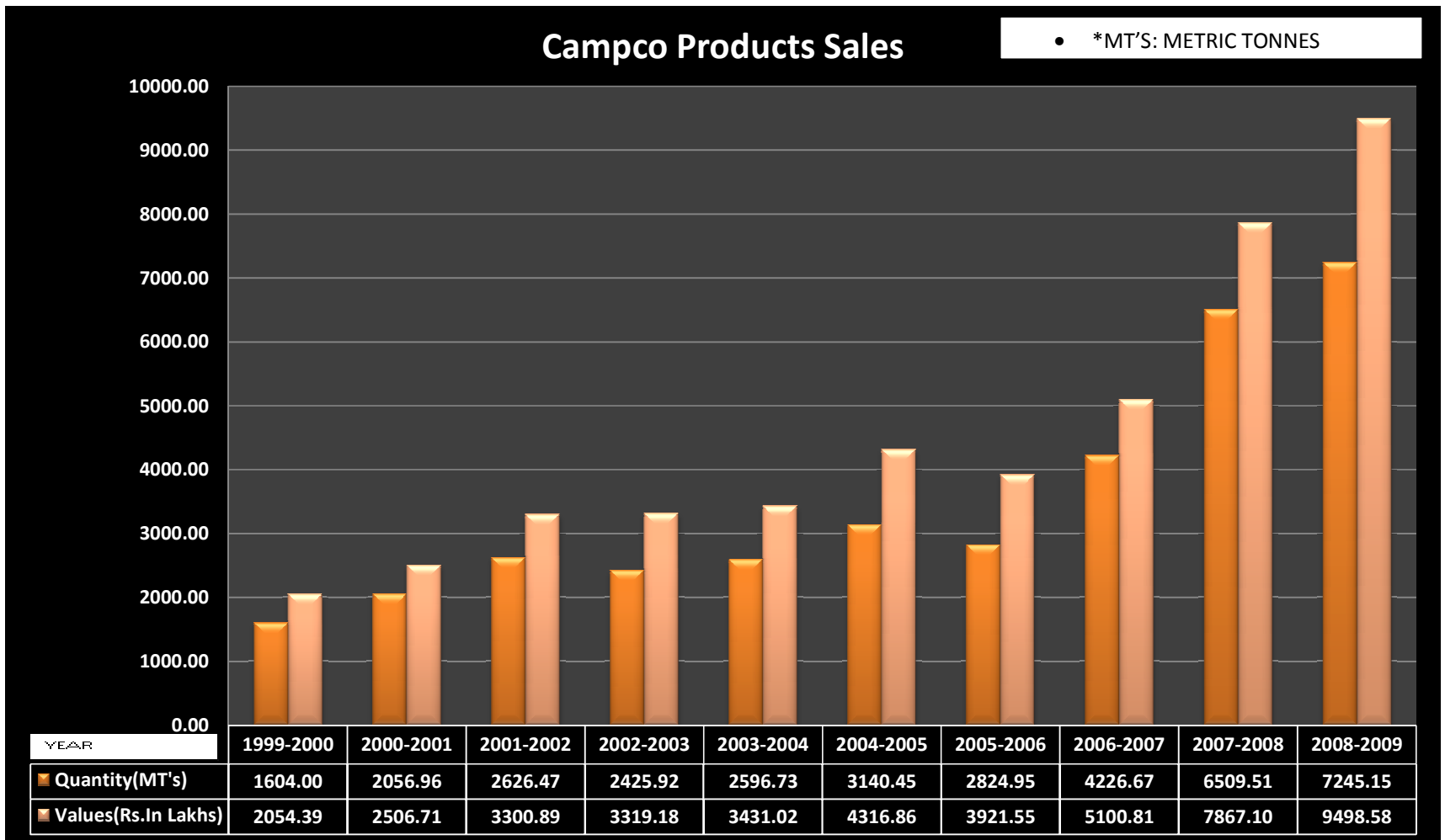


Fig. 4.2: Year-wise Sales performance of Campco brands of chocolates (1999-2000 to 2008-2009)

Table 4.2 : Financial Performance of the Campco chocolate factory (1999-2009)

Ratios	Leverage ratios	Activity ratios				Profitability ratios			
	Interest coverage	Inventory turnover	Days of inventory holding	Net assets turnover	Total assets turnover	Gross profit margin	Net profit margin	Return on total assets	Earning power
1999-00	1.63	4.70	76.55	NA	NA	0.35	0.03	NA	NA
2000-01	1.49	4.85	74.20	NA	NA	0.30	0.02	NA	NA
2001-02	2.00	5.06	71.10	NA	NA	0.28	0.06	NA	NA
2002-03	-0.55	5.65	63.60	2.34	2.10	0.06	-0.19	-0.26	1.37
2003-04	1.03	6.03	59.66	2.12	1.75	0.11	-0.07	-0.11	1.77
2004-05	-1.31	4.64	77.57	2.36	2.11	0.04	-0.11	-0.20	1.93
2005-06	-0.61	4.34	82.88	2.54	2.27	0.07	-0.09	-0.14	1.68
2006-07	1.77	4.90	73.36	2.28	2.05	0.15	0.01	0.0120	2.24
2007-08	1.47	4.57	78.68	2.78	2.36	0.15	0.0015	0.0047	3.18
2008-09	2.13	4.67	77.03	2.95	2.54	0.19	0.03	0.12	3.42
Average	0.91	4.94	73.46	2.48	2.16	0.17	-0.0308	-0.0573	1.55

4.3 Marketing strategies of Campco for chocolates and cocoa based products

The Campco chocolate factory manufactures a range of chocolate Products which are indicated in Tables 4.3 and 4.4 and plate no.3

Table 4.3 : Product description of industrial packs of chocolate

Sl. No.	Industrial Packs	Price (Rupees./Kg)
1.	Cocoa Mass	277
2.	Cocoa Butter	325
3.	Cocoa Powder	185
4.	Chocolate Mass	85
5.	Choco Paste	81
6.	Choco Chips-Milk	130
7.	Choco Chips-Dark	120
8.	Dark Chocolate	84
9.	Premium Milk Chocopaste	146
10.	Milk Chocodip	75

Table 4.4 : Product description of consumer packs of chocolate

Sl. No.	Consumer Packs	Grams(g)	Price (in Rupees)
1.	Melto	27 & 8	10/27g 3/8g
2.	CREAM	27 & 8	10/27 g 3/8 g
3.	Turbo	18	5/unit
4.	Treat	18 & 6	5/18 g 2/ 6 g
5.	Megabite	18	5/unit
6.	Campco Mini Bar	7	2/ unit
7.	Eclairs	380 & 1.71Kg.jar	50/jar
8.	Winner (Jar)	500 & 200	90/500 g 40/ 200 g
9.	Krust	18	5/unit
10.	Funtan	25	10/ unit
11.	Funda (3 Flavours)	200	35/unit
12.	Melto Eclair	1 kg. Jar & 480 g. Pouch	1/unit

A. Moulded Products



CAMPCO MELTO



CAMPCO CREAM

B. Enrobed Products



CAMPCO TURBO



CAMPCO TREAT



CAMPCO MEGABITE



CAMPCO BAR



4EVER



KRUST

Plate No. 3: Chocolate types in Campeo chocolate factory

Plate No. 3: Continued



CAMPCO ECLAIR 2000



CAMPCO ECLAIRS



MELTO ECLAIRS



BROWN CENTER ECLAIRS



PLAY TIME

D. Drinking Chocolate



CAMPCO WINNER



CAMPCO WINNER

4.3.1 Organizational structure of sales force

The different types of chocolates produced here are having domestic market and some portion is exported. The Nestle, the Cadbury companies have an agreement with Campco chocolate factory produces chocolates under their brand name. Apart from this CAMPCO is having its own marketing team and they have distinct marketing channels for South India and North India. The Present marketing channel in North India is 3 tier system and in South India it is 2 tier system which is presented in figures 4.4 and 4.5 respectively.

For efficient marketing of chocolates, CAMPCO has divided its area of operation into four regions managed through the regional sales managers. Regional head offices are located at Mangalore, Hyderabad, and Delhi. Mangalore office has the highest number of area sales offices covering four states namely Karnataka, Kerala, Maharashtra and Goa. Similarly the remaining regions cover other important markets across the country (Table 4.5). The responsibility of regional sales managers is to direct the area sales managers. The concerned regional sales manager should look after all the marketing activities of area sales managers.

The responsibility of area sales managers is controlling, coordinating, invoicing sales in order to lead the marketing process smoothly and giving feedback to regional sales manager about the sales activities.

4.3.2 International market

Campco exports some of its products to international buyers in US, Africa, Nepal, and Hong Kong. The buyers place purchase orders directly with the factory. During the year 2008-09, the factory exported chocolates worth 17.35 crores of which semifinished accounted for 67 per cent of the share. The factory would take orders

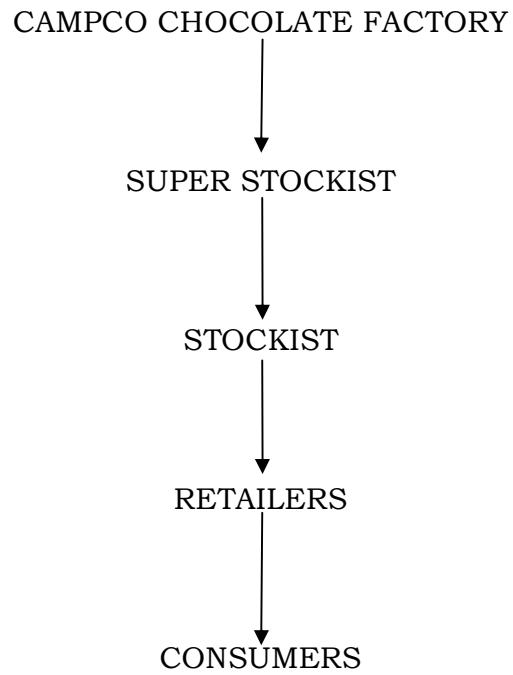


Fig. 4.4 : Marketing Channel for North India

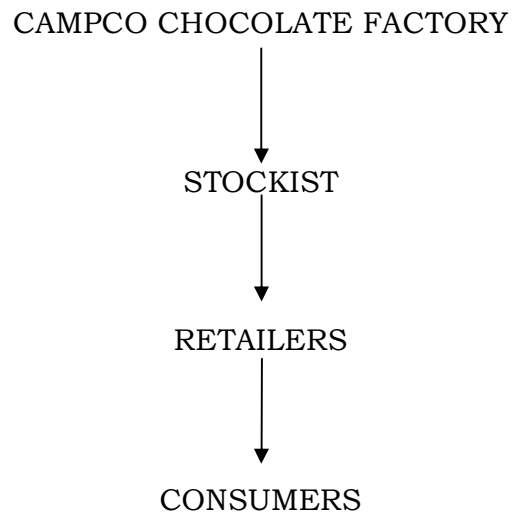


Fig. 4.5 : Marketing Channel for South India

Table 4.5 : Location of regional and area sales offices

	REGION-I	REGION-II	REGION-III	REGION-IV
HEAD OFFICES	Mangalore	Hyderabad	Delhi	Delhi
AREA SALES OFFICES	Calicut	Chennai	Jaipur	Ghaziabad
	Bangalore	Cuttack	Ahmedabad	Haldwani
	Hubli	Kolkota	Indore	Chandigarh
	Goa			Jammu
	Mumbai			
	Shimoga			
	Ernkulam			

from the prospective importers all-round the year for the supply of chocolates and cocoa based products. In order to meet unexpected demand, Campco chocolate factory also would maintain surplus inventory. The mode of payment is through Letter of Credit after making initial advances.

4.3.3 Job work, out sourcing and agreements with other firms

Entire range of M/s. Nestle chocolate products were produced at Campco chocolate factory up to 31st December 2000. Now they are manufacturing only the required quantity of Eclairs and white chocolates in the factory. It is also supplying cocoa butter and powder required for Nestle's Ponda Factory. Similarly Campco has contractual Agreements with other companies like Cadbury India Limited, ITC Limited and Amul to produce cocoa based products and their brands of chocolates in campco chocolate factory. The major bulk buyers of campco cocoa based products are presented in Table 4.6.

4.3.4 Pricing strategy

The prices of chocolates and cocoa products are presented in Tables 4.3 and 4.4. The retailer (13-18 %) margin is almost thrice that of the margin of stockists (6 %) and super stockists (5 %). Offer prices are worked out based on demand and sales in the organized retail outlets who make bulk purchases similar to those of stockists. Margin retained by the organization reduces with the quantum of purchases. The prices of consumer packs and industrial packs are presented in Tables 4.3 and 4.4. The MRP quoted is inclusive of all taxes, leakages and Free on Rail (FOR) destination. Cash and carry is the mode of purchase within the country.

**Table 4.6: Major bulk buyers of cocoa based products
from Campco chocolate factory**

SL. No.	MAJOR BULK BUYERS
1.	Nestle India Limited
2.	Cadbury India Limited
3.	Glaxo Smith Kline Pharmaceuticals Limited
4.	Jagatjit Industries Limited
5.	Parle Agro Private Limited
6.	ITC Limited
7.	Amul
8.	Jindal Foods
9.	Kellogs

Source: Eshwar Bhat, AGM, Campco chocolate factory

4.3.5 Packaging material suppliers

The Campco chocolate factory has preferred suppliers for sourcing packaging material for its products. Being an ISO 22000 factory, it uses the packaging material which is hygienically manufactured from food grade plastic to maintain the color, flavor and nutritive values of inside contents for a long period of time. Moisture proof, durable and appealing packaging is the key to enhance the shelf life, brand image and marketability of chocolate products.

Packaging material is sourced from the following four firms.

- Corrugated and Cotton box - G.R.V. Merchandizing, Bangalore
- Corrugated boxes, Outer films – Karavali Colour Cartons Limited, Mangalore
- Coated and Laminated Paper Packaging Plastics film-Manipal Packaging Industries, Manipal group, Manipal
- Jars-Manjushree Technopack Limited, Bangalore

4.3.6 Annual sales performance of Campco chocolates and cocoa based products

During 1999-2000, Campco had sold 1604.00 MT of chocolates and cocoa based products (Table 4.1 and Fig 4.2), which was worth Rs. 2054 lakhs, which increased to 2056.96 MT (Rs. 2506 lakhs) during 2000-01 and 2626 MT (Rs. 3301 lakhs) during 2001-02. In the year 2008-09, the company sold 7245 MT of chocolates and cocoa based products valued at Rs. 9499 lakhs.

4.3.7 Major players in the country

There are other chocolates and cocoa based products manufacturers in the country who are the major players in the market (Table 4.7). Although there are ten other chocolates and cocoa based products manufacturers in the country, the faith of buyers on Campco chocolates factory has made the Campco

chocolate factory to have its own brand equity in the market over its competitors.

4.3.8 Promotional activities

Promotional activities like exhibition and competition in schools on which Ten per cent out of sales income is spent.

4.4 Costs of and returns from cocoa plantation

The annual costs and returns per hectare of cocoa were computed to analyze the profitability of cocoa intercrop in arecanut plantations.

4.4.1 General characteristics of the sample farmers

An understanding of general characteristics of the sample farmers would provide a bird's eye view of the general features prevailing in the study area. The general characteristics of cocoa cultivators are presented in Table 4.8.

It could be seen that there is no significant difference in the average age and occupation of the cocoa growers of these districts. The educational qualification ranged from primary to college level, while only one respondent was illiterate. Dakshina Kannada being close to neighbouring Kerala state has cent per cent literacy among the sample respondents.

The average size of the family in Dakshina Kannada District was about 6 members and average land holding was 6 Ha. of which 4.5 Ha. irrigated and remaining 1.5 Ha. was rainfed. Similarly in the case of Shimoga District the average size of the family was about 6 members and average land holding was 4.65 Ha., of which 3.45 Ha. irrigated and remaining 1.20 Ha. was rainfed. Thus, there is no much difference in terms of demographic features of the households. The cocoa varieties grown in the study area were criollo and foresterio.

Table 4.7 : Major players for chocolates and cocoa based products in India

Sl. No.	Name	Location
1.	Amul, Kaira District Co-Operative Milk Producer Union Ltd.	Anand, Gujarat
2.	Jindal	Mumbai
3.	Morde Food Products	Mumbai
4.	Britania Industries Ltd.	New Delhi
5.	Hindustan Unilever Ltd.	New Delhi
6.	Nestle India Ltd.	New Delhi
7.	Cadbury India Ltd.	Mumbai
8.	Lotus Chocolate Company Ltd.	Hyderabad
9.	Sathe Biscuits & Chocolates	Pune

Source: Directorate of Cashew nut and Cocoa Development

Table 4.8 : General characteristics of sample farmers

Sl. No.	Particulars	Unit	Dakshina Kannada	Shimoga
			Sample size	Sample size
			n=20	n=20
1.	Average Age	Years	43	42
2.	Education*			
	Illiterate		0	5
	Primary		0	10
	High school		10	25
	PUC		30	25
	Graduation		60	35
3.	Occupation			
	Agriculture as Main occupation	No.	20	20
	Agriculture as Subsidiary occupation	No.	Nil	Nil
4.	Average Family size	No	6	6
5.	Average Land holdings			
	Irrigated	Ha.	4.5	3.45
	Rainfed	Ha	1.5	1.2
	Total	Ha.	6	4.65

Note: * percentage to sample size, Ha.-Hectare, No. - Number

4.4.2 Establishment cost of cocoa plantation

Cocoa plants start bearing from the third year onwards. Therefore the expenditure for first two years is categorized under establishment cost. The establishment cost per hectare of cocoa bean cultivation is presented in Table 4.9. The establishment cost in cocoa bean cultivation includes various items like land preparation, preparation of drainage channel, planting material, pipe line, fencing, land rent and depreciation on machineries and equipments. The pooled average total cost of establishment per hectare was Rs. 134306 of which total fixed cost was Rs. 97943 (73 %) and total variable cost was Rs. 36363 (27 %). The average establishment cost per hectare for farmers of Dakshina Kannada was higher (Rs. 137877) compared to Shimoga (Rs. 130735). The total establishment cost was amortized for 20 years spread over the economic life of plantation.

The share of total fixed cost out of establishment cost was found to be higher for Dakshina Kannada farmers with Rs. 99175 (72 %) per hectare followed by Shimoga farmers with Rs. 96711 (74 %).

In the case of total variable cost, Dakshina Kannada farmers incurred higher amount with Rs. 38702 (28 %), of which labour cost was Rs. 26243 (19 %) and material cost was Rs. 9707 (7 %). Whereas, in the case of Shimoga total variable cost is Rs. 34024 (26 %), out of which labour cost was Rs. 21802 (17 %) and material cost was Rs. 9798 (7 %) (Table 4.9).

4.4.3 Annual average maintenance cost of cocoa plantation

The pooled average annual maintenance cost per hectare of cocoa bean plantation during the bearing age was Rs. 48286 of which variable cost was Rs. 29398 (60 %) and total fixed cost was Rs. 18888 (40 %). The total maintenance cost incurred by Dakshina Kannada farmers was found to be higher (Rs. 51193) compared to Shimoga

farmers with Rs. 45379. There was not much difference between regions in the quantum of fixed costs out of total maintenance cost.

In the case of total variable costs Dakshina Kannada farmers had higher variable costs to the tune of Rs. 22130 per hectare (Table 4.10). Most of this difference was on account of higher wage rates prevailing in Dakshina Kannada. The labour expenses amounted to Rs. 22130 in Dakshina Kannada while Shimoga farmers incurred slightly lower labour amount Rs.17748.

4.4.4 Yield and returns of cocoa bean cultivation in the study area

Cocoa profitability is higher in Dakshina Kannada compared to Shimoga. In order to check if significant yield difference exists between the regions, the t-statistic was computed to test the significance of mean (Table 4.11).

In Dakshina Kannada the yield were higher (3925 kg/Ha.) compared to Shimoga (3300 kg/Ha.) This difference in yield is mainly attributed to better management practices and agro climatic conditions prevailing in Dakshina Kannada District. And the net return obtained by Dakshina Kannada farmers (Rs. 131587) is higher compared to Shimoga farmers (Rs. 161652).

Table 4.9 : Establishment cost per hectare of cocoa plantation

Sl. No.	Particulars	Dakshina Kannada			Shimoga			Average		
		Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%
I	FIXED COST									
1.	Land cleaning & Peg marking (in days)	43	7731	5.61	41	6113	4.68	42	6922	5.15
2.	Digging pits (IN DAYS)	32	6440	4.67	34	6120	4.68	33	6280	4.68
3.	planting material (Rupees 15 per graft, 506 grafts/hectare)	506	7590	5.50	506	7587	5.80	506	7588	5.65
4.	Bore well, pumpset, Pipe line		49388	35.82		49501	37.86		49445	36.82
5.	Fencing		10500	7.62		10100	7.73		10300	7.67
6.	Land rent		4000	2.90		4000	3.06		4000	2.98
7.	Interest on fixed capital @ 9.5%		8137	5.90		7925	6.06		8031	5.98
8.	Depreciation		5389	3.91		5365	4.10		5377	4.00
I	TOTAL FIXED COST		99175	71.93		96711	73.98		97943	72.93

Note: % -Percentage to total establishment cost

Table 4.9 – (Continued)

Sl. No.	Particulars	Dakshina Kannada			Shimoga			Average		
		Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%
II	VARIABLE COST									
A.	Labour Cost (IN DAYS)									
9.	Pit filling & Planting – stacking, mulching & shading	33	5886	4.27	35	5220	3.99	34	5553	4.13
10.	Weeding once a year	11	1430	1.04	11	1296	0.99	11	1363	1.01
11.	Pruning and training	24	4311	3.13	23	3480	2.66	24	3895	2.90
12.	Soil working(earthing up)	16	2934	2.13	17	2543	1.94	17	2738	2.04
13.	Application of manures and fertilizers	23	4185	3.04	20	2970	2.27	22	3578	2.66
14.	Plant protection operations	14	2475	1.80	14	2130	1.63	14	2303	1.71
15.	Fencing, watch & ward	9	1638	1.19	9	1290	0.99	9	1464	1.09
16.	Miscellaneous operations like removal of sprouts, deblossoming, transportation of inputs,	19	3384	2.45	19	2873	2.20	19	3129	2.33
	TOTAL	149	26243	19.03	148	21802	16.68	149	24023	17.89

Note: % - Percentage to total establishment cost

Table 4.9 – (Continued)

Sl. No.	Particulars	Dakshina Kannada		Shimoga		Average	
		Value in Rupees.	%	Value in Rupees.	%	Value in Rupees.	%
B.	MATERIAL COST						
17.	Manures & fertilizers	6843	4.96	6978	5.34	6911	5.15
18.	Plant protection chemicals	1015	0.74	1037	0.79	1026	0.76
19.	Irrigation (fuel for the pumpsets available for the irrigation of arecanut)	1849	1.34	1783	1.36	1816	1.35
20.	Total Material Cost	9707	7.04	9798	7.49	9753	7.26
21.	Interest on working capital @7.5%	2752	2.00	2424	1.85	2588	1.93
II	Total variable cost	38702	28.07	34024	26.02	36363	27.07
	Total establishment cost (I+II)	137877	100.00	130735	100.00	134306	100.00

Note: % - Percentage to column total

Table 4.10 : Annual maintenance cost for one hectare of cocoa plantation

Sl. No.	Particulars	Dakshina Kannada			Shimoga			Average		
		Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%	Number of labours	Value in Rupees.	%
I	VARIABLE COST									
A.	Labour Cost (in days)									
1.	Pit filling, stacking, mulching & shading	2	342	0.66	2	233	0.50	2	288	0.58
2.	Weeding once a year	5	818	1.57	6	720	1.54	6	769	1.56
3.	Pruning and training	17	3006	5.78	17	2588	5.55	17	2797	5.67
4.	Soil working	11	2034	3.91	13	1913	4.10	12	1973	4.00
5.	Application of manures and fertilizers	24	4329	8.32	22	3278	7.03	23	3804	7.71
6.	Plant protection operations	19	3420	6.57	15	2243	4.81	17	2831	5.74
7.	watch & ward	5	936	1.80	5	743	1.59	5	839	1.70
8.	Miscellaneous operations like removal of sprouts, deblossoming, transportation of inputs.	18	3249	6.24	19	2790	5.98	19	3020	6.12
9.	Harvesting	22	3996	7.68	22	3240	6.95	22	3618	7.34
	Total Labour Cost(A)	123	22130	42.53	121	17748	38.06	122	19939	40.42

Note: % - Percentage to total maintenance cost

Table 4.10 – (Continued)

Sl. No.	Particulars	Dakshina Kannada		Shimoga		Average	
		Value in Rupees.	%	Value in Rupees.	%	Value in Rupees.	%
B.	MATERIAL COST						
10.	Manures & fertilizers	5240	10.07	5355	11.49	5298	10.74
11.	Plant protection chemicals	930	1.79	960	2.06	945	1.92
12.	Irrigation (fuel for the pumpsets available for the irrigation of arecanut)	1181	2.27	1150	2.47	1165	2.36
	Total material cost(B)	7351	14.13	7465	16.01	7408	15.02
13.	A+B	29481	56.66	25213	54.08	27347	55.44
14.	Interest on working capital @7.5%	2211	4.25	1891	4.06	2051	4.16
	Total variable cost	31692	60.91	27104	58.13	29398	59.60
	FIXED COST						
15.	Land rent	2000	3.84	2000	4.29	2000	4.05
16.	Depreciation	2695	5.18	2260	5.75	2477	5.45
17.	Amortized establishment cost	14806	30.07	14015	31.82	14411	30.90
	TOTAL FIXED COST	19501	39.09	18275	41.87	18888	40.40
	TOTAL MAINTENANCE COST	51193	100.00	45379	100.00	48286	100.00

Note: % -Percentage to column total

Table 4.11: Cocoa yield performance in different regions

	Dakshina Kannada	Shimoga
Mean yield	3925.00	3300.00
SD₊	1238.36	1250.26
t Stat	1.58**	

** Statically significant at 5 per cent level

CHAPTER V

DISCUSSION

The results obtained in the previous chapter are discussed under the following headings for the purpose of analytical clarity.

5.1 Establishment and growth of Campco chocolate factory

5.2 Financial performance of Campco chocolate factory

5.3 Marketing strategies of CAMPCO for chocolates and cocoa based products

5.4 Economics of cocoa bean production

5.1 Establishment and growth of Campco chocolate factory

Cocoa marketing crisis due to sudden withdrawal of buying by cocoa traders due to crash in the international cocoa prices came as a rude shock to cultivators. At this stage Karnataka and Kerala governments enthused the CAMPCO to enter the scene to rescue farmers from distress. CAMPCO willingly took up the responsibility to enter the cocoa market and performed a savior's role.

With a view to creating a permanent demand and a steady market for the beans, CAMPCO established a Chocolate Manufacturing Factory at Kemminje village in Puttur Taluk, Dakshina Kannada District by adopting foreign technical knowhow in chocolate making. The factory was set up in 1986 with an initial investment of Rs. 1167 lakhs.

The annual compound growth rates of production, sales quantity and value of Campco products are estimated. The results of the analysis (Table 4.1) signifies that for the chocolate manufacturing factory as a whole, the growth rate in production, quantity sold on own and Sales value of Campco products are positive and statistically significant for the period of study.

It may be noted here that the capacity utilization, expansion of the unit, expansion of area under cocoa cultivation has increased the supply of cocoa products. Further, the presence of own marketing team with proper marketing strategies and contract with the companies like Nestle, Amul, Cadbury India Ltd. to supply the cocoa based products have paved the way for growth in the production, quantity sold on own and sales value of Campco products. The growth in sales is highly significant in financial terms. Thus, it may be concluded that the ever increasing demand from major chocolate companies to produce their products in the Campco chocolate factory and increasing demand for Campco chocolates in domestic market, the sale of Campco products in the Campco chocolate factory has expanded 16.14 per cent, while the production in quantity terms has increased by 10.36 per cent, and 16.12 per cent in the case of sale of own quantity. These findings are similar to those of Ashok (2009) who observed similar results in Paiyur Fruit Products Pvt. Ltd. in Krishnagiri District of Tamil Nadu.

5.2 Financial performance of Campco chocolate factory

The various financial ratios such as leverage ratios, activity ratios and profitability ratios were analyzed for a period of ten years from 1999-2000 to 2008-09 and are presented in Table 4.2.

5.2.1 Leverage ratios

The long-term financial position of the Campco chocolate factory is judged through financial leverage or capital structure ratios. Long-term creditors, like debenture holders, financial institutions etc. are more concerned with Campco chocolate factory's long-term financial strength. These ratios indicate mix of funds provided by owners and lenders. As a general rule, there should be an appropriate mix of debt and owner's equity in financing such investment ventures.

It is noticed that average value of interest coverage ratio (operating profit to interest) for the period of ten years is moderate. It

registered negative values during 2002-2003, 2004-2005, 2005-2006 which indicates that Campco chocolate factory failed to meet its interest burden during these periods. Whereas, moderate interest coverage ratios are reported during the remaining periods. Higher interest coverage ratio during 2008-2009 indicates that the Campco chocolate factory can meet its interest burden.

5.2.2 Activity ratios

The operational efficiency of the processing unit is studied through activity ratios namely, inventory turnover, days of inventory holding, net assets turnover and total assets turnover ratios. The inventory turnover reflects the efficiency of inventory management, the higher the ratio, more efficient the management of inventories and vice versa.

The average inventory turnover ratio of the Campco chocolate factory is 4.94 which imply that the Campco chocolate factory is turning its inventory of finished goods into sales 4.94 times in a year. In other words, it holds inventory on an average for 73 days. Higher inventory turnover ratio is desirable for growth of any firm and Campco chocolate factory has scope to increase the inventory turnover which in turn helps to reduce the days of inventory holding

Average net assets turnover ratio (sales to net assets) for a period of seven years is 2.48; it implies that the Campco chocolate factory is producing Rs. 2.48 worth of sales for one rupee of capital employed in net assets.

The relationship between sales to total assets is established through the ratio of sales to total assets. The average total assets turnover of 2.16 times implies that Campco chocolate factory generate sales of Rs. 2.16 for every rupee investment in fixed and current assets together.

5.2.3 Profitability ratios

The profitability ratios measure the efficiency of utilizing resources for generating profits. The profitability is analyzed through a series of ratios like gross profit margin, net profit margin, return on investment (ROI) and return on equity (ROE).

Gross profit to sales ratio (gross profit ratio) had an average value of 0.17 (17 %). A high gross profit margin ratio is a sign of good management and it measures the efficiency of production as well as pricing. And the reasons attributed for low gross profit margin are higher cost of goods sold due to increase in price of raw materials. This indicates that Campco chocolate factory has scope for further improvement in its gross profit margin. Siddaram (2004) also reported similar findings in the management of public and private dairy processing units in Karnataka.

It is found that the value of net profit margin for the later part of the analysis is positive and improving, although the ten years average (1999-2000 to 2008-09) is -0.03 (-3 per cent), which cautions that it would be difficult for the Campco chocolate factory to withstand adverse economic conditions when profit margin is negative. The margins are negative during the period 2003 to 2006 and Campco chocolate factory failed to achieve satisfactory returns on shareholders fund. Similarly, a positive net profit margin could be the result of one or more of the following favorable conditions, such as rise in selling price, falling cost of production or increasing demand for the product. Though the ratio is negative during 2003 to 2006 period due to accrued losses, the Campco chocolate factory has since then recovered and has improved its financial status from 2008 onwards. These findings are similar to those of Ashok (2009) who reported that net assets turnover ratio of Paiyur Fruit Products Pvt. Ltd., for 1999-2008 period was 2.62, total assets turnover ratio of 2.01, and gross profit margin ratio of 0.08. Thus agroprocessing industry is operating

on moderate profits at present. Further, improvement is plausible with efficient inventory and marketing strategies.

The return on total asset ratio measures how efficiently the capital is employed and in this study return on total asset is calculated for a period (2003-2009) of seven years. The average return on total asset for seven years period is (-0.05) negative due to negative margin during the period 2003 to 2006.

The earning power is a measure of operating profitability and also business performance which is not affected by interest charges and tax payments. In this study earning power was calculated for the seven years period (2003-2009). Average earning power for seven years is (1.55) 155 per cent.

5.3 Marketing strategies

The success of any production venture depends on intelligent strategies of choosing appropriate markets, launching products and establishing good distribution net work. The marketing strategies of Campco is studied by assessing sales force distribution, product range and distribution channels.

5.3.1 Organizational structure of sales force

A variety of cocoa products and chocolates are manufactured for meeting the requirements of bulk buyers, domestic and international consumers (Tables 4.1 & 4.2 & Fig.1). The standard specifications are maintained for every category of chocolates produced and packaged in the factory. The factory has ISO 22000 and HACCP standards Certification. This ensures the stringent quality in every process of chocolate production. This helps in brand building as well as it instils trust in the distributors, retailers and contactors like Nestle Ltd. Cadbury Ltd. to outsource production from Campco chocolate factory.

The factory is having its own Marketing team for domestic market operations and marketing channels for South India is slightly different from that of North India. The marketing channel in North India is three tier system, while in South India it is two tier (Fig. 3 & 4) with four regional offices and 17 area sales offices across India. Shobha (1998) reported five alternative marketing channels for marketing of processed products by the co-operative and private fruit and vegetable processing units in north Karnataka.

It directly ships to international buyers and presently major destinations are the US, Africa, Nepal and Hong Kong. During the year 2008-09, the factory exported chocolates worth 17.35 crores of which semi finished accounted for 67 per cent of the share. In order to meet unexpected demand, Campco chocolate factory also would maintain surplus inventory. The mode of payment is through Letter of Credit after making initial advances.

The Campco has been doing job work, outsourcing and agreement with other firms in domestic market to produce cocoa based products like cocoa butter and powder and chocolates for companies like Cadbury India Ltd., ITC Ltd. and Nestle. These buyers themselves come to the processing unit to make a contract for the annual requirements. It is advantageous to the Campco chocolate factory as it is able to operate at full capacity and earn returns on capital investment.

5.3.2 Pricing strategy

During 1999-2000, CAMPCO had sold 1604.00 MT of chocolates and cocoa based products (Table 4.1 and Fig. 4.2), which was worth Rs. 2054 lakhs, which increased to 2057 MT (Rs. 2507 lakhs) during 2000-01 and 2626 MT (Rs. 3301 lakhs) during 2001-02. In the year 2008-09 of the study period, the company sold 7245 MT of chocolates and cocoa based products valued at Rs. 9499 lakhs. Campco offers an assorted range of chocolates targeting both

low and high price elastic consumers. The retailer (13-18 %) margin is almost thrice that of the margin of stockists (6 %) and super stockists (5 %). Special prices are worked out to the organized retailers who purchase in bulk similar to that of stockists. Margin retained by the organization reduces with the quantum of purchases. The prices of consumer packs and industrial packs presented in Tables 4.3 and 4.4. The MRP quoted is inclusive of all taxes, leakages and Free on Rail (FOR) destination. Cash and carry is the mode of payment within the country. Ten Per cent of sales income is spent on Promotional activities like exhibition and competition in schools.

Apart from sales promotion, products offered in attractive packages are important for enhancing sales. Campco chocolate factory uses the packaging material which is hygienically manufactured from food grade plastic to maintain the colour, flavour and nutritive values of content inside for a long period of time. They get packaging material from following suppliers.

- Corrugated and Cotton box - G.R.V. Merchandizing, Bangalore
- Corrugated boxes, Outer films – Karavali Colour Cartons Ltd., Mangalore
- Coated and Laminated Paper Packaging Plastics film-Manipal Packaging Industries, Manipal group, Manipal
- Jars- Manjushree Technopack Limited, Bangalore

5.4 Costs of and returns from cocoa plantation

The comparative profitability of cocoa inter cropped in areca gardens is computed for Shimoga and Dakshina Kannada Districts. Cocoa bean is a major ingredient in chocolate manufacturing and the price of cocoa would influence its supply as well as chocolate prices.

5.4.1 Establishment cost of cocoa plantation

Majority of Indian farmers cultivate cocoa as an intercrop in coconut and arecanut gardens. Investment needed for establishing

cocoa garden is not so heavy compared to other plantation crops. The cost of establishing a cocoa garden upto bearing period is treated as establishment cost.

The establishment cost on cocoa cultivation varies across the Districts of Dakshina Kannada and Shimoga. The total establishment cost per hectare for farmers in Dakshina Kannada is Rs. 137875/Ha., and for Shimoga farmers it is slightly lower at Rs. 130732/Ha.

The cost incurred on pipeline, pumpset, and borewell constitutes the highest share in total establishment cost in both Dakshina Kannada (Rs. 49388) and Shimoga Districts (Rs. 49501). The total cost incurred on labour in Dakshina Kannada (Rs. 26243) District was higher than that of the Shimoga (Rs. 21801) District. This is attributed to the fact that, the wages in Dakshina Kannada District was higher than the Shimoga District. The cost incurred on land cleaning, Peg marking was also very high in Dakshina Kannada District than Shimoga.

5.4.2 Average annual maintenance cost of cocoa plantation

Pooled average maintenance cost of cocoa garden during the bearing period was Rs. 48286 per hectare.

Total variable cost was the major component of maintenance cost which was Rs. 31692 (61 %) in Dakshina Kannada District and 27101 (58 %) in Shimoga District. Total labour wages is higher in Dakshina Kannada District (Rs. 22130) than Shimoga District (Rs. 17748) due to higher wages in Dakshina Kannada District.

5.4.3 Yield and return structure of cocoa plantation in the study area

The cocoa starts bearing fruits from 3rd year onwards. The pooled average yield obtained is 3612 kg per hectare. The yield was significantly higher in Dakshina Kannada District (3925 kg/Ha.) than in Shimoga District (3300kg/Ha.) which may be due to agro-climatic

factors prevailing in Dakshina Kannada District. The yields are significantly higher in Dakshina Kannada compared to Shimoga District. These yields are much higher than that reported by Giriappa (1995) for India who observed the average yields of 400-500kg per hectare.

The overall average net returns was Rs. 146619 and the average net return obtained over total cost was higher in Dakshina Kannada District (Rs. 161652) compared to Shimoga District (Rs. 131587). But cocoa production is found profitable in both the districts. Hence, the hypothesis that cocoa cultivation gives higher net returns to the farmers of both districts is proved.

CHAPTER VI

SUMMARY AND CONCLUSION

Indian demand for cocoa is increasing at a healthy rate of 8 per cent per annum. The Indian chocolate market is worth around Rs. 1500 crores growing at 18-20 per cent per annum and offers great potential for Campco chocolate factory and for other chocolate manufacturers as the market is still in its early stages of growth.

The success of any industry or firm largely stems from efficient management. The financial performance is an important indicator of managerial efficiency. Therefore, the study on Business Performance analysis of the Campco chocolate factory was taken up to provide insight into the strengths and weakness of the factory. The analysis of Campco chocolate factory, Puttur, in Karnataka state was done by computing relevant business performance indicators. The specific objectives of the study are:

1. To document establishment and growth of Campco chocolate factory
2. To analyze the financial performance of Campco chocolate factory
3. To study the marketing strategies of CAMPCO for chocolates and cocoa based products
4. To analyze the economics of cocoa bean production.

The data relating to financial statements were obtained from the audit reports maintained by Campco chocolate factory for the period 1999-2000 to 2008-2009. The views of marketing department at the Head Office Manglore were also obtained.

All the relevant financial ratios were computed to study the business performance of Campco chocolate factory. Campco chocolate factory is a subsidiary of the CAMPCO Ltd. which was established in

the year 1986 with an initial outlay of Rs. 1167 lakhs. Campco chocolate factory is located at Kemminje village in Puttur Taluk in Dakshina Kannada District, 52 km away from the coastal city Mangalore. The factory is well equipped with modern plant and machineries manufactured by 5 major companies of Italy, Denmark, Germany, Switzerland and Holland. CAMPCO is in the business of cocoa processing and chocolate manufacturing with an installed capacity of around 13000 MT with a cocoa beans crushing capacity to the tune of 9000 MT.

In the study area of Dakshina Kannada and Shimoga Districts, cocoa has been grown as an inter-crop. The important cocoa varieties grown were criollo and forestiro.

The economics of cocoa production is indispensable since there is no proper farm business data on its cost of production. The accurate figures on establishment cost, operating cost and input requirements of cocoa plantation would be greatly helpful to the cocoa producers in general. This information will be of immense use to farm financing institutions.

Financial ratio analysis, growth rates and percentages are computed for meaningful interpretation of data.

Major findings

1. Despite the variations in production, quantity sold on own and sales value of campco products over the years, it can be inferred that the Campco chocolate factory processing unit as a whole experienced significant growth rates of 10.36, 16.12 and 16.14 per cent for production, quantity sold on own and sales value of Campco products, respectively for the period of 1999-2000 to 2008-09.

2. The results of leverage ratios (average interest coverage ratio of 0.91) indicate that the Campco chocolate factory can meet its interest burden and it is in a comfortable position to meet its long-term financial obligations.
3. The results of activity ratios (Inventory turnover (4.94), Days of inventory holding (73.46), indicates that the Campco chocolate factory has scope to increase the inventory turnover which in turn helps to reduce the days of inventory holding. Further, the results of net assets turnover (2.48) and total assets turnover (2.16) indicate that firm has to emphasize on larger amount of sales and good efficiency to manage and utilize its assets. A proper balance between sales and assets is necessary to manage the assets efficiently by adopting competitive strategies.
4. The gross profit margin (0.17) declined from the year 1999-2000 to 2004-2005 but from 2005-2006 it has increased and net profit margin also declined for the year 1999-2000 and 2001-2002 and from 2002-2003 to 2005-2006 it was negative. However, from 2006-2007 it had increased at a lower pace compared to gross profit margin implying that the operating expenses relative to sales have been increasing over the years. Average return on total assets for the period of seven yeas study was negative. The earning power, a measure of operating profitability had increased over the years from 2003-2009 which implies that the Campco chocolate factory has scope for further improvement in its profit margins and rate of return on investment. Increasing expenses should be identified and controlled.
5. Standard specifications were strictly followed by Campco Chocolate Factory while producing chocolates and cocoa based products, its popular brand image, ISO 22000, HACCP certifications and the standardization followed for the end product are its biggest strengths.

6. CAMPCO is marketing its branded chocolate products through various agencies like wholesalers, retailers. It is also exporting to countries like USA, Nepal and African countries directly. The exports are advantageous for the firm for expanding market.
7. The cocoa division of Campco collects produce from member farmers at Rs. 58 per kg and payment is made immediately after delivery of cocoa.
8. The total establishment cost of cocoa plantation in the case of Shimoga was Rs. 130735 per hectare, which was comparatively lower than Dakshina Kannada which was Rs. 137877. The main reason behind this difference is on account of labour wage differentials in the selected districts.
9. The yield in Dakshina Kannada is significantly higher than Shimoga because of better cultivation practices and suitable agro climatic conditions prevailing there.
10. The net return over total cost was higher in Dakshina Kannada (Rs. 161652) than Shimoga farms (Rs. 131587) owing to the yield differences in these regions.

Conclusion:

Thus, the business performance analysis of Campco chocolate factory reveals that the success and profitability of such a venture hinges from the choice of right business model. The forward and backward linkages are well established and the firm has pepped up the quality of chocolates and cocoa based products that buyers have stated preference.

Similarly cocoa growers have favorable opinion about cocoa farming. Good returns in the past few years from cocoa farming have

helped in reviving cultivation of this lucrative cash crop in south India. The commodity is in short supply and demand is consistently increasing. Procurement prices of cocoa are already high in India as buyers have stiff competition. During the study period wet beans were selling at Rs. 58 per kg. Good prices of cocoa have prompted farmers to look at cocoa optimistically.

Hence, it could be concluded that the growth performance of the Campco chocolate factory is satisfactory and financially moderate. Cocoa cultivation is also profitable across the districts of Shimoga and Dakshina Kannada.

CHAPTER VII

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