PROCUREMENT AND PROCESSING OF COCOA BY THE CENTRAL ARECANUT AND COCOA MARKETING AND PROCESSING COOPERATIVE LTD. (CAMPCO)

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UNIVERSITY OF AGRICULTURAL SCIENCES
GKVK, BENGALURU-65

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Project Report submitted to the

University of Agricultural Sciences, Bengaluru

in partial fulfillment of the requirements

for the award of the Degree of

MASTER OF BUSINESS ADMINISTRATION

(Agribusiness Management)

BENGALURU **SEPTEMBER, 2013**

Affectionately

Dedicated to

My beloved Parents

Sisters and

Guide

DEPARTMENT OF AGRICULTURAL MARKETING, CO-OPERATION AND BUSINESS MANAGEMENT
UNIVERSITY OF AGRICULTURAL SCIENCES
GKVK, BENGALURU-560 065

CERTIFICATE

This is to certify that the Project Report entitled, **"Procurement and processing of cocoa by The Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd"** *submitted by* ***Ms. Sumana, P. K., ID No. MBAL 1024*** *in partial fulfillment of the requirement for the degree of* ***MASTER OF BUSINESS ADMINISTRATION (Agribusiness Management)*** *to the University of Agricultural Sciences, Bengaluru, is a record of bonafide research work done by her during the period of her 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, associate ship, fellowship or other similar titles.*

Bengaluru
5th September, 2013

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Bengaluru

September, 2013 **(SUMANA, P. K.)**

PROCUREMENT AND PROCESSING OF COCOA BY THE CENTRAL ARECANUT AND COCOA MARKETING AND PROCESSING COOPERATIVE LTD

SUMANA, P. K.

ABSTRACT

The present study was taken up to analyze the procurement and processing of Cocoa by the Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd (CAMPCO). The main objective of the study is to analyze the pattern of procurement, the processing cost and returns and also to assess the problems in marketing of Cocoa products. The data was collected from CAMPCO, Mangalore and CAMPCO Chocolate Factory, Puttur. The CAMPCO procures Cocoa pod, cocoa wet bean and cocoa dry bean from farmers. The procurement of cocoa pod is more in the month of june (1.30MT at the value of Rs.0.23 lakhs), cocoa wet bean procurement is more in the month of may (716.60MT at the value of Rs.680.23 lakhs) and the procurement of cocoa dry bean is more in the month of march (124.74MT at the value of Rs. 385.55 lakhs). The total processing costs involved for converting cocoa bean into different finished products were Rs. 67,50,254 and the total profit is Rs. 33,042,741. The total processing costs involved for preparation of different semi-finished products such as cocoa powder, cocoa butter, cocoa mass, etc., were Rs. 7,22,247 and the total profit is Rs. 6,78,91,428. The major problems faced in marketing of cocoa products by CAMPCO were competition from well established MNC brands such as Cadbury, Nestle, etc., Therefore, it was suggested to promote the CAMPCO Chocolate brand through aggressive marketing, involving sales promos, advertisement, sponsoring, competitive price, etc.

Sumana, P.K.

Date: *Dr. P. K. Mandanna*

Place: *Major Advisor*

ಕೇಂದ್ರ ಅಡಿಕೆ ಮತ್ತು ಕೋಕೋ ಮಾರಾಟ ಮತ್ತು ಸಂಸ್ಕರಣಾ ಸಹಕಾರಿ ಸಂಘದಲ್ಲಿ ಕೋಕೋ ಖರೀದಿ ಮತ್ತು ಸಂಸ್ಕರಣೆಯ ಬಗ್ಗೆ ಅಧ್ಯಯನ

ಸುಮನ, ಪಿ.ಕೆ.

ಸಾರಾಂಶ

ಪ್ರಸ್ತುತ ಅಧ್ಯಯನ ಕೋಕೋ ಖರೀದಿ ಮತ್ತು ಸಂಸ್ಕರಣೆಯ ಬಗ್ಗೆ ಕೇಂದ್ರ ಅಡಿಕೆ ಮತ್ತು ಕೋಕೋ ಮಾರಾಟ ಮತ್ತು ಸಂಸ್ಕರಣಾ ಸಹಕಾರಿ ಸಂಘ (ಕ್ಯಾಂಪ್ಕೋ)ದಲ್ಲಿ ಮಾಡಲಾಯಿತು. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಕೋಕೋ ಖರೀದಿ ಪ್ರಕ್ರಿಯೆ, ಸಂಸ್ಕರಣಾ ವೆಚ್ಚ ಮತ್ತು ಅದಾಯ ಹಾಗೂ ಕೋಕೋ ಉತ್ಪನ್ನಗಳ ಮಾರಾಟದಲ್ಲಿ ಎದುರಿಸುತ್ತಿರುವ ಸಮಸ್ಯೆಗಳನ್ನು ವಿಶ್ಲೇಷಣೆ ಮಾಡಲಾಯಿತು. ಇದರ ಬಗ್ಗೆ ಮಾಹಿತಿಯನ್ನು ಕ್ಯಾಂಪ್ಕೋ, ಮಂಗಳೂರು ಮತ್ತು ಕ್ಯಾಂಪ್ಕೋ ಚಾಕೋಲೇಟ್ ಫ್ಯಾಕ್ಟರಿ, ಪುತ್ತೂರು ಅಲ್ಲಿ ಸಂಗ್ರಹಿಸಲಾಯಿತು. ಕ್ಯಾಂಪ್ಕೋವು ರೈತರಿಂದ ಮೂರು ರೀತಿಯಲ್ಲಿ ಕೋಕೋ ಖರೀದಿಸುತ್ತದೆ. ಅವೆಂದರೆ ಕೋಕೋ ಕಾಯಿ, ಕೋಕೋ ಆರ್ದ್ರ ಬೀಜ ಮತ್ತು ಕೋಕೋ ಒಣ ಬೀಜ. ತಿಂಗಳವಾರು ಅನ್ವಯ, ಕ್ಯಾಂಪ್ಕೋವು ಕೋಕೋ ಕಾಯಿಯನ್ನು ಜೂನ್ ತಿಂಗಳಿನಲ್ಲಿ(ರೂ. ೦.೨೩ ಲಕ್ಷ, ೧.೩೦ ಮೆಟ್ರಿಕ್ ಟನ್) ಹೆಚ್ಚು ಖರೀದಿ ಮಾಡಿದೆ. ಕೋಕೋ ಆರ್ದ್ರ ಬೀಜವನ್ನು ಮೇ ತಿಂಗಳಿನಲ್ಲಿ (ರೂ. ೬೮೦.೨೩ ಲಕ್ಷ, ೭೧೬.೬೦ ಮೆಟ್ರಿಕ್ ಟನ್) ಹೆಚ್ಚು ಖರೀದಿ ಮಾಡಿದೆ. ಕೋಕೋ ಒಣ ಬೀಜವನ್ನು ಮಾರ್ಚ್ ತಿಂಗಳಿನಲ್ಲಿ (ರೂ.೩೮೫.೫೫ ಲಕ್ಷ, ೧೨೪.೭೪ ಮೆಟ್ರಿಕ್ ಟನ್) ಹೆಚ್ಚು ಖರೀದಿ ಮಾಡಿದೆ. ಕ್ಯಾಂಪ್ಕೋದಲ್ಲಿ ಕೋಕೋ ಬೀಜವನ್ನು ವಿವಿಧ ಕೋಕೋ ಉತ್ಪನ್ನಗಳಾಗಿ ಪರಿವರ್ತಿಸಲು ಒಳಗೊಂಡಿರುವ ಒಟ್ಟು ವೆಚ್ಚ ರೂ.೬೭,೫೦.೨೫ಳ ಮತ್ತು ಒಟ್ಟು ಲಾಭ ರೂ. ೩೩,೦೪೨ ಮತ್ತು ವಿವಿಧ ಕೋಕೋ ಅರೆ ಉತ್ಪನ್ನಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಒಳಗೊಂಡಿರುವ ಒಟ್ಟು ವೆಚ್ಚ ರೂ. ೭,೨೨,೨೪೭ ಮತ್ತು ಒಟ್ಟು ಲಾಭ ರೂ. ೬,೭೪,೯೧,೪೨೪. ಕ್ಯಾಂಪ್ಕೊವು, ತನ್ನ ಕೋಕೋ ಉತ್ಪನ್ನಗಳ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಕ್ಯಾಡ್‌ಬರಿ, ನೆಸ್ಲೆ, ಮುಂತಾದ ಬಹುರಾಷ್ಟ್ರೀಯ ಕಂಪನಿಗಳ ಬ್ರಾ್ಯಂಡ್‌ಗಳಿಂದ ಪೈಪೋಟಿಯನ್ನು ಎದುರಿಸುತ್ತಿರುವುದು ಬಹುದೊಡ್ಡ ಸಮಸ್ಯೆಯಾಗಿದೆ. ಆದುದರಿಂದ, ಕ್ಯಾಂಪ್ಕೋವು ತನ್ನ ಚಾಕೋಲೇಟ್ ಬ್ರಾ್ಯಂಡ್‌ಗಳನ್ನು ಉತ್ತೇಜಿಸಲು ಆಕ್ರಮಣಕಾರಿ ಮಾರುಕಟ್ಟೆ, ಮಾರಾಟ ಪ್ರಚಾರ, ಜಾಹೀರಾತು, ಪ್ರಾಯೋಜಕತ್ವ, ಸ್ಪರ್ಧಾತ್ಮಕ ಬೆಲೆ ಮುಂತಾದವುಗಳನ್ನು ಬಳಸಬಹುದಾಗಿದೆ.

ಸುಮನ, ಪಿ.ಕೆ.

ದಿನಾಂಕ:

ಸ್ಥಳ: ಬೆಂಗಳೂರು

ಡಾ|| ಪಿ. ಕೆ. ಮಂದಣ್ಣ

(ಪ್ರಧಾನ ಸಲಹೆಗಾರರು)

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INTRODUCTION

CHAPTER I
INTRODUCTION

Cocoa is originated from Amazon region of South America. It is also produced in tropical areas of African continent in large. The cultivated species of cocoa tree is only *Theobroma* among all other species. All though it was a beverage crop prior to coffee and tea, it was not much populated because as it was new crop to India. Cocoa is cultivated as companion crop in coconut or and arecanut gardens all though it is having major importance in confectionary industries. It is a plantation crop but not purely cultivated in India, however its commercial cultivation is from 1980s only. Its products are consumable and confectionery in nature with palatableness. It is mainly consumed in developed countries as beverage, chocolates, pharmaceutical operations in addition cocoa shell is used for feed or as manure.

Most of the World's cocoa is grown in a narrow belt 10 degrees either side of the Equator because the trees grow well in humid tropical climates with regular rains and a short dry season. Even temperatures between 21 and 23 degrees centigrade, with a fairly constant rainfall of 1,000 to 2,500 mm per year, are needed without hot dry winds and drought.

Forty five countries produce cocoa and eight countries represent 90% of world supply viz., Cote d'Ivoire or Ivory Coast (38%), Ghana (21%), Indonesia (13%), Nigeria (5%), Cameroon (5%), Brazil(4%), Ecuador (3%) and Malaysia(1%). The remaining 37 cocoa-producing countries represent only 10% of the world's production. And the largest Importer of cocoa beans are Netherlands (20.6%), The United States of America (18.5%), Malaysia (10.8%), Germany (8.3%), Belgium (6.0%), France (4.7%), The United Kingdom (4.2%) and Spain (2.4%).

As per the National Horticultural Board, the area under cocoa in India is around 56 thousand hectares with a production of around 14 thousand metric tonnes in 2011-12. In India, it is cultivated in Kerala, Karnataka and Tamil Nadu. The current area under cocoa, however, is very small. There is a lot of potential for area expansion as a mixed crop. Kerala accounts for about 76 percent of the area and 78 percent of the total production in the country sum times the remaining percent area and production is contributed by Karnataka. It is being grown in some pockets in Tamil Nadu and Andhra Pradesh also.

History of cocoa

Millions of years ago the genus *Theobroma* originated from South America to the east of the Andes. *Theobroma cacao* is the most widely known one among all 22 species. Maya provided tangible evidence of cocoa as a domesticated crop. It was drunk by Maya traders in as early as 400 B.C. as per one archaeological survey. The Aztec culture dominant in Mesoamerica from the fourteenth century to the conquest, placed much emphasis on the Sanctity of cacao. The first outsider to drink chocolate was Christopher Columbus, who reached Nicaragua in 1502 searching for a sea route to the spices of the East. But Hernan Cort, leader of an expedition in 1519 to the Aztec empire, who returned to Spain in 1528 bearing the Aztec recipe for xocoatl (chocolate drink) with him. It was received unenthusiastically at initial and it was not until sugar was added that it became a popular drink in the Spanish courts.

Varieties of Cocoa

1) Criollo Variety: Pods become yellow or red when ripen. Pod walls are thick. Seeds are large, plumpy and almost round in section. Cotyledons are white or pale in colour. It produces the highest quality of all cocoas. Only small quantities are now available in the world market.

2) Forastero Variety: Unripe pod whitish or greenish in colour, after ripening it becomes yellow, usually inconspicuously ridged and furrowed. Surface often smooth, end rounded or very bluntly pointed. Pod walls relatively thick and often with, a woody layer difficult to cut seed flattened. Fresh cotyledons are deeply pigmented and dark violet in cross section, usually giving an astringent product. It gives higher yield than Criollo type.

3) Trinitario Variety: These varieties are hybrid between Criollo and Forastero. Very heterogeneous and exhibiting a wide range of morphological and physiological characters. Colour of unripe pod may be green, red or purple. Colour of riped pod is yellow, orange or red. Pods are variable in shape and arid wall thickness. Surface ranging from complete smoothness to heavy, sculpturing. Beans range from plump to flat Cotyledon pigments white to nearly black. It is more productive than Criollo.

Climatic conditions of cocoa

Cocoa is grown in average rainfall of 1250-2000mm per annum, preferably between 1500-2000mm but quantity is less important than distribution. It requires minimum temperature of 18-21^{o}C to maximum temperature of 30-32^{o}C varying. 25^{o}C is favorable. It cannot grow where the temperature falls below 10^{o}C and annual average temperature is less than 21^{o}C. And the humidity should be 100 percent during night and 70-80 percent in day. Plants growing in low humidity (50-60 percent) having larger leaves, greater at medium (70-80 percent), at high (90-95 percent) leaves are small and tend to be curled and withered at the tip.

Cocoa is suitable to all kinds of soils. Compared to other tropical trees these are more sensitive to moisture, stress and in addition to water logging, cannot tolerate stagnant, water logged conditions but

withstand flooding. 1.5m depth should be maintained. Forest soils rich in humus are best suited for cocoa crop. During summer soil should be capable of retaining moisture for easy penetration of roots and circulation of air and moisture. Clay loams and sandy loams are suitable. Shallow soils should be avoided. 3.5 percent organic matter, 2 percent carbon in the top 1.5 cm soil depth is minimum required for ideal cocoa plantation. PH ranges from 6 to 7.5 and coastal sandy soils are not suitable.

Harvesting

The development of the pod takes 5-6 months from fertilizing the flower to full ripening. Harvesting involves removing the ripe pods from the trees and opening them to extract the wet beans. As they ripen, the pods change colours, green pods becoming orange, yellow and red pods turning orange. Each pod will have 25-45 beans embedded in white pulp (mucilage). Generally cocoa gives two main crops in a year during September – January and April-June, though off-season crops may be seen almost all through the year especially under irrigated condition.

The pods are harvested manually by making a clean cut through the stalk with a well sharpened blade. The pods are opened to remove the beans within a week to 10 days after harvesting. In general the harvested pods are grouped together and split either in or at the edge of the plantation. Sometimes the pods are transported to a fermentary before splitting. After extraction from the pod the beans undergo fermentation and drying process before bagged for delivery.

Processing of Cocoa Beans

Fermentation

Fermentation can be carried out in a variety of ways, but all methods depend on removing the beans from the pods and piling them

together or in a box to allow micro-organisms to develop and initiate the fermentation of the pulp surrounding the beans. The piles are covered by banana leaves. The fermentation process decides the quality of raw cocoa. The fermentation process begins with the growth of micro-organisms. The chemical reactions that take place during fermentation cause the chocolate flavour and colour to develop. The length of fermentation varies depending on the bean type and origin. Forastero beans require about 5 days and Criollo beans 2-3 days for fermentation.

Drying

Cocoa beans are dried after fermentation in order to reduce the moisture content from about 60 percent to about 7.5 percent. Drying must be carried out carefully to ensure that off-flavors are not developed. Drying should take place slowly. If the beans are dried too quickly some of the chemical reactions started in the fermentation process are not allowed to complete their work and the beans are acidic with a bitter flavour. However, if the drying is too slow moulds and off flavors can develop. Various research studies indicate that bean temperatures during drying should not exceed 65^0C. There are two methods for drying beans - sun drying and artificial drying. After drying it is ready for further processing.

Transforming Cocoa Beans into Chocolate

Firstly, the cocoa beans are cleaned to remove all extraneous material. To bring out the chocolate flavour and colour the beans are roasted. The temperature, time and degree of moisture involved in roasting depend on the type of beans used and the sort of chocolate or product required from the process. And then it is moved to winnowing machine, which is used to remove the shells from the beans to leave just the cocoa nibs. The cocoa nibs undergo alkalization, usually with potassium carbonate, to develop the flavor and colour. The nibs are then

milled to create cocoa liquor (cocoa particles suspended in cocoa butter). The temperature and degree of milling varies according to the type of nib used and the product required.

Manufacturers generally use more than one type of bean in their products and therefore different beans have to be blended together to the required formula. The cocoa liquor is pressed to extract the cocoa butter leaving a solid mass called cocoa press cake. The amount of butter extracted from the liquor is controlled by the manufacturer to produce press cake with different proportions of fat. The processing now takes two different directions. The cocoa butter is used in the manufacture of chocolate. The cocoa press cake is broken into small pieces to form kibbled press cake which is then pulverized to form cocoa powder. Cocoa liquor is used to produce chocolate through the addition of cocoa butter. Other ingredients such as sugar, milk, emulsifying agents and cocoa butter equivalents are also added and mixed. The proportions of the different ingredients depend on the type of chocolate being made.

The mixture then undergoes a refining process by traveling through a series of rollers until a smooth paste is formed. Refining improves the texture of the chocolate and reduces the particle size of sugar and cocoa to around 30 microns. The next process, conching, further develops flavour and texture. Conching is a kneading or smoothing process. The speed, duration and temperature of the kneading affect the flavour. The mixture is then tempered or passed through a heating, cooling and reheating. The mixture is then put into moulds or used for enrobing fillings and cooled in a cooling chamber. The chocolate is then packaged for distribution to retail outlets.

The Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd. (CAMPCO)

The CAMPCO was registered in 1973 under the K.C.S. Act, with the objective of arranging procurement, processing and conducting sale of Cocoa, Areca nut and Rubber. This institution was registered again in 1988 under the Multi-state Cooperative Act, which extends its jurisdiction to Karnataka and Kerala State. However, for the purpose of purchase, processing and the sale of Arecanut and Cocoa and establishment of allied industries and Marketing of their products there are no restrictions of area of jurisdiction.

The CAMPCO has been functioning effectively with the following objectives

1. Procurement of Areca nut and Cocoa grown by member cultivators and if necessary, from other growers on an agency basis or on outright purchase basis.

2. Sale of Areca nut and Cocoa and their products to the best advantage of members and also to advance loans to members on the pledge of goods and to do all other things necessary to carry out the objective.

3. To promote and develop Areca and Cocoa cultivation, marketing and processing.

Campco has chocolate manufacturing factory at Puttur. It processes cocoa and manufactures large quantity of semi-finished and finished products with a capacity of 18,000 tonnes per annum. It also manufactures chocolates for Nestle, Perfetti, ITC, Lotte and Britannia apart from selling its own chocolates. There is significant increase in terms of procurement and processing of cocoa in CAMPCO. Therefore,

this project work was carried out to analyze the procurement and processing of cocoa by CAMPCO.

Table 1.1: Business Transaction of CAMPCO as on 2013

Sl. No.	Details	Rs. in Lakhs
1.	Paid up share Capital	2946.50
2.	Number of Branches	87
3.	Number of Individual Members	123152
4.	Number of Member Co-operatives	556
5.	Deposit	7441.55
6.	Working Capital	20206.67
7.	Trade Profit	8000.00
8.	Profit (Tentative upto)	2024.00
9.	Annual Turnover	96000.00

Source: Published report of CAMPCO, 2013

Specific Objectives of the Study

Keeping all the above said points in view, the present study was carried out with an overall objective of evaluating the procurement and processing of cocoa by CAMPCO. The following were the specific objectives.

1. To analyze the pattern of procurement of cocoa by CAMPCO,
2. To analyze the processing cost and returns of CAMPCO Ltd and
3. To assess the problems in marketing of cocoa products.

Hypotheses of the Study

Based on the above objectives, the following hypotheses were formulated.

1. Procurement pattern of CAMPCO is not uniform,
2. There is significant increase in profits over the years,

Presentation of the Study

The whole study has been presented in six chapters.

- The first chapter deals with the introduction and specific 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 of 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
- Seventh chapter lists references relating to the present study.

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

In this chapter, an attempt has been made to critically review the literature of the past research work in relevance to the present study. The available literature on the subject has been reviewed and presented under the following sections.

2.1 The pattern of procurement

2.2 The cost and returns of processing

2.3 The problems in marketing

2.1 The Pattern of Procurement

Jagadish Alse (1998) studied the pattern, procedure and cost involved in purchase of arecanut by CAMPCO. He found that arecanut is procured through different channels, Growers---CAMPCO (Channel I), Growers---Grower's society---CAMPCO (Channel II) and Growers---Comission agent---CAMPCO (Channel III). And the cost of procurement was maximum in Channel-III. The CAMPCO following grading method to fix the price and superior quality of arecanut is get high price. He also assess annual growth rate for cocoa procurement and he concluded that, procurement of cocoa pod had negative growth (-47.2%) and cocoa wet bean (8.6%) and dry bean (4.9%) had positive growth.

Laurence (2000) studied the food procurement pattern in a Malian village in West Africa. He investigates food procurement patterns that combine subsistence grain production with a variety of income generating activities. It finds dependence on food purchases wide spread and revenue from the own-account activities of non household heads essential to food security. Gender and the wealth of households are found to influence some, but not all, income generating activities and

expenditures. He identified three household food procurement profiles i.e., investment in cattle, market gardens and bush extraction, and remittances.

Mane (2000) evaluated the procurement management of raw material in the starch industry in Belgaum district. He studied three patterns of procurement of maize. The maximum quantity of maize procured through channel II and channel III. These units procured maize more than their installed capacity and maintained raw material inventory, when the price was low. The procurement cost per tonne of maize was higher through channel III (commission agent) because of high commission charged, while low cost through channel I (farmer) because of absence of commission charges and transportation and handling charges.

Manjunatha (2000) in his study on procurement pattern of wheat of roller flour mills in Bijapur district at the period of 1999-2000. He identified two pattern of procurement of wheat. The quantity of wheat procured was maximum (68.28%) through pattern I(FCI) and minimum(31.71%) through pattern II(Trader). The roller flour mills procured maximum quantity of wheat through pattern I (FCI) compared to pattern II because the price of wheat in open market was higher than FCI wheat prices and also the FCI is assured source of supply. The procurement cost per quintal of wheat procured was higher through pattern I (Rs.23.43) because of higher transportation cost incurred, but it was lower through pattern II (Rs. 10.48) as it involved less transportation cost. Hence the pattern II was found to be efficient pattern of procurement for the roller flour mills if we consider cost of procurement but price of wheat was high in this pattern.

Raju (2000) analyses the management aspects of procuring fruits and vegetables in KHOPCOMS. He observed that the area of operation of

society in the procurement place Hubli with 0-5 kilometers radius having 5 procurement centers and 162 farmer members covered. In Dharwad procurement place with 15-20 kms radius from main society having 3 procurement centers and 81 farmer members covered. In Bangalore procurement place with 350-400 kilometer radius having 5 procurement centers and 38 farmer members covered. In Bijapur procurement place with 210-280 kilometer radius having 2 procurement centers and 5 farmer members covered. In Sirsi procurement place with 80-100 kilometers radius having 1 procurement centre and 5 farmer members covered.

Sunil Kumar *et al.* (2002) studied the sale pattern of groundnut in Guntur district in Andhra Pradesh. They concluded that small farmers sold maximum of their produce in the local market i.e., weekly market/fairs and to village venders and received less price as compared to wholesale market and as against other size groups. Reverse results were found in the case of large size group i.e., they sold maximum of their produce of selectedfarm products in wholesale market i.e., to wholesaler, commission agent at district market committees and gained higher price than other groups.

Krishnegowda (2003) studied the procurement pattern of silk processing units in Doddaballapur and Ramanagar district. The study revealed that in the case of reeling units the channels of procurement patterns are channel-I, that is farmers- government cocoon market-reelers. In the weaving units, he confirms govt silk exchange-weavers are the channel –I and channel-II is the registered dealers-weaver.

Deepa (2005) analysed the procurement centres in different districts under MIS since inception of the scheme in Karnataka. She found that the number of the procurement centers distributed in different districts have been increased over years in almost all the years

in maize and ragi, due to increase in the area and production under these crop. However, during 2001-02 and 2003-04 number of centres for maize may be decreased because slightly higher prices ruled in the market during 2003-04 and non planned opening up of the centers during 2001-02. Further she revealed that, the number of procurement centres remained same in all the years for Bengal gram crop as they are opened only in one district in the state and was able to cover all the major growing areas in the state. The quantity and value of the commodities procured have been increased over years but it was decreased only in three years that is in 1999-2000, 2002-03 and 2003-04, because the number of commodities considered for procurement was decreased and their quantity procured was also decreased in these years because of the market prices ruled higher than procurement price. However, in case of pulses, i.e., procurement of bengalgram increased in all the year. Whereas in oilseed group the quantity procured and the value of commodities procured have been decreased over years because the prices prevailing in the open market was higher than that of the support price announced by the government, immediately after the intervention in the market.

Siddaram *et al.* (2007) revealed the procurement management of milk in Dharwad and Belgaum districts and data were collected mainly from processing units during 2002 03. The procurement pattern of raw milk by the private sector unit involves many intermediaries like contractors, sub-contractors and there is lack of producer's involvement due to absence of village level producer's societies. So, the private sector unit should evolve a system by avoiding intermediaries by fonning milk producer's associations/groups at village level for procuring raw milk directly from the producers.

Naresh Babu (2009) studied the pattern of milk consumption by different user categories at Bangalore city. The general characteristics of the120 households revealed that 35.83 per cent of households belonged to income groups IG3, while IG2 comprised of 35 per cent households and followed by IG1 29.17 per cent. In about 51.67 percent of the households, housewives made the buying decision of milk. In about 25.83 per cent of households, husband makes the buying decision of milk. Joint decisions by both husband and wife were made in about 10.83 per cent of households and only about 7.5 per cent and 4.17 per cent the decision was made by mother-in-law and others. The average age of the decision maker varied from 35 years to 58 years and the average family size from 2 to 5 members per family across the income groups. A majority of the households were nuclear families.

Suprabha (2009) revealed the raw material procurement strategy of Karnataka oilseed growers' federation ltd that procurement operations of KOF are diversified. KOF is procuring oilseeds through its own Oilseed Growers' Co-operative Societies (OGCS) and through regulated markets. Further KOF is also importing oil through State Trading Corporation LTD. The study also revealed that demand for branded oil from the end consumers resulted in the increasing raw material procured over the years.

2.2. The Cost and Returns of Processing

Ashraf (2000) studied the costs of processing of oilseeds in oil mills at co-operative sector in Gadag district of Karnataka. The total processing cost/tone (fixed cost as well as variable costs) comparatively higher in the large scale unit (Rs. 1376.91 and Rs. 16219.99 respectively) over those in case of the medium scale unit (Rs. 545.40 and Rs. 15,370.10 respectively). Not only the variable cost ,the cost of raw material is also identified as the major cost in processing .

Madana Mohana Reddy (2000) studied the cost and return structure in seed processing units in Haveri district. As private sector units largely engaged in processing of high value crops like hybrids vegetables and commercial crops the overall average cost of carrying inventory was very high (Rs.1348.59 per quintal) as compared to public sector units (Rs.389.99 per quintal). The total average per quintal processing cost was high (Rs.1309.64) in private sector as compared to public sector (Rs. 344.02). The total average cost of producing processed seed per quintal was more in private sector processing units (Rs.1,04,838.28) as compared to public sector units (Rs.7068.90) and the average net returns per quintal of processed seed produced and marketed was high (Rs.31,717.44) in private sector as compared to public sector units (Rs.4274.25) due to dealing in diversified seed portfolios with relatively high margins obtained by the private sector units.

Legesse (2000) studied the wheat production and marketing in Northern Karnataka observed that the major item of cost incurred by all categories of the farmers was the expenditure made on human labour (14.329%), followed by bullock labour (13.44%) and seeds (7.18%). From this analysis he states that gross and net returns per hector from wheat increased with an increase in farm size. The net return obtained by large producers was higher (Rs.1989/ha) than that realized by small producers (Rs.1561/ha).

Savitha (2000) analysed the cost and return structure in the spinning mills in Gadag District. During the study it is observed that the cost of processing of cotton differs from cooperative sector to private sector. At the overall level the cost processing per quintal of cotton worked out to Rs. 661.60. The total cost of processing was more in the cooperative sector unit (Rs. 819.67 per quintal) while it was less in the

private sector unit (Rs. 503.52 per quintal). The major cost in processing the cotton includes power and fuel.

Veeresh (2004) estimated the costs and returns from the cultivation of cotton in Dharwad and Haveri district. In his study of the different costs incurred by the DCH-32 cotton growers in Dharwad district indicated that the average per quintal was Rs. 897.12 and marketing cost was Rs. 166.40. The net returns realized were Rs.1727.26 per quintal. In case of Jayadhar cotton these worked out to Rs. 977.14, Rs. 159.58 and Rs.960.28 respectively. While in Haveri district, the per quintal cost of cultivation, cost of marketing and net returns were found to be Rs. 890.66, Rs.224.67 and Rs. 1571.67 respectively for DCH-32 cotton and Rs. 982.47, Rs.166.00 and Rs.772.53 respectively for Jayadhar cotton.

Santhosh (2008) evaluated the costs and returns of redgram cultivation in Gulbarga District. In cultivation of redgram as a sole crop (CS-I), large farmers were found to incur higher total variable cost than small and medium farmers. The cultivation of redgram as a sole crop showed that per hectare net returns were higher for small farmers (Rs.7357) than medium (Rs.6891) and large farmers (Rs.5171) and it is also observed that large farmers (Rs.17634) could realize higher net returns than medium (Rs.16333) and small farmers (Rs.16,049) under intercropping. The per hectare net return realized under intercropping was higher (Rs.17,022) compared to sole crop (Rs.5670).

Vasudeva (2009) observed to estimate the cost and returns of processing of paddy into rice across the different sizes of mills at Siruguppa thaluk of Bellary District. The cost per quintal of paddy processed(including cost of raw material) was higher (Rs.1266.76) in large size rice mills as compared to medium (Rs.1247.96) and small(Rs.1233.10) size rice mills. He observed the variable costs (97.05

per cent) constituted major share of the total processing cost followed by fixed cost (2.95 per cent). The total returns per quintal of output produced was Rs.2096.46 in large size rice mills as against Rs.2012.48 in medium and Rs.1935.36 in small size rice mills. The net returns per quintal of paddy processed was found to be higher in large size(Rs. 829.70) rice mills as compared to medium (Rs. 764.52) and small(Rs. 702.26) size rice mills.

Guledgudda (2010) while studying the annualized establishment cost and cost of cultivation of cashewnut during 2004-05 in Belgaum and Dakshina Kannada districts of Karnataka State. The establishment cost of cashew orchard (up to four years) were worked out to be Rs.41,999, and Rs.43,330 in case of small and large farms, respectively in Dakshina Kannada District and In Belgaum district, Rs.38,288 and Rs.39,311in case of small and large farms, respectively. The cost of production and net income were estimated to be high in Dakshina Kannada district as compared to Belgaum district. Hence, investment in cashew plantations was found to be economically and financially sound in the state. Hence, the farmers are encouraged to take up the cultivation of this crop in large areas of wasteland/marginal land.

Kumar *et al*. (2010) investigated the processing aspects of cashew nut in Karnataka. The study revealed that the total cost of processing of cashew nuts inclusive of variable cost, marketing cost and fixed cost came to Rs. 54433/tone. From the study it was observed that processing unit realized net returns of Rs.3880, Rs.3537 and Rs.3009/tone in large, medium and small size units respectively. The study further states that Investment on cashew processing was economically viable as indicated by results of net present value, B.C. ratio and Internal rate of return. Further scope for increasing the efficiency and reducing the cost of small processing units was observed from this study.

Sathish (2010) studied the economics of groundnut processing in Chitradurga District. He found that total cost of groundnut oil processing was Rs. 2323.79 per quintal, Rs. 2320.79 per quintal, Rs. 2133.56 per quintal in small, large and ghanis respectively and processing cost in groundnut oil is 25.60 per cent in small, 25.11 per cent in large and 17.10 per cent in ghanis per quintal. Total cost of processing was Rs. 2265.03 per quintal of which processing costs accounted for Rs.415.03 (22.43%) in decorticating units.

2.3. The Problems in Marketing

Mahesh (2007) studied the problems faced by the cattle feed manufacturing units in Northern Karnataka. The study revealed that, moderate availability of labour, high cost of labour and technical person, and also difficult in maintenance of machinery are the major constraints in both co-operative and private sectors. He also ranks, production problem as II in cooperative sector and III in private sector. And the problem of finance is the third major problem in Co-operative sector unit, where as in case of private sector unit the same problem ranked II.

Ranghaswamy and Dhaka (2007) studied the constraints faced by co-operative and private dairy plants in Coimbatore district of Tamil Nadu. They found three varieties of constraints at three important value addition stages viz. milk procurement, processing and manufacturing, and distribution of dairy products. They selected the number of respondents based on probability proportion to sample size method. They identified some of the members of co-operative society selling the milk to private milk vendors and some of the collection centres collecting the inadequate quantity of milk were the very serious problems faced by Co-operative and Private dairy plants respectively. Under utilization of transport vehicles at milk transporters level, under capacity utilization of chilling centers and also under capacity utilization of plant at milk

processing and manufacturing level was the most serious constraints faced by both the plants. At distribution level, higher sales commission to commission agents, wholesalers and retailers, and highly competitive market environment was the most serious problems faced by both the plants.

Banumathy and Sitadevi (2008) study to identify the major problems that acted constraints for marketing of flowers at Chidambaram taluk of Cuddalore District. They revealed that, in the case of small farmers, lack of finance was the problem that was ranked I. Perishable nature of flower, price fluctuations, poor market information and forced sale were other important problems ranked second, third, fourth and fifth respectively. Medium farmers and large farmers ranked price fluctuation and perishable nature of flower as first and second respectively. Long distance to the primary market, lack of finance and poor market information were other important problems in medium farms. Mostly large farmers have their own vehicles for transporting their produce. Hence, they ranked lack of transport facilities as seventh. Large farmers can generate capital to meet out the operational cost since they have large marketable surplus and, therefore, they ranked lack of finance as tenth.

Prashant *et al*. (2008) studied the constraints faced by the milk producers and milk co-operative societies. The main problem related to low quantity of milk marketed by the producer members in the Co-operative area. Low price of the milk was the main problems followed by lack of cold storage, delay in payments, inadequate water for animal, lack of all weather roads, small quantity of marketable surplus, improper treatment of animals, lack of cross breed animal and uncertainty of electricity. Milk producer's co-operative societies also faced some

problems in the collection of milk are the lack of cold storage facilities followed by lack of all weather roads, private trading and local politics.

Keerthi (2008) identified the problems associated with production and marketing of pineapple in Shimoga district. He found that most of the farmers had the problem of non-availability of planting material in time, non-availability of fertilizer in time, non-availability of sufficient quantity of irrigation, non-availability of adequate hired labour, lack of technical knowhow, high cost of planting and heart rot disease of pineapple. And the problems in marketing of pineapple fruits were absence of regulated markets, lack of cold storage facilities, lack of grading facilities, fluctuation in market price, non-availability of market information, delay in payments and weighment problems.

Ashoka (2009) studied the production and marketing constraints of fruit processing at paiyur fruit products pvt. Ltd in Krishnagiri District of Tamil Nadu. In the study it is identified that power supply, non availability of quality /variety raw mangoes and high cost of packaging material are the main constraints faced in Mango processing unit.

Ruchira Shukla and Guptha (2010) studied the production and marketing constraints in Jaipur district of Rajasthan. The constraints faced in production and marketing of cabbage growers were found high cost of fertilizers, problems of pest, problems of disease, storage facilities, high cost of plant protection, fluctuation in the prices, exploitation by the middlemen and poor transportation facilities.

Prasanna (2010) suggested the marketing strategies of CAMPCO for chocolates and cocoa based products states that Chocolate factory is marketing its campco branded chocolates and cocoa based products through various channels to different customers like private companies wholesalers, retailers. Here to understand the marketing strategies of

campco, sales force distribution, and product range and distribution channels were assessed.

Shanmukhana Gowda (2010) evaluated the constraints faced by members of the Malnad Areca Marketing Co-operative Society Ltd., Shimoga district. It was observed that Cent percent of the members facing the problem of fluctuation of market prices. 55 members (91.66%) out of 60 faces the timely non availability of labour, 52 members (86.66%) faces the constraint of koleroga disease. And the remaining people 43 members (71.66%) feel that the credit given by the society was inadequate. And other constraints include high processing cost, high rate of interest on loan and transportation of their produce to the society.

Verma and Pramod (2010) identified the problems faced by the growers and manufacturers in Himachal Pradesh. He found that high labour charges, availabilityof labour and lack of knowledge about credit availability were the main constraints of tea growers. And distant marketing, non-remunerative prices, lack of promotional campaign, inadequate funds and high production costs were the problems for tea co-operatives. The study suggests that there is need to improve the productivity and manufacturing technology to enhance the economic status of the Himachal Tea Industry.

Kumar *et al.* (2011) studied the problems faced by the farmers in menthol mint cultivation in the Barabanki District of Uttar Pradesh. The major problems faced by the farmers are high input cost, erratic supply of electricity, lack of adequate information, infrastructural facilities, regulated markets and energy-efficient distillation units.

Malik and Saraf (2013) analyzed the constraints faced by guava processor in processing of guava in Allahabad district of Uttar Pradesh (U.P.) India. The processing of fresh guava was undertaken only by 10

units (processing firms) in the study area, so all the 10 units were evaluated for the present study. The processing units included cottage scale (03), small scale (05) and large scale (02). The study revealed that major problems faced by processors were non-availability of skilled labours, lack of capital, setting of guava products and degree of competition, etc.

METHODOLOGY

CHAPTER III

METHODOLOGY

This chapter deals with the description of the study area, the sampling technique adopted, the nature and sources of the data, the method of data collection and the various analytical tools and techniques used in analysing the data. These items are described under the following sub-heads:

3.1 Description of the study area

3.2 Description of selected CAMPCO Ltd.

3.3 Nature and source of data

3.4 Analytical techniques employed

3.1 Description of the Study Area and CAMPCO Ltd.

The overall objective of the study was to evaluate the procurement and processing of cocoa by CAMPCO Ltd.

3.1.1 Description of the Study Area

Dakshina Kannada is a coastal district in the state of Karnataka in India lies between the latitudes 12^{o} 27' and 13^{o} 58' South latitude and74^{o} 35' and 75^{o} 04' East longitude. The main crops of Dakshina Kannada district are paddy, pineapple and plantation crops like coconut, arecanut, blackpepper, rubber and cocoa.

Majority of Indian farmers cultivate cocoa as an intercrop in coconut and areca nut gardens. Production of cocoa would increase to 16,000 tonnes in 2011-12. It is also one of the supporter of Agro-based industry in India. Cocoa beans are the primary raw material for confectioneries, beverages, chocolates and other edible products. The commercial sector of cocoa in India hardly takes place in a major way in

the international export trade. Majority of the processed cocoa products are consumed within India. The tropical diversified congenial climate available in India provides immense scope for its cultivation.

Kerala was the leading State in promoting cocoa cultivation. Massive area coverage was possible through distribution of cocoa seedlings. Perhaps Cadbury India Ltd., was the only industrial unit during the period of massive expansion of area under cocoa. There was an attractive price for cocoa pods and beans prevalent till 1980's. This favourable situation, coupled with large scale distribution of planting materials could bring about an enviable area coverage recording 29,000 ha under cocoa by 1980-81.

Being a crop subjected to the monopolistic exploitation of the available industrial unit, however paved ways for fall in price in 1981-82 and 1982-83. Inadequate marketing network and the fall in price developed a sense of insecurity among the planting communities, which detrimentally affected its expansion besides attributing to a neglectful approach by the plantation community. The entry of CAMPCO towards the marketing scenario from 1990's, though created a favourable atmosphere, the services rendered towards procurement of cocoa was far below the requirement. As a result, expansion of cocoa came to a standstill in spite of favouring the growers with a better price.

From 1997-98 onwards the non-traditional tracts of Karnataka and other States like Andhra Pradesh and Tamil Nadu started developing cocoa. With the implementation of 8th Five Year Plan programmes, by distributing high yielding varieties in the form of clones and hybrid seedlings, the area and production of cocoa has increased.

3.1.2 Description of the CAMPCO Ltd.

A sudden marketing crisis in the year 1970-71, when prices registered a marked fall which caused considerable concern to the growers, was the genesis for the setting up of this Co-operative Venture (what popularly is called The CAMPCO). The CAMPCO was registered on 11th July 1973 under sec.7 of the Karnataka Co-operative Societies Act with the blessings and active support extended by the State Governments of Karnataka and Kerala, with sec.4(2)of the Multi State Co-operative Societies Act 1984.

The main objective of CAMPCO is procurement of arecanut and cocoa from member cultivator. The area of operation for procurement of cocoa and arecanut has been extended throughout the country. From 2010 onwards, it also procures rubber from farmers.

In 2011-12 the cooperative has purchased 47,195 MT of arecanut valued at Rs.66,243 lakhs and sold 53,873 MT valued at Rs.78,220 lakhs and the total production of CAMPCO chocolate factory has touched 14,757 tones and it has produced 7,697 MT in its own brand and sold chocolates worth Rs.16,265 lakhs including export of 697 MT valued at Rs.892 lakhs.

The quantity of cocoa wet bean procured is 3653MT valued at Rs.1573 lakhs and dry beans purchased is 1296MT valued at Rs. 2218 lakhs including direct purchase of 872MT of value Rs.1510 lakhs at CAMPCO Chocolate Factory and consumption at factory is 2145MT of dry beans.

The co-operative has purchased 581MT of rubber valued at Rs. 1177 lakhs and sold 647MT to the value Rs. 1332 lakhs in 2011-12.

3.1.3 Nature and Sources of Data

To elicit the information regarding the procurement, processing etc. were obtained from discussion held with the officials of CAMPCO and personal observation. The detailed information of cocoa were obtained using pre-tested schedule.The secondary data relating to processing cost and returns were obtained from the annual reports of the CAMPCO.

3.1.4 Analytical Techniques Employed

For achieving the objectives of the study various statistical tools and techniques were used. They are as follows:

i. Descriptive Statistics
ii. Compound Annual Growth Rate

i. Descriptive Statistics

The Descriptive Statistics was employed to analyse the data on quantity of cocoa procured, price and channels followed in procurement with the aid of averages and percentages to draw meaningful discussions.

ii. Compound Annual Growth Rate

In order to evaluate the growth in procurement, quantity and value of cocoa growth rate were computed for a period of 2002-03 to 2011-12. An exponential function of the following type was employed to estimate the growth rates.

$$Y = ab^t$$

Where,
Y = indicator/ variable
a = constant
b = Regression co-efficient (Rate of change in Y per unit of time)

= (I-r)/ 100

t = Years (time).

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

$$r = (b-1) 100$$

The compound growth rate of each variable indicates the rate of change in each year. The exponential function assumes constant growth rate, and it is obtained by deducting unity from the co-efficient 'b'.

3.1.5 Definitions of Terms and Concepts Used in Costs – Returns Analysis

i) **Cocoa Bean:** Cacao bean is the dried and fully fermented fatty bean of Theobroma Cacao, from which cocoa solids and cocoa butter are extracted.

ii) **Cocoa Pod:** It is a fruit of Cocoa tree, which is rough and leathery rind.

iii) **Cocoa Wet Bean:** It is sweet, white mucilaginous pulp in the cocoa pod.

iv) **Cocoa Dry Bean:** It is a product obtained by cocoa processing viz., cleaning, fermentation and drying.

v) **Processing cost:** This cost is computed as the summation of raw material cost, packing cost and manufacturing cost (fixed and variable cost).

vi) **Freight costs:** This is the cost incurred on hiring the transport facilities.

vii) **Profit or loss/ton:** It is calculated by subtracting price to super-stockiest to total cost.

viii) **Total Profit or loss/ton:** It is obtained by multiplication of Profit or loss/ton and quantity dispatched.

ix) **Job Work:** Processing or working upon of raw material or semi-finished goods supplied by other company to the CAMPCO chocolate company.

RESULTS

CHAPTER IV

RESULTS

The findings of the study are presented in this chapter under the following headings in consonance with the objectives of the study.

4.1 Pattern of Procurement of Cocoa by CAMPCO

4.2 The Processing Cost and Returns of CAMPCO

4.3 Problems in Marketing of Cocoa Products

4.1 Pattern of Procurement of Cocoa by CAMPCO

4.1.1 Forms of Cocoa Procurement

The CAMPCO procures three forms of cocoa from farmers and indicated as below.

i. Cocoa pod procurement: The sale of cocoa pod from growers or members of CAMPCO is in small quantity (Table 4.1) because the price of cocoa pod is less (Rs.8/kg during the study period). The farmers from Uttara Kannada sold cocoa pod to the CAMPCO.

ii. Wet bean procurement: The CAMPCO procures wet bean in large quantity from the growers or members of CAMPCO. The farmers harvest cocoa pod from tree and extract wet bean from them and sell it to CAMPCO. During study period, the rate of wet bean was Rs. 35-38/kg. After procurement, the CAMPCO process it in own branch or it dispatch to other branches for drying. The drying centre for cocoa is Dharapuram (Tamilnadu) and Biruru (Karnataka).

iii. Dry bean procurement: The CAMPCO procures dry bean from some region of Sullia, Putturu and Belthangadi. After that they transfer it into its chocolate factory for further processing. During study period, the rate of cocoa dry bean was 175/kg.

4.1.2 Channels of Procurement

The CAMPCO procures the cocoa through channels indicated below.

Channel I : Growers ⟶ CAMPCO

Channel II : Growers ⟶ Branch of CAMPCO ⟶ CAMPCO

Channel III : Growers ⟶ Co-operative Society ⟶ CAMPCO

In Channel–I, the growers directly bring the cocoa to the premises of CAMPCO, where it is received by the CAMPCO after price fixation. Here the CAMPCO did not play any role other than receipt of cocoa forms and also did not to incur any costs.

In Channel-II, the CAMPCO procures the produce from it's own branches which inturn collects the produce from growers.

In Channel-III, the CAMPCO procures the produce from Primary Agricultural Co-operative Society which inturn collects the produce from growers. Those co-operatives deliver the produce on receipt of labour, transport and vat charges from the CAMPCO. The procurement charges in Channel-II and Channel –III is Rs.144/kg which includes labour, transport and VAT charges.

The CAMPCO follows market rate method of pricing strategy for fixing rate of cocoa. The quality parameter used for procurement is based on colour and bean size of the cocoa.

4.1.3 Growth Rates in Quantity and Value of Procurement of Cocoa Pod, Cocoa Wet Bean and Cocoa Dry Bean

The compound growth rates of quantity and value for procurement of cocoa pod, wet bean and dry bean by CAMPCO were worked out in order to find out their annual growth from 2002-03 to 2011-12. It could be observed from Table 4.1 that the procurement of cocoa pod by CAMPCO had negative growth (-9.78%), procurement of wet bean had positive growth (2.90%) and procurement of dry bean also shown positive growth (74.94%).

4.1.4 Procurement of Cocoa Dry Bean from Private Party by The CAMPCO Chocolate Factory:

- St. George Industries, Perumbavour
- Heritage Cocoa traders, West Godavari, Andra Pradesh
- J.V.S. Trade Links, Kerala
- Kwality Cocoa Products, Kerala

Table 4.1: Details of Procurement of Cocoa Pod, Wet Bean and Dry Bean from 2002-03 to 2011-12

Forms of procurement	Cocoa pod		Wet bean		Dry bean	
Years	Quantity (MT)	Value (Rs. in lakhs)	Quantity (MT)	Value (Rs. in lakhs)	Quantity (MT)	Value (Rs in lakhs)
2002-03	6.00	0.20	5621.00	1391.90	128.00	85.66
2003-04	2.00	0.12	7677.00	1718.26	52.00	44.11
2004-05	4.50	0.22	5998.40	1347.77	67.60	54.20
2005-06	3.00	0.16	5322.00	1112.07	106.00	82.95
2006-07	1.60	0.08	4365.90	956.62	275.00	227.52
2007-08	1.20	0.06	2937.90	662.12	1569.00	1546.12
2008-09	3.00	0.16	5037.90	1337.02	888.90	914.57
2009-10	1.41	0.84	3706.20	1260.10	1021.00	1458.82
2010-11	1.13	0.006	4859.77	2209.98	1117.00	1958.24
2011-12	1.83	0.14	3653.22	1573.62	1296.77	2218.05
CAGR (%)	**-0.08**	**-9.78**	**-6.73**	**2.90**	**56.78**	**74.94**

Note: CAGR indicates Compound Annual Growth Rate

Table 4.2: Details of Procurement of Cocoa Pod for the Year 2012-13

Sl. No.	Month/Year	Cocoa pod	
		Quantity (MT)	**Value (Rs. in lakhs)**
1.	April 2012	0.07	0.013
2.	May 2012	0.04	0.078
3.	June 2012	1.30	0.231
4.	July 2012	0.61	0.109
5.	August 2012	0.14	0.025
6.	September 2012	0.09	0.016
7.	October 2012	0.06	0.012
8.	November 2012	0.04	0.007
9.	December 2012	0.22	0.039
10.	January 2013	0.02	0.002
11.	February 2013	0.03	0.003
12.	March 2013	0.06	0.012
Total		**2.68**	**0.547**

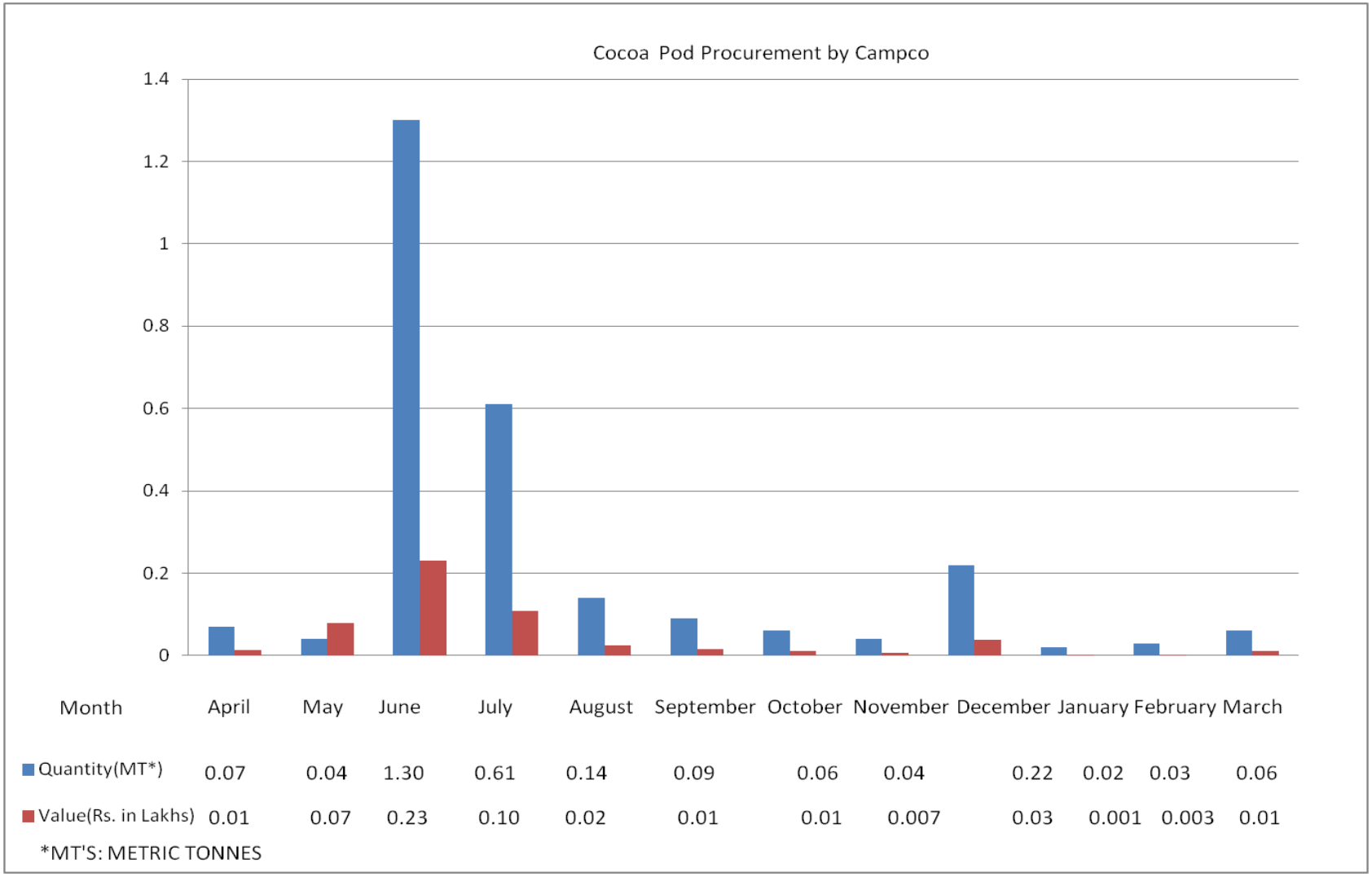
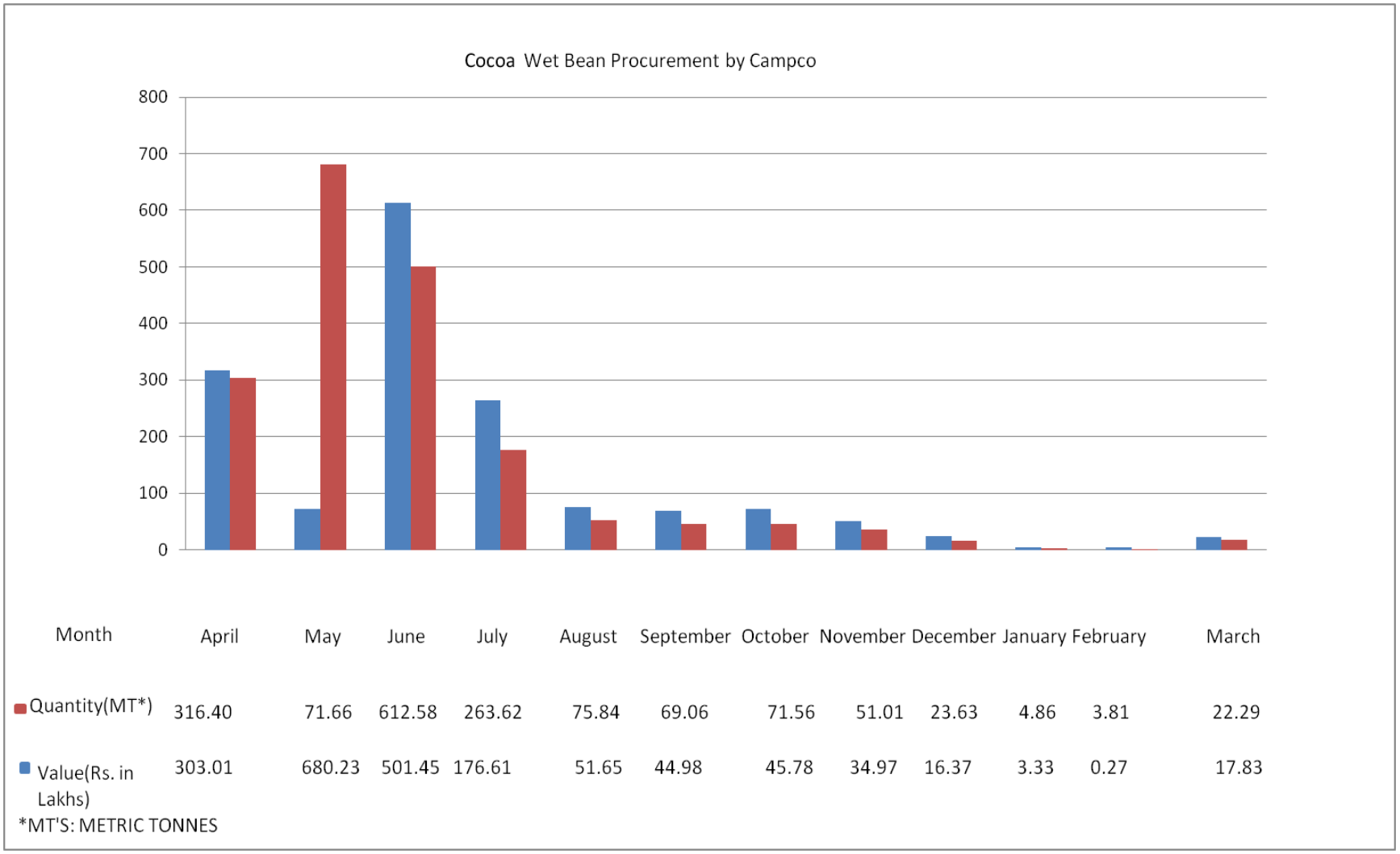


Fig. 4.1: Month-wise Procurement Performance of Cocoa Pod by CAMPCO for the year 2012-13

Table 4.3: Details of Procurement of Wet Bean for the Year 2012-13

Sl. No.	Month/Year	Wet bean	
		Quantity (MT)	Value (Rs. in lakhs)
1.	April 2012	316.40	303.01
2.	May 2012	716.60	680.23
3.	June 2012	612.58	501.45
4.	July 2012	263.62	176.61
5.	August 2012	75.84	51.65
6.	September 2012	69.06	44.98
7.	October 2012	71.56	45.78
8.	November 2012	51.01	34.97
9.	December 2012	23.63	16.37
10.	January 2013	4.86	3.33
11.	February 2013	3.81	0.27
12.	March 2013	22.29	17.83
Total		**1586.32**	**1876.54**



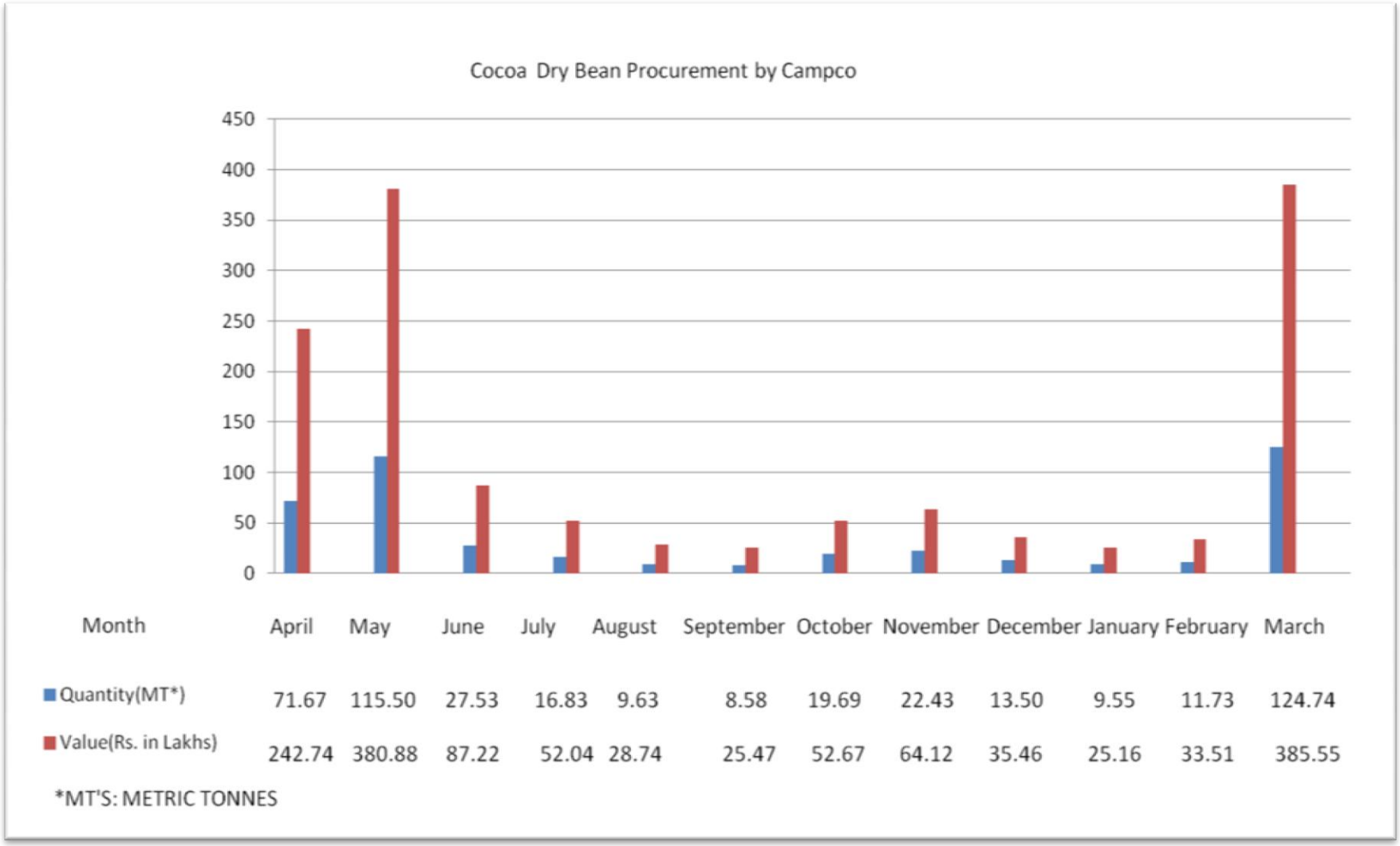
Month	April	May	June	July	August	September	October	November	December	January	February	March
Quantity(MT*)	316.40	71.66	612.58	263.62	75.84	69.06	71.56	51.01	23.63	4.86	3.81	22.29
Value(Rs. in Lakhs)	303.01	680.23	501.45	176.61	51.65	44.98	45.78	34.97	16.37	3.33	0.27	17.83

*MT'S: METRIC TONNES

Fig. 4.2: Month-wise Procurement Performance of Cocoa Wet Beans by CAMPCO for the year 2012-13

Table 4.4: Details of Procurement of Dry Bean for the Year 2012-13

Sl. No.	Month/Year	Dry bean	
		Quantity (MT)	Value (Rs. in lakhs)
1.	April 2012	71.67	242.74
2.	May 2012	115.50	380.88
3.	June 2012	27.53	87.22
4.	July 2012	16.83	52.04
5.	August 2012	9.63	28.74
6.	September 2012	8.58	25.47
7.	October 2012	19.69	52.67
8.	November 2012	22.43	64.12
9.	December 2012	13.50	35.46
10.	January 2013	9.55	25.16
11.	February 2013	11.73	33.51
12.	March 2013	124.74	385.55
Total		**451.38**	**1413.59**



Month	April	May	June	July	August	September	October	November	December	January	February	March
Quantity(MT*)	71.67	115.50	27.53	16.83	9.63	8.58	19.69	22.43	13.50	9.55	11.73	124.74
Value(Rs. in Lakhs)	242.74	380.88	87.22	52.04	28.74	25.47	52.67	64.12	35.46	25.16	33.51	385.55

*MT'S: METRIC TONNES

Fig. 4.3: Month-wise Procurement Performance of Cocoa Dry Beans by CAMPCO for the year 2012-13

4.2 The Processing Cost and Returns of CAMPCO

4.2.1 Processing Cost of Finished Products of CAMPCO

The details of processing costs involved in preparation of the various finished products for the year 2011-12 is presented in the Table 4.5. The table revealed that the processing cost involves the cost of raw material, packing material and the manufacturing costs include variable and fixed costs. The Melto brand is produced in four quantities namely 8g, 10g, 21g and 25g and the processing costs involves Rs.1,58,141/ tonne, Rs.1,49,888/tonne, Rs.1,67,110/tonne and Rs.1,56,871/tonne respectively. The Cream brand is produced in three quantities are 8g, 21g and 25g and the processing costs involves Rs.1,55,301/tonne, Rs.1,63,224/tonne and Rs. 1,54,164/tonne respectively.

The Funtan brand is produced in five quantities-10g, 19g, 20g, 25g and 37g and the processing costs involves Rs.1,75,539/tonne, Rs. 2,19,316/tonne Rs. 2,14,878/tonne, Rs. 2,01,061/tonne and Rs. 2,01,565/tonne respectively. The Krunchos brand is produced in two quantities are 20g and 23g, the processing costs involves Rs. 1,76,323/ tonne and Rs. 1,68,407/tonne respectively. The Minibar brand is produced in two quantities are 6g and 7g, the processing costs involves Rs. 1,32,685/tonne and Rs. 1,28,324/tonne respectively. The Campco bar brand is produced in two quantities are 14g and 30g and the processing costs involves Rs. 1,05,721/tonne and Rs. 99,844/tonne respectively. The Krust brand is produced in five quantities are 15g, 13g (Orange), 13g (Vanilla), 13g (Orange) Jar and 13g (Vanilla) Jar and the processing costs involves Rs. 1,25,595/tonne, Rs. 1,40,360/tone, Rs.1,36,500/tonne, Rs.1,50,397/tonne and 1,47,969/tonne respectively. The Funda brand is produced in three flavours are strawberry, mango and vanilla and the processing costs/tonne involves Rs. 1,02,089, Rs. 99,559 and Rs. 1,01,620, respectively.

Table 4.5: Details of Processing Costs Involved in Preparation of the Various Finished Products for the Year 2011-12

Sl. No.	Products	Raw material cost/ tonne (Rs.)	Packing material Cost/ tonne (Rs.)	Manufacturing Cost/tonne (Rs.)		Total processing cost/tonne (Rs.)
				Variable	Fixed	
1.	Melto 8g	93,067 (58.85)	40,062 (25.33)	16,603 (10.50)	8408 (5.32)	1,58,141 (100.00)
2.	Melto 10g	93,067 (62.09)	31,809 (21.22)	16,603 (11.08)	8408 (5.61)	1,49,888 (100.00)
3.	Melto 21g	93,067 (55.69)	49,031 (29.34)	16,603 (9.94)	8408 (5.03)	1,67,110 (100.00)
4.	Melto 25g	93,067 (59.33)	38,792 (24.73)	16,603 (10.58)	8408 (5.36)	1,56,871 (100.00)
5.	Cream 8g	90,857 (58.50)	39,929 (25.71)	16,264 (10.47)	8251 (5.31)	1,55,301 (100.00)
6.	Cream 21g	90,857 (55.66)	47,852 (29.32)	16,264 (9.96)	8251 (5.05)	1,63,224 (100.00)
7.	Cream 25g	90,857 (58.94)	38,792 (25.16)	16,264 (10.55)	8251 (5.35)	1,54,164 (100.00)
8.	Funtan 10g	1,37,530 (78.35)	10,595 (6.04)	17,992 (10.25)	9423 (5.37)	1,75,539 (100.00)
9.	Funtan 19g	1,37,530 (62.71)	54,371 (24.79)	17,992 (8.20)	9423 (4.30)	2,19,316 (100.00)
10.	Funtan 20g	1,37,530 (64.00)	49,933 (23.24)	17,992 (8.37)	9423 (4.39)	2,14,878 (100.00)
11.	Funtan 25g	1,37,530 (68.40)	36,154 (17.98)	18,809 (9.35)	8568 (4.26)	2,01,061 (100.00)
12.	Funtan 37g	1,37,530 (68.23)	36,620 (18.17)	17,992 (8.93)	9423 (4.68)	2,01,565 (100.00)
13.	Krunchos 20g	1,00,650 (57.08)	50,662 (28.73)	16,603 (9.42)	8408 (4.77)	1,76,323 (100.00)
14.	Krunchos 23g	1,00,650 (59.77)	42,746 (25.38)	16,603 (9.86)	8408 (4.99)	1,68,407 (100.00)
15.	Minibar 6g	63,196 (47.63)	48,098 (36.25)	13,545 (10.21)	7846 (5.91)	1,32,685 (100.00)
16.	Minibar 7g	63,196 (49.25)	43,737 (34.08)	13,545 (10.56)	7846 (6.11)	1,28,324 (100.00)
17.	Campco Bar 14g	63,196 (59.78)	21,134 (19.99)	13,545 (12.81)	7846 (7.42)	1,05,721 (100.00)
18.	Campco Bar 30g	63,196 (63.29)	15,257 (15.28)	13,545 (13.57)	7846 (7.86)	99,844 (100.00)

Sl. No.	Products	Raw material cost/ tonne (Rs.)	Packing material Cost/ tonne (Rs.)	Manufacturing Cost/tonne (Rs.)		Total processing cost/tonne (Rs.)
				Variable	Fixed	
19.	Krust 13g (Orange)	97,772 (69.66)	29,496 (21.01)	8212 (5.85)	4881 (3.48)	1,40,360 (100.00)
20.	Krust 13g (Vanilla)	95,104 (69.67)	28,304 (20.74)	8212 (6.02)	4881 (3.58)	1,36,500 (100.00)
21.	Krust 13g (Orange) Jar	97,772 (65.01)	39,532 (26.29)	8212 (5.46)	4881 (3.25)	1,50,397 (100.00)
22.	Krust 13g (Vanilla) Jar	95,104 (64.27)	39,772 (26.88)	8212 (5.55)	4881 (3.30)	1,47,969 (100.00)
23.	Krust 15g	85,275 (67.90)	27,227 (21.68)	8212 (6.54)	4881 (3.89)	1,25,595 (100.00)
24.	Funda (strawberry)	34,807 (34.09)	45,238 (44.31)	19,212 (18.82)	2833 (2.77)	1,02,089 (100.00)
25.	Funda (mango)	31,097 (31.23)	46,418 (46.62)	19,212 (19.30)	2833 (2.85)	99,559 (100.00)
26.	Funda (vanilla)	34,144 (33.60)	45,432 (44.71)	19,212 (18.91)	2833 (2.79)	1,01,620 (100.00)
27.	Melto eclairs jar	48,909 (56.68)	24,985 (28.96)	9305 (10.78)	3089 (3.58)	86,287 (100.00)
28.	Melto éclairs pouches	48,909 (65.41)	13,468 (18.01)	9305 (12.44)	3089 (4.13)	74,770 (100.00)
29.	Melto Éclairs Jar 4.2g	48,909 (57.70)	23,468 (27.68)	9305 (10.98)	3089 (3.64)	84,771 (100.00)
30.	Melto Éclairs 4.2g Pouch	48,909 (66.36)	12,399 (16.82)	9305 (12.62)	3089 (4.19)	73,702 (100.00)
31.	Melto éclairs small pack	48,909 (63.60)	16,311 (21.21)	8689 (11.30)	2990 (3.89)	76,898 (100.00)
32.	Melto éclairs drum pack	48,909 (38.40)	66,058 (51.87)	9305 (7.31)	3089 (2.43)	1,27,360 (100.00)
33.	Éclair 300g Pouches	42,866 (63.34)	13,221 (19.53)	8824 (13.04)	2770 (4.09)	67,681 (100.00)
34.	Éclairs 300g Jar 1.50 Kg	42,866 (55.52)	22,743 (29.46)	8824 (11.43)	2770 (3.59)	77,204 (100.00)
35.	Éclairs 300g Small Jar	42,866 (53.56)	25,571 (31.95)	8824 (11.03)	2770 (3.46)	80,032 (100.00)
36.	Éclairs 300g Jumbo Jar	42,866 (58.69)	18,584 (25.44)	8824 (12.08)	2770 (3.79)	73,045 (100.00)
37.	Éclair 320g Pouches	42,866 (61.90)	14,793 (21.36)	8824 (12.74)	2770 (4.00)	69,254 (100.00)
38.	Éclairs 320g Jar 1.60 Kg	42,866 (55.05)	23,408 (30.06)	8824 (11.33)	2770 (3.56)	77,869 (100.00)

Sl. No.	Products	Raw material cost/ tonne (Rs.)	Packing material Cost/ tonne (Rs.)	Manufacturing Cost/tonne (Rs.)		Total processing cost/tonne (Rs.)
				Variable	Fixed	
39.	Éclairs 320g Small Jar	42,866 (53.32)	25,934 (32.26)	8824 (10.98)	2770 (3.45)	80,394 (100.00)
40.	Éclairs 320g Jumbo Jar	42,866 (57.25)	20,421 (27.27)	8824 (11.78)	2770 (3.70)	74,881 (100.00)
41.	Coffee éclairs jars	42,925 (54.67)	23,993 (30.56)	8824 (11.24)	2770 (3.53)	78,513 (100.00)
42.	Coffee éclairs pouches	42,925 (64.00)	12,554 (18.72)	8824 (13.16)	2770 (4.13)	67,073 (100.00)
43.	Coffee éclair jumbo jar	42,925 (59.75)	17,321 (24.11)	8824 (12.28)	2770 (3.86)	71,840 (100.00)
44.	Coffee éclair drum pack	42,925 (35.55)	66,237 (54.85)	8824 (7.31)	2770 (2.29)	1,20,757 (100.00)
45.	Strawberry éclair jars	42,915 (55.15)	23,310 (29.95)	8824 (11.34)	2770 (3.56)	77,819 (100.00)
46.	Strawberry éclair Jumbo jars	42,915 (60.50)	16,419 (23.15)	8824 (12.44)	2770 (3.91)	70,928 (100.00)
47.	Strawberry éclair Pouch	42,915 (64.80)	11,718 (17.69)	8824 (13.32)	2770 (4.18)	66,228 (100.00)
48.	Strawberry éclair Drum pack	42,915 (35.61)	66,019 (54.77)	8824 (7.32)	2770 (2.30)	1,20,529 (100.00)
49.	Rich Milk Chocolate 40g	1,41,276 (65.65)	47,163 (21.92)	17,647 (8.20)	9113 (4.23)	2,15,199 (100.00)
50.	Turbo 15g Outer	57,298 (57.89)	20,326 (20.53)	13,709 (13.85)	7651 (7.73)	98,985 (100.00)
51.	Treat 15g	56,849 (58.54)	18,955 (19.52)	13,493 (13.89)	7809 (8.04)	97,105 (100.00)
52.	Megabite 15g	62,857 (61.24)	17,404 (16.95)	14,140 (13.78)	8245 (8.03)	1,02,646 (100.00)
53.	Winner 500g	79,115 (59.67)	30,839 (23.26)	19,617 (14.79)	3020 (2.28)	1,32,591 (100.00)
54.	Assorted gift box	83,001 (46.32)	96,189 (53.68)	0 (0.00)	0 (0.00)	1,79,190 (100.00)
55.	Assorted gift box (small)	1,10,336 (56.80)	83,918 (43.20)	0 (0.00)	0 (0.00)	1,94,254 (100.00)

Note: 1) Figures in parentheses indicate percentage to the total
2) MT- Metric Tonnes

The Melto éclairs brand is produced in six quantities-jar, pouches, 4.2g jar, 4.2g pouches, small pack and drum pack and the processing costs/tonne involves Rs. 86,287, Rs. 74,770, Rs. 84,771, Rs. 73,702, Rs. 76,898 and Rs. 1,27,360 respectively. The Éclairs brand is produced in eight quantities-300g pouches, 300g jar 1.50 Kg, 300g small jar, 300g jumbo jar, 320g pouches, 320g jar 1.60kg, 320g small jar and 320g jumbo jar and the processing costs/tonne involves Rs. 67,681, Rs. 77,204, Rs. 80,032, Rs. 73,045, Rs. 69,254, Rs. 77,869, Rs. 80,394 and Rs. 74,881 respectively. The Coffee éclairs brand is produced in four quantities- jars, pouches, jumbo jar and drum pack and the processing costs/tonne involves Rs.78,513, Rs. 67,073, Rs. 71,840and Rs. 1,20,757 respectively. The Strawberry éclairs brand is produced in four quantities-jars, jumbo jar, pouches, and drum and the processing costs/tonne involves Rs.77,819, Rs.70,928, Rs.66,228 and Rs.1,20,529, respectively.

The other brand is like Rich Milk Chocolate 40g, Turbo 15g Outer, Treat 15g, Megabite 15g, Winner 500g and the processing costs/tonne involves Rs. 2,15,199, Rs. 98,985, Rs. 97,105, Rs. 1,02,646 and Rs. 1,32,591 respectively. The Assorted gift box is produced for finished products and the processing costs/tonne involves Rs.1,79,190. The processing cost for small gift box is Rs. 1,94,254/tonne.

4.2.2 Total Cost of Finished Products of CAMPCO

The details of total costs involved in preparation of the various finished products for the year 2011-12 are presented in Table 4.6. It can be seen from the table that the total cost involves processing cost, marketing cost, excise duty on seventy per cent of MRP and freight charges. The Melto brand is produced in four quantities-8g, 10g, 21g and 25g and the total costs/tonne involves Rs. 2,62,668, Rs. 2,87,424, Rs.2,98,358 and Rs.2,68,000 respectively. The Cream brand is produced

Table 4.6: Details of Costs Involved in Preparation of the Various Finished Products for the Year 2011-12

Sl. No.	Products	Total processing cost (Rs.)	Marketing Cost (Rs.)	Excise Duty on 70 percent of the MRP (Rs.)	Freight (Rs.)	Total cost (Rs.)
1.	Melto 8g	1,58,141 (60.21)	71,989 (27.41)	27,038 (10.29)	5500 (2.09)	2,62,668 (100.00)
2.	Melto 10g	1,49,888 (52.15)	95,986 (33.40)	36,050 (12.54)	5500 (1.91)	2,87,424 (100.00)
3.	Melto 21g	1,67,110 (56.01)	91,415 (30.64)	34,333 (11.51)	5500 (1.84)	2,98,358 (100.00)
4.	Melto 25g	1,56,871 (58.53)	76,789 (28.65)	28,840 (10.76)	5500 (2.05)	2,68,000 (100.00)
5.	Cream 8g	1,55,301 (63.05)	71,989 (29.23)	13,519 (5.49)	5500 (2.23)	2,46,309 (100.00)
6.	Cream 21g	1,63,224 (58.86)	91,415 (32.97)	17,167 (6.19)	5500 (1.98)	2,77,306 (100.00)
7.	Cream 25g	1,54,164 (61.45)	76,789 (30.61)	14,420 (5.75)	5500 (2.19)	2,50,873 (100.00)
8.	Funtan 10g	1,75,539 (56.07)	95,986 (30.66)	36,050 (11.51)	5500 (1.76)	3,13,075 (100.00)
9.	Funtan 19g	2,19,316 (60.28)	1,01,038 (27.77)	37,947 (10.43)	5500 (1.51)	3,63,801 (100.00)
10.	Funtan 20g	2,14,878 (60.97)	95,986 (27.24)	36,050 (10.23)	5500 (1.56)	3,52,414 (100.00)
11.	Funtan 25g	2,01,061 (64.40)	76,789 (24.60)	28,840 (9.24)	5500 (1.76)	3,12,190 (100.00)
12.	Funtan 37g	2,01,565 (57.62)	1,03,768 (29.66)	38,973 (11.14)	5500 (1.57)	3,49,806 (100.00)
13.	Krunchos 20g	1,76,323 (56.18)	95,986 (30.58)	36,050 (11.49)	5500 (1.75)	3,13,859 (100.00)
14.	Krunchos 23g	1,68,407 (58.33)	83,466 (28.91)	31,348 (10.86)	5500 (1.90)	2,88,721 (100.00)
15.	Minibar 6g	1,32,685 (58.66)	63,991 (28.29)	24,033 (10.62)	5500 (2.43)	2,26,209 (100.00)
16.	Minibar 7g	1,28,324 (61.32)	54,849 (26.21)	20,600 (9.84)	5500 (2.63)	2,09,273 (100.00)
17.	Campco Bar 14g	1,05,721 (51.44)	68,562 (33.36)	25,750 (12.53)	5500 (2.68)	2,05,533 (100.00)
18.	Campco Bar 30g	99,844 (51.63)	63,991 (33.09)	24,033 (12.43)	5500 (2.84)	1,93,368 (100.00)
19.	Krust 13g (Orange)	1,40,360 (56.73)	73,835 (29.84)	27,731 (11.21)	5500 (2.22)	2,47,426 (100.00)
20.	Krust 13g (Vanilla)	1,36,500 (56.04)	73,835 (30.31)	27,731 (11.39)	5500 (2.26)	2,43,566 (100.00)

Sl. No.	Products	Total processing cost (Rs.)	Marketing Cost (Rs.)	Excise Duty on 70 percent of the MRP (Rs.)	Freight (Rs.)	Total cost (Rs.)
21.	Krust 13g (Orange) Jar	1,50,397 (58.42)	73,835 (28.68)	27,731 (10.77)	5500 (2.14)	2,57,463 (100.00)
22.	Krust 13g (Vanilla) Jar	1,47,969 (58.02)	73,835 (28.95)	27,731 (10.87)	5500 (2.16)	2,55,035 (100.00)
23.	Krust 15g	1,25,595 (57.32)	63,991 (29.20)	24,033 (10.97)	5500 (2.51)	2,19,119 (100.00)
24.	Funda (Strawberry)	1,02,089 (62.34)	47,158 (28.80)	9013 (5.50)	5500 (3.36)	1,63,760 (100.00)
25.	Funda (Mango)	99,559 (61.75)	47,158 (29.25)	9013 (5.59)	5500 (3.41)	1,61,230 (100.00)
26.	Funda (Vanilla)	1,01,620 (62.23)	47,158 (28.88)	9013 (5.52)	5500 (3.37)	1,63,291 (100.00)
27.	Melto Eclairs Jar	86,287 (59.06)	39,299 (26.90)	15,021 (10.28)	5500 (3.76)	1,46,107 (100.00)
28.	Melto Eclairs Pouches	74,770 (55.55)	39,299 (29.20)	15,021 (11.16)	5500 (4.09)	1,34,590 (100.00)
29.	Melto Eclairs Jar 4.2g	84,771 (55.64)	44,913 (29.48)	17,167 (11.27)	5500 (3.61)	1,52,351 (100.00)
30.	Melto Eclairs 4.2g Pouch	73,702 (52.17)	44,913 (31.79)	17,167 (12.15)	5500 (3.89)	1,41,282 (100.00)
31.	Melto Eclairs Small Pack	76,898 (56.25)	39,299 (28.74)	15,021 (10.99)	5500 (4.02)	1,36,718 (100.00)
32.	Melto Eclairs Drum Pack	1,27,360 (62.04)	52,398 (25.52)	20,028 (9.76)	5500 (2.68)	2,05,286 (100.00)
33.	Éclair 300g Pouches	67,681 (61.18)	31,439 (28.42)	6008 (5.43)	5500 (4.97)	1,10,628 (100.00)
34.	Eclairs 300g Jar 1.50 Kg	77,204 (64.26)	31,439 (26.17)	6008 (5.00)	5500 (4.58)	1,20,151 (100.00)
35.	Eclairs 300g Small Jar	80,032 (65.08)	31,439 (25.56)	6008 (4.89)	5500 (4.47)	1,22,979 (100.00)
36.	Eclairs 300g Jumbo Jar	73,045 (62.97)	31,439 (27.10)	6008 (5.18)	5500 (4.74)	1,15,992 (100.00)
37.	Éclair 320g Pouches	69,254 (63.04)	29,474 (26.83)	5633 (5.13)	5500 (5.01)	1,09,861 (100.00)
38.	Eclairs 320g Jar 1.60 Kg	77,869 (65.73)	29,474 (24.88)	5633 (4.75)	5500 (4.64)	1,18,476 (100.00)
39.	Eclairs 320g Small Jar	80,394 (66.44)	29,474 (24.36)	5633 (4.66)	5500 (4.55)	1,21,001 (100.00)
40.	Eclairs 320g Jumbo Jar	74,881 (64.84)	29,474 (25.52)	5633 (4.88)	5500 (4.76)	1,15,488 (100.00)
41.	Coffee Eclairs Jars	78,513 (57.10)	44,913 (32.66)	8583 (6.24)	5500 (4.00)	1,37,509 (100.00)
42.	Coffee Eclairs Pouches	67,073 (53.20)	44,913 (35.63)	8583 (6.81)	5500 (4.36)	1,26,069 (100.00)

Sl. No.	Products	Total processing cost (Rs.)	Marketing Cost (Rs.)	Excise Duty on 70 percent of the MRP (Rs.)	Freight (Rs.)	Total cost (Rs.)
43.	Coffee Éclair Jumbo Jar	71,840 (54.91)	44,913 (34.33)	8583 (6.56)	5500 (4.20)	1,30,836 (100.00)
44.	Coffee Éclair Drum Pack	1,20,757 (67.18)	44,913 (24.99)	8583 (4.77)	5500 (3.06)	1,79,753 (100.00)
45.	Strawberry Éclair Jars	77,819 (59.80)	39,299 (30.20)	7510 (5.77)	5500 (4.23)	1,30,128 (100.00)
46.	Stb. Ecl. Jumbo Jars	70,928 (57.55)	39,299 (31.89)	7510 (6.09)	5500 (4.46)	1,23,237 (100.00)
47.	Stb. Ecl. Pouch	66,228 (55.87)	39,299 (33.15)	7510 (6.34)	5500 (4.64)	1,18,537 (100.00)
48.	Stb. Ecl. Drum Pack	1,20,529 (69.74)	39,299 (22.74)	7510 (4.35)	5500 (3.18)	1,72,838 (100.00)
49.	Rich Milk Chocolate 40g	2,15,199 (61.01)	95,986 (27.21)	36,050 (10.22)	5500 (1.56)	3,52,735 (100.00)
50.	Turbo 15g Outer	98,985 (51.42)	63,991 (33.24)	24,033 (12.48)	5500 (2.86)	1,92,509 (100.00)
51.	Treat 15g	97,105 (50.94)	63,991 (33.57)	24,033 (12.61)	5500 (2.89)	1,90,629 (100.00)
52.	Megabite 15g	1,02,646 (52.33)	63,991 (32.62)	24,033 (12.25)	5500 (2.80)	1,96,170 (100.00)
53.	Winner 500g	1,32,591 (64.96)	47,993 (23.51)	18,025 (8.83)	5500 (2.69)	2,04,109 (100.00)
54.	Assorted Gift Box	1,79,190 (61.17)	78,677 (26.86)	29,549 (10.09)	5500 (1.88)	2,92,916 (100.00)
55.	Assorted Gift Box (Small)	1,94,254 (62.71)	79,988 (25.82)	30,042 (9.70)	5500 (1.78)	3,09,784 (100.00)

Note: 1) Figures in parentheses indicate percentage to the total
2) MT- Metric Tonnes

in three quantities viz. 8g, 21g and 25g and the total costs/ tonne involves Rs. 2,46,309, Rs. 2,77,306 and Rs. 2,50,873, respectively.

The Funtan brand is produced in five quantities-10g, 19g, 20g, 25g and 37g and the total costs/tonne involves Rs. 3,13,075, Rs. 3,63,801 Rs. 3,52,414, Rs. 3,12,190 and Rs. 3,49,806 respectively. The Krunchos brand is produced in two quantities are 20g and 23g the total costs/tonne involves Rs. 3,13,859 and Rs. 2,88,721 respectively. The Minibar brand is produced in two quantities are 6g and 7g and the total costs/tonne involves Rs. 2,26,209 and Rs. 2,09,273 respectively. The Campco bar brand is produced in two quantities are 14g and 30g and the total costs/tonne involves Rs.2,05,533 and Rs.1,93,368 respectively. The Krust brand is produced in five quantities are 15g, 13g (Orange), 13g (Vanilla), 13g (Orange) Jar and 13g (Vanilla) Jar and the total costs/ tonne involves Rs. 2,19,119, Rs. 2,47,426, Rs. 2,43,566, Rs. 2,57,463 and 2,55,035 respectively. The Funda brand is produced in three flavours are strawberry, mango and vanilla and the total costs/tonne involves Rs. 1,63,760, Rs. 1,61,230 and Rs. 1,63,291 respectively.

The Melto éclairs brand is produced in six quantities-jar, pouches, 4.2g jar, 4.2g pouches, small pack and drum pack and the total costs/ tonne involves Rs. 1,46,107, Rs. 1,34,590, Rs. 1,52,351, Rs. 1,41,282, Rs. 1,36,718 and Rs. 2,05,286 respectively. The Éclairs brand is produced in eight quantities-300g pouches, 300g jar 1.50 Kg, 300g small jar, 300g jumbo jar, 320g pouches, 320g jar 1.60kg, 320g small jar and 320g jumbo jar and the total costs/tonne involves Rs. 1,10,628, Rs. 1,20,151, Rs. 1,22,979, Rs. 1,15,992, Rs. 1,09,861, Rs. 1,18,476, Rs.1,21,001 And Rs. 1,15,488 respectively. The Coffee éclairs brand is produced in four quantities- jars, pouches, jumbo jar and drum pack and the total costs/tonne involves Rs. 1,37,509, Rs. 1,26,069, Rs. 1,30,836 and Rs. 1,79,753 respectively. The Strawberry éclairs brand

is produced in four quantities- jars, jumbo jar, pouches, and drum pack and the total costs/tonne involves Rs. 1,30,128, Rs. 1,23,237, Rs. 1,18,537 and Rs. 1,72,838 respectively.

The other brand is like Rich Milk Chocolate 40g, Turbo 15g Outer, Treat 15g, Megabite 15g, Winner 500g, and the total costs/tonne involves Rs. 3,52,735, Rs. 1,92,509, Rs. 1,90,629, Rs. 1,96,170and Rs. 2,04,109 respectively. The Assorted gift box is produced for finished products and the total costs/tonne involves Rs. 2,92,916 and the total cost for small gift box is Rs. 3,09,784.

4.2.3 Profit/Loss of Finished Products of CAMPCO

The details of profit/loss involved in preparation of the various finished products for the year 2011-12 are presented in Table 4.7. The Melto brand is produced in four quantities-8g, 10g, 21g and 25g and the total profit/tonne was Rs. 55,600.32, Rs. 9,56,932.48, Rs. 3133371.19 and Rs. 3,52,216.55 respectively. The Cream brand is produced in three quantities-8g, 21g and 25g and the total profit/tonne was Rs. 24,22,399.73, Rs. 48,67,158.30 and Rs. 8,73,899.86 respectively.

The Funtan brand is produced in five quantities-10g, 19g, 20g and 37g and the total profit/tonne was Rs. 3,22,672.55, Rs. 5,62,676.87, Rs. 8,721.22, and Rs. 2,34,514.85 respectively. The Funtan 25g brand got loss of Rs. -1,65,060.72 in the year 2011-12. The Krunchos brand is produced in two quantities - 20g and 23g and the total profit/tonne was Rs. 24,07,747.32 and Rs. 1,99,195.44 respectively. The Minibar brand is produced in two quantities, 6g and 7g and the total profit/tonne of Minibar 6g was Rs. 4,58,922.89 and the Minibar 7g got a loss of Rs. -1,32,182.43. The Campco bar brand is produced in two quantities, 14g and 30g and the total profit/tonne was Rs. 10,16,364.88 and Rs. 6,81,984.40 respectively. The Krust brand is produced in five

Table 4.7: Details of Profit of the Various Finished Products for the Year 2011-12

Sl. No.	Products	Price to Super-Stockiest (Rs./Tonne)	Total Cost (Rs./Tonne)	Profit/ Loss per Tonne (Rs./Tonne)	Quantity Dispatched (Tonnes)	Total Profit or Loss/ tonne (Rs.)*
1.	Melto 8g	2,66,627	2,62,668	3959.00	14.04	55,600.32
2.	Melto 10g	3,55,504	2,87,424	68,080.00	14.06	9,56,932.48
3.	Melto 21g	3,52,501	2,98,358	26,292.00	119.18	31,33,371.19
4.	Melto 25g	2,84,402	2,68,000	16,402.00	21.47	3,52,216.55
5.	Cream 8g	2,66,627	2,46,309	20,318.00	119.22	24,22399.73
6.	Cream 21g	3,52,177	2,77,306	47,668.00	102.11	48,67,158.30
7.	Cream 25g	2,84,402	2,50,873	33,529.00	26.06	8,73,899.86
8.	Funtan 10g	3,55,504	3,13,075	42,429.00	7.61	3,22,672.55
9.	Funtan 19g	3,74,214	3,63,801	10,413.00	54.04	5,62,676.87
10.	Funtan 20g	3,55,504	3,52,414	3090.00	2.82	8721.22
11.	Funtan 25g	2,84,402	3,12,190	-27,788.00	5.94	-1,65,060.72
12.	Funtan 37g	3,84,328	3,49,806	34,522.00	6.79	2,34,514.85
13.	Krunchos 20g	3,55,504	3,13,859	41,645.00	57.82	24,07,747.32
14.	Minibar 6g	2,37,003	2,26,209	10,794.00	42.52	4,58,922.89
15.	Minibar 7g	2,03,144	2,09,273	-6129.00	21.57	-1,32,182.43
16.	Krunchos 23g	3,16,151	2,88,721	13,395.00	14.87	1,99,195.44
17.	Campco Bar 14g	2,66,370	2,05,533	35,961.00	28.26	10,16,364.88
18.	Campco Bar 30g	2,53,644	1,93,368	26,995.00	25.26	6,81,984.40
19.	Krust 13g (Orange)	2,73,464	2,47,426	26,038.00	44.92	11,69,542.81

Sl. No.	Products	Price to Super-Stockiest (Rs./Tonne)	Total Cost (Rs./Tonne)	Profit/ Loss per Tonne (Rs./Tonne)	Quantity Dispatched (Tonnes)	Total Profit or Loss/ tonne (Rs.)*
20.	Krust 13g (Vanilla)	2,73,464	2,43,566	29,898.00	49.71	14,86,279.27
21.	Krust 13g (Orange) Jar	2,73,464	2,57,463	16,001.00	4.36	69,698.92
22.	Krust 13g (Vanilla) Jar	2,73,464	2,55,035	18,430.00	4.59	84,678.29
23.	Krust 15g	2,37,003	2,19,119	17,885.00	70.32	12,57,748.32
24.	Funda (Strawberry)	1,74,661	1,63,760	10,901.00	3.99	43,534.23
25.	Funda (Mango)	1,74,661	1,61,230	13,431.00	2.25	30,171.40
26.	Funda (Vanilla)	1,74,661	1,63,291	11,370.00	2.85	32,418.14
27.	Melto Eclairs Jar	1,45,550	1,46,107	-557.00	23.89	-13,307.26
28.	Melto Eclairs Pouches	1,45,550	1,34,590	10,960.00	9.94	1,08,898.56
29.	Melto Eclairs Jar 4.2g	1,76,515	1,52,351	3820.00	92.01	3,51,491.95
30.	Melto Eclairs 4.2g Pouch	1,66,343	1,41,282	25,061.00	39.52	9,90,502.94
31.	Melto Eclairs Small Pack	1,45,550	1,36,718	8832.00	7.28	64,330.17
32.	Melto Eclairs Drum Pack	1,94,067	2,05,286	-11,219.00	27.90	-3,12,954.57
33.	Éclair 300g Pouches	1,16,441	1,10,628	5813.00	478.18	27,79,675.45
34.	Eclairs 300g Jar 1.50 Kg	1,16,441	1,20,151	-3710.00	109.59	-4,06,590.03
35.	Eclairs 300g Small Jar	1,16,441	1,22,979	-6538.00	30.24	-1,97,709.12
36.	Eclairs 300g Jumbo Jar	1,16,441	1,15,992	449.00	134.22	60,263.70
37.	Éclair 320g Pouches	1,09,163	1,09,861	-698.00	203.23	-1,41,851.92
38.	Eclairs 320g Jar 1.60 Kg	1,09,163	1,18,476	-9313.00	104.97	-9,77,552.08
39.	Eclairs 320g Small Jar	1,09,163	1,21,001	-11,838.00	43.71	-5,17,402.05

Sl. No.	Products	Price to Super-Stockiest (Rs./Tonne)	Total Cost (Rs./Tonne)	Profit/ Loss per Tonne (Rs./Tonne)	Quantity Dispatched (Tonnes)	Total Profit or Loss/ tonne (Rs.)*
40.	Eclairs 320g Jumbo Jar	1,09,163	1,15,488	-6325.00	70.46	-4,45,684.80
41.	Coffee Eclairs Jars	1,75,765	1,37,509	19,413.00	91.22	17,70,931.51
42.	Coffee Eclairs Pouches	1,66,343	1,26,069	40,274.00	15.32	6,16,859.14
43.	Coffee Éclair Jumbo Jar	1,66,343	1,30,836	35,507.00	25.09	8,90,749.91
44.	Coffee Éclair Drum Pack	1,66,343	1,79,753	-13410.00	4.56	-61,098.11
45.	Strawberry Éclair Jars	1,48,792	1,30,128	12,180.00	48.54	5,91,211.35
46.	Stb. Ecl. Jumbo Jars	1,45,550	1,23,237	22,313.00	16.16	3,60,506.68
47.	Stb. Ecl. Pouch	1,45,550	1,18,537	27,014.00	12.52	3,38,285.52
48.	Stb. Ecl. Drum Pack	1,45,550	1,72,838	-27,287.00	4.84	-1,32,025.42
49.	Rich Milk Chocolate 40g	3,55,504	3,52,735	2769.00	7.57	20973.51
50.	Turbo 15g Outer	2,46,002	1,92,509	35,495.00	80.90	28,71,721.56
51.	Treat 15g	2,45,831	1,90,629	3746.00	27.25	10,23,068.43
52.	Megabite 15g	2,37,003	1,96,170	40,833.00	60.62	24,75,312.79
53.	Winner 500g	1,77,752	2,04,109	-26,357.00	48.72	-12,84,113.04
54.	Assorted Gift Box	2,91,396	2,92,916	-1520.00	39.46	-59,986.41
55.	Assorted Gift Box (Small)	2,96,253	3,09,784	-13,531.00	11.31	-1,52,973.91

Note: MT- Metric Tonnes

***** - The profit indicated as per the audited published reports of CAMPCO for the year 2011-12.

quantities -13g (Orange), 13g (Vanilla), 13g (Orange) Jar, 13g (Vanilla) Jar, and 15g the total profit/tonne was Rs. 11,69,542.81, Rs. 14,86,279.27, Rs. 69,698.92, Rs. 84,678.29 and 1,25,7748.32 respectively. The Funda brand is produced in three flavours, strawberry, mango and vanilla and the total profit was Rs. 43534.23, Rs. 30171.40 and Rs. 32418.14 respectively.

The Melto éclairs brand is produced in six quantities- jar, pouches, 4.2g jar, 4.2g pouches, small pack and drum pack and the total/tonne profit was Rs. -13,307.26, Rs. 1,08,898.56, Rs. 3,51,491.95, Rs. 9,90,502.94, Rs. 64,330.17 and Rs.-3,12,954.57 respectively. The Melto eclaire jar and Melto éclair drum pack incurred loss. The Éclairs brand is produced in eight quantities-300g pouches, 300g jar 1.50 Kg, 300g small jar, 300g jumbo jar, 320g pouches, 320g jar 1.60kg, 320g small jar and 320g jumbo jar and the total profit/loss/tonne was Rs. 27,79,675.45, Rs. -4,06,590.03, Rs. -1,97,709.12, Rs. 60,263.70, Rs.-1,41,851.92, Rs.-9,77,552.08, Rs.-5,17,402.05 and Rs.-4,45,684.80 respectively. The Coffee éclairs brand is produced in four quantities- jars, pouches, jumbo jar and drum pack and the total profit/loss/tonne was Rs. 17,70,931.51, Rs. 6,16,859.14, Rs. 8,90,749.91and Rs. -61,098.11 respectively. The Strawberry éclairs brand is produced in four quantities- jars, jumbo jar, pouches, and drum pack and the total profit/loss/ tonne was Rs. 5,91,211.35, Rs. 3,60,506.68, Rs. 3,38,285.52 and Rs. -1,32,025.42 respectively.

And other brand is like Rich Milk Chocolate 40g, Turbo 15g Outer, Treat 15g, Megabite 15g, Winner 500g and the total profit/loss/tonne was Rs.20,973.51, Rs.28,71,721.56, Rs.10,23,068.43, Rs.24,75,312.79 and Rs. -12,84,113.04 respectively. The Assorted gift box is produced for finished products and the total profit/loss was Rs. -59986.41/tonne and total profit/loss is for small gift box was Rs. -152973.91/tonne.

4.2.4 Processing Cost of Semi-finished Products of CAMPCO

The details of processing costs involved in preparation of the various semi-finished products for the year 2011-12 is presented in the Table 4.8. The table revealed that the processing cost involves the cost of raw material, packing material and the manufacturing costs include variable and fixed costs. The Cocoa powder is produced in four quantities-10-12% Dark, 10-12% - 25Kg and 18-20% - 25Kg and the processing costs/tonne incurred was Rs. 2,40,954, Rs. 2,68,787 and Rs. 2,68,961 respectively. The processing costs incurred for Cocoa butter was Rs. 2,73,587/tonne . The processing costs incurred for Cocoa mass was Rs. 2,69,829/tonne. The processing costs incurred for Milk chocolate 1kg was Rs. 1,47,123/tonne. The Plain chocolate brand was produced in two quantities, 1kg and PVM and the processing costs/tonne incurred was Rs. 1,44,467 and Rs. 1,16,043, respectively.

The Regular Chocopaste brand is produced in two quantities-15kg and 20 kg and the processing costs/tonne incurred was Rs. 74,221 and Rs. 77,304 respectively. The Liquid chocopaste brand is produced in two quantities-15kg and 20 kg and the processing costs/tonne incurred was Rs. 84,168 and Rs. 86,448 respectively. The processing costs incurred for Ideal chocopaste 1kg was Rs. 8,09,757/tonne. The processing costs incurred for Hangyo milk chocodip was Rs. 68,974/tonne. The processing costs incurred for Winner Bulk was Rs.1,04,972/tonne. The processing costs incurred for Coffee day was Rs. 1,11,752/tonne. The processing costs incurred for Java green was Rs. 1,55,000/tonne. The Milk Chocó mass brand is produced in two quantities-1/2kg and 1kg and the processing costs/tonne incurred was Rs. 1,22,871 and Rs. 1,13,864 respectively. The Plain chocomass brand is produced in two quantities are 1/2kg and 1kg and the processing costs/tonne incurred was Rs. 1,10,544, and Rs. 1,02,700, respectively.

Table 4.8: Details of Processing Costs Involved in Preparation of the Various Semi-finished Products for the year 2011-12

Sl. No.	Products	Raw material cost/tonne (Rs.)	Packing material cost/tonne (Rs.)	Conversion cost/tonne (Rs.)		Total processing Cost/tonne (Rs.)
				Variable cost	Fixed cost	
1.	Cocoa Powder 10-12% Dark	2,40,220 (99.70)	734 (0.30)	0 (0.00)	0 (0.00)	2,40,954 (100.00)
2.	Cocoa Powder 10-12% - 25Kg	2,60,861 (97.05)	735 (0.27)	4,916 (1.83)	2,276 (0.85)	2,68,787 (100.00)
3.	Cocoa Powder 18-20% - 25Kg	2,60,861 (96.99)	909 (0.34)	4,916 (1.83)	2,276 (0.85)	2,68,961 (100.00)
4.	Cocoa Butter	2,54,173 (92.90)	1943 (0.71)	13,271 (4.85)	4201 (1.54)	2,73587 (100.00)
5.	Cocoa Mass	2,51,390 (93.17)	2599 (0.96)	12,002 (4.45)	3838 (1.42)	2,69,829 (100.00)
6.	Milk Chocolate 1 Kg	1,24,669 (84.74)	2462 (1.67)	14,536 (9.88)	5456 (3.71)	1,47,123 (100.00)
7.	Plain Chocolate 1 Kg	1,21,541 (84.13)	2482 (1.72)	14,828 (10.26)	5616 (3.89)	1,44,467 (100.00)
8.	Plain Chocolate PVM	93,785 (80.82)	2425 (2.09)	14,421 (12.43)	5413 (4.66)	1,16,043 (100.00)
9.	Regular Chocopaste 15 Kgs	59,380 (80.00)	2389 (3.22)	9630 (12.97)	2822 (3.80)	74,221 (100.00)
10.	Regular Chocopaste 20 Kgs	59,380 (76.81)	5472 (7.08)	9630 (12.46)	2822 (3.65)	77,304 (100.00)
11.	Liquid Chocopaste 15 Kgs	68,603 (81.51)	3193 (3.79)	9575 (11.38)	2797 (3.32)	84,168 (100.00)
12.	Liquid Chocopaste 20 Kgs	68,603 (79.36)	5472 (6.33)	9575 (11.08)	2797 (3.24)	86,448 (100.00)
13.	Ideal Chocopaste	59,380 (73.33)	9143 (11.29)	9630 (11.89)	2822 (3.49)	8,09,757 (100.00)
14.	Hangyo Milk Chocodip	61,123 (88.62)	133 (0.19)	4599 (6.67)	3120 (4.52)	68,974 (100.00)
15.	Winner Bulk	76,733 (73.10)	5602 (5.34)	15,393 (14.66)	7244 (6.90)	1,04,972 (100.00)
16.	Coffee Day	79,115 (70.80)	10000 (8.95)	19,617 (17.55)	3020 (2.70)	1,11,752 (100.00)
17.	Java Green	1,23,581 (79.73)	5408 (3.49)	16,388 (10.57)	9625 (6.21)	1,55,000 (100.00)
18.	Milk Chokmass 1/2 Kg	93,067 (75.74)	11458 (9.33)	13,577 (11.05)	4768 (3.88)	1,22,871 (100.00)
19.	Milk Chokmass 1 Kg	93,067 (81.74)	2452 (2.15)	13,577 (11.92)	4768 (4.19)	1,13,864 (100.00)
20.	Plain Chokmass 1/2 Kg	80,087 (72.45)	4793 (4.34)	17,050 (15.42)	8615 (7.79)	1,10,544 (100.00)

Sl. No.	Products	Raw material cost/tonne (Rs.)	Packing material cost/tonne (Rs.)	Conversion cost/tonne (Rs.)		Total processing Cost/tonne (Rs.)
				Variable cost	Fixed cost	
21.	Plain Chokmass 1 Kg	80,087 (77.98)	3615 (3.52)	14,023 (13.65)	4975 (4.84)	1,02,700 (100.00)
22.	White Chokmass	90,857 (81.74)	2452 (2.21)	13,512 (12.16)	4337 (3.90)	1,11,157 (100.00)
23.	White Chokmass (Low Budget)	90,857 (82.32)	1666 (1.51)	13,512 (12.24)	4337 (3.93)	1,10,372 (100.00)
24.	Premium Plain Chocmass 1Kg	80,087 (78.81)	2532 (2.49)	14,023 (13.80)	4975 (4.90)	1,01,617 (100.00)
25.	Plain Choco Chips	93,785 (74.30)	2957 (2.34)	21,292 (16.87)	8192 (6.49)	1,26,225 (100.00)
26.	Milk Choco Chips (Compound)	93,067 (75.03)	2973 (2.40)	20,404 (16.45)	7590 (6.12)	1,24,035 (100.00)
27.	Plain Chocomass Chips (Regular)	80,087 (71.70)	2957 (2.65)	20,793 (18.62)	7854 (7.03)	1,11,691 (100.00)
28.	Plain Chocomass Chips (Britannia)	80,087 (71.70)	2957 (2.65)	20,793 (18.62)	7854 (7.03)	1,11,691 (100.00)
29.	White Chocomass Chips	90,857 (74.90)	2957 (2.44)	20,109 (16.58)	7389 (6.09)	1,21,312 (100.00)
30.	Milk Couverture	93,067 (82.06)	2005 (1.77)	13,577 (11.97)	4768 (4.20)	1,13,413 (100.00)
31.	Milk Chocolate Marbles	1,24,669 (85.18)	1703 (1.16)	14,515 (9.92)	5478 (3.74)	1,46,364 (100.00)
32.	Ooty Chocolate	1,24,669 (65.96)	44,339 (23.46)	14,536 (7.69)	5456 (2.89)	1,89,000 (100.00)
33.	Milk Chocolate Special	1,24,669 (74.21)	23,339 (13.89)	14,536 (8.65)	5456 (3.25)	1,68,000 (100.00)
34.	White Chocolate	1,41,276 (86.24)	2452 (1.50)	14,620 (8.92)	5473 (3.34)	1,63,821 (100.00)

Note: 1) Figures in parentheses indicate percentage to the total
2) MT- Metric Tonnes

The processing costs incurred for White chocomass was Rs. 1,11,157/tonne. The processing costs incurred for White chocomass (low budget) was Rs. 1,10,372/tonne. The processing costs incurred for Premium plain chocomass 1kg was Rs. 1,01,617/tonne. The processing costs incurred for Plain chocochip was Rs.1,26,225/tonne. The processing costs incurred for Milk chocochip compound was Rs. 1,24,035/tonne. The Plain chocomass chips brand is produced in two quantities, regular and britania and the processing costs/tonne incurred was Rs. 1,11,691 and Rs. 1,11,691 respectively. The processing costs for White chocomass chips was Rs. 1,21,312. The processing costs for Milk couverture was Rs. 1,13,413. The Milk chocolate brand is produced in two quantities, marbles and special and the processing costs incurred was Rs. 1,46,364 and Rs. 1,68,000 respectively. And the processing cost/tonne for the Ooty chocolate and White chocolate was Rs.1,89,000 and Rs.1,63,821.

4.2.5 Profit/Loss of Semi-finished Products of CAMPCO

The details of total profit/loss of the various semi-finished products for the year 2011-12 are presented in the Table 4.9. The table revealed that the Cocoa powder is produced in three quantities-10-12% Dark, 10-12% - 25Kg and 18-20% - 25Kg and the total profit/loss/tonne was Rs. 2,60,08,597, Rs. 45,38,450 and Rs. 10,05,025 respectively. The total profit/loss for Cocoa butter was Rs. 50,05,177/tonne. The total profit/loss for Cocoa mass was Rs. 15,53,920/tonne. The total profit/loss for milk chocolate 1kg was Rs. 32,44,647/tonne. The Plain chocolate brand is produced in two quantities-1kg and PVM and the total profit/loss was Rs. 45,85,626 and Rs. 57,41,590 respectively.

The Regular Chocopaste brand produced in two quantities, 15kg and 20 kg and the total profit/loss was Rs. 2,63,475 and Rs. 5,83,325 respectively. The Liquid chocopaste brand is produced in two quantities -

Table 4.9: Details of Total Profit of the Various Semi-finished Products for the year 2011-12

Sl. No.	Products	Qty. Sold	Net Factory Cost	Net Realisation	Realisation Profit	Total Profit/ Loss/tone (Rs.)*
1.	Cocoa Powder 10-12% Dark	12,13,025	240.95	262.40	21.44	2,60,08,597
2.	Cocoa Powder 10-12% - 25Kg	3,53,430	268.79	281.63	12.84	45,38,450
3.	Cocoa Powder 18-20% - 25Kg	34,075	268.96	298.46	29.49	10,05,025
4.	Cocoa Butter	3,29,710	273.59	288.77	15.18	50,05,177
5.	Cocoa Mass	96,615	269.83	285.91	16.08	15,53,920
6.	Milk Chocolate 1 Kg	1,64,070	147.12	166.90	19.78	32,44,647
7.	Plain Chocolate 1 Kg	2,00,260	144.47	167.36	22.90	45,85,626
8.	Plain Chocolate PVM	1,08,410	116.04	169.01	52.96	57,41,590
9.	Regular Chocopaste 15 Kgs	4,65,675	74.22	74.79	0.57	2,63,475
10.	Regular Chocopaste 20 Kgs	1,05,980	77.30	82.81	5.50	5,83,325
11.	Liquid Chocopaste 15 Kgs	1,33,140	84.17	81.89	-2.28	-3,03,582
12.	Liquid Chocopaste 20 Kgs	9280	86.45	100.90	14.45	1,34,100
13.	Ideal Chocopaste	16,780	80.98	86.51	5.54	92,888
14.	Hangyo Milk Chocodip	18,000	68.97	90.67	21.69	3,90,455
15.	Winner Bulk	13,500	104.97	108.80	3.83	51,732
16.	Coffee Day	18,149	111.75	122.69	10.93	1,98,440
17.	Java Green	344	155.00	195.60	40.60	13,957
18.	Milk Chokmass 1/2 Kg	12,522	122.87	123.59	0.72	9017

Sl. No.	Products	Qty. Sold	Net Factory Cost	Net Realisation	Realisation Profit	Total Profit/ Loss/tone (Rs.)*
19.	Milk Chokmass 1 Kg	50,910	113.86	122.55	8.69	4,42,161
20.	Plain Chokmass 1/2 Kg	17,534	110.54	115.18	4.64	81,276
21.	Plain Chokmass 1 Kg	71,190	102.70	112.98	10.28	7,31,886
22.	White Chokmass	49,930	111.16	116.18	5.03	2,50,964
23.	White Chokmass (Low Budget)	15,020	110.37	110.33	-0.04	-622
24.	Premium Plain Chocmass 1Kg	72,930	101.62	137.79	36.18	26,38,310
25.	Plain Choco Chips	10,800	126.22	176.97	50.74	5,48,024
26.	Milk Choco Chips (Compound)	62,265	124.03	126.13	2.09	1,30,211
27.	Plain Chocmass Chips (Regular)	11,352	111.69	121.05	9.36	1,06,249
28.	Plain Chocmass Chips (Britannia)	1,19,916	111.69	129.13	17.43	20,90,664
29.	White Chocomass Chips	120	121.31	128.18	6.87	825
30.	Milk Couverture	7,90,495	113.41	119.48	6.07	47,96,677
31.	Milk Chocolate Marbles	1,33,400	146.36	166.57	20.20	26,94,838
32.	Ooty Chocolate	5080	189.00	199.50	10.50	53,340
33.	Milk Chocolate Special	5300	168.00	204.37	36.37	1,92,752
34.	White Chocolate	1083	163.82	179.55	15.73	17,034

Note: MT- Metric Tonnes

***** - The profit indicated as per the audited published reports of CAMPCO for the year 2011-12.

15 kg and 20 kg and the total profit or loss/tonne was Rs. -3,03,582 and Rs.1,34,100 respectively. The total profit/loss/tonne for Ideal chocopaste 1kg was Rs. 92,888. The total profit/loss for Hangyo milk chocodip was Rs. 3,90,455. Total profit/loss for Winner Bulk was Rs. 51,732. The processing costs for Coffee day was Rs. 198440/tonne. Total profit/loss for Java green was Rs. 13957/tonne. The Milk choco mass brand is produced in two quantities, 1/2kg and 1kg and the total profit/loss was Rs. 9017, and Rs. 442161 respectively. The Plain chocomass brand is produced in two quantities, 1/2kg and 1kg and the total profit/loss was Rs. 81,276, and Rs. 7,31,886 respectively.

The total profit/tonne for White chocomass was Rs. 2,50,964. The total profit/loss for White chocomass (low budget) was Rs. -622/tonne. The total profit/loss for Premium plain chocomass 1kg was Rs. 26,38,310. The total profit/loss for Plain chocochip was Rs. 548024/tonne. The total profit/loss for Milk chocochip compound was Rs. 1,30,211/tonne. The Plain chocomass chips brand is produced in two quantities, regular and britania and the total profit/tonne was Rs. 1,06,249 and Rs. 20,90,664 respectively. The total profit/loss for White chocomass chips was Rs. 825/tonne. The total profit/loss for Milk couverture was Rs. 47,96,677/tonne. The Milk chocolate brand is produced in two quantities, marbles and special and the total profit/tonne was Rs. 2694838 and Rs. 1,92,752 respectively. And the total profit/tonne for the Ooty chocolate and White chocolate was Rs. 53,340 and Rs.17,034 and in the production of 169.06MT and 1.34MT respectively.

4.2.6 Top Ten Profited Finished Products of CAMPCO from the Year 2009-10 to 2011-12

The details of Top Ten Profited Finished Products of CAMPCO from the Year 2009-10 to 2011-12 are presented in the Table 4.10. The

CAMPCO got 16.77% Percentage of profit to the total profit from the Cream 27g brand followed by Melto 27g (14.36%) and treat 18g (13.76%) in the year 2009-10. In 2010-11, Turbo 15g (15.97%) got highest percentage of the total profit followed by Éclair 320g pouches (15.16%) Cream 25g (13.35%) respectively. And in the year 2011-12, Cream 21g got (14.73%) highest percentage of the total profit followed by Melto 21g (9.48%) and Turbo 15g (8.69%) respectively.

4.2.7 Top Ten Profited Semi-finished Products of CAMPCO from the Year 2009- 10 t0 2011-12

The details of Top Ten Profited semi-finished Products of CAMPCO from the Year 2009-10 to 2011-12 are presented in the Table 4.11. The CAMPCO got 38.23 Percentage of profit to the total profit from the Cocoa butter followed by Cocoa powder 10-12% - 25kg (25.76%), and Cocoa powder 10-12% dark (11.35%) in the year 2009-10. In 2010-11, Cocoa Powder 10-12% Dark (40.26%) got highest percentage of the total profit followed by Milk Couverture (18.81%) Cocoa Powder 10-12% -25Kg (7.50%) respectively. And in the year 2011-12, Cocoa Powder 10-12% Dark got (38.30%) highest percentage of the total profit followed by Plain Chocolate PVM (8.46%) and Cocoa butter (7.37%) respectively.

4.2.8 Profit of CAMPCO from Job Work

The profit revealed by CAMPCO from the year 2009-10 t0 2011-12 are presented in the Table 4.12. It could be revealed that the CAMPCO got profit from jobwork from the companies viz M/S. Nestle India Ltd, M/S. Watanmal & Boolchand, M/S. Cadbury India Limited Hongkong, M/S. Lotus Chocolate Company, M/S. Milma and M/S. KMF, Bangalore. It got a total profit of Rs. 2,90,79,870 in the year 2009-10, decreased to Rs. 2,00,98,894 in 2010-11 and it further increased to Rs. 2,31,17,481 in the year 2011-12.

Table 4.10: Details of Top 10 Profited Products of CAMPCO from the Year 2009-10 to 2011-12

Sl. No.	2009-10		2010-11		2011-12	
	Products	**Percentage of profit to the total**	**Products**	**Percentage of profit to the total**	**Products**	**Percentage of profit to the total**
1.	Cream 27g	16.77	Turbo 15g outer	15.97	Cream 21g	14.73
2.	Melto 27g	14.36	Éclair 320g pouches	15.16	Melto 21g	9.48
3.	Treat 18g	13.76	Cream 25g	13.35	Turbo 15g outer	8.69
4.	Éclair 350g pouches	9.25	Melto 25g	8.95	Éclair 300g pouches	8.42
5.	Krunchos 23g	8.97	Krust 15g	8.90	Megabite 15g	7.49
6.	Cream 8g	8.57	Treat 15g	8.68	Cream 8g	7.33
7.	Krust 15g	7.83	Megabite 15g	8.08	Krunchos 20g	7.28
8.	Minibar 7g	7.69	Cream 8g	8.04	Coffee Eclairs Jars	5.36
9.	Turbo 18g outer	7.51	Krunchos 23g	5.52	Krust 13g (vanilla)	4.49
10.	Megabite 15g	7.30	Treat 18g	3.86	Krust 15g	3.81

Table 4.11: Details of Top 10 Profited Semi-finished Products of CAMPCO from the Year 2009-10 to 2011-12

Sl. No.	2009-10		2010-11		2011-12	
	Products	**Percentage of profit to the total**	**Products**	**Percentage of profit to the total**	**Products**	**Percentage of profit to the total**
1.	Cocoa butter	38.23	Cocoa Powder 10-12% Dark	40.26	Cocoa Powder 10-12% Dark	38.30
2.	Cocoa powder 10-12% - 25kg	25.76	Milk Couverture	18.81	Plain Chocolate PVM	8.46
3.	Cocoa powder 10-12% dark	11.35	Cocoa Powder 10-12% - 25Kg	7.50	Cocoa Butter	7.37
4.	Pvm chocolate	7.94	Cocoa Butter	5.66	Milk Couverture	7.06
5.	Milk chocolate marbles	3.97	Liquid Chocopaste 15 Kgs	4.36	Plain Chocolate 1 Kg	6.75
6.	Cocoa powder 18-20% - 25kg	3.12	Milk Chocolate Marbles	3.81	Cocoa Powder 10-12% - 25Kg	6.68
7.	Cocoa mass	3.08	Plain Chocolate 1 Kg	2.41	Milk Chocolate 1 Kg	4.71
8.	White chokmass	2.87	Milk Chocolate 1 Kg	2.31	Milk Chocolate Marbles	3.97
9.	Milk chocolate mass	2.41	Milk Chokmass 1 Kg	1.81	Premium Plain Chocmass 1Kg	3.88
10.	Milk choco chips	2.34	Cocoa Powder 18-20% - 25Kg	1.69	Plain Chocmass Chips (Britannia)	3.07

Table 4.12: Profit Realized by CAMPCO from Job Work

Sl. No.	Job Work	2009-10 (Rs. in Lakhs)	2010-11 (Rs. in Lakhs)	2011-12 (Rs. in Lakhs)
1	M/S. Nestle India Ltd	293.90	169.63	118.66
2	M/S. Watanmal & Boolchand, Hongkong	-3.10	-4.78	12.97
3	M/S. Cadbury India Limited	_	18.78	67.58
4	M/S. Lotus Chocolate Company	_	6.31	2.82
5	M/S. Milma	_	11.04	15.77
6	M/S. KMF, Bangalore	_	_	13.36
Total		**290.79**	**200.98**	**231.17**

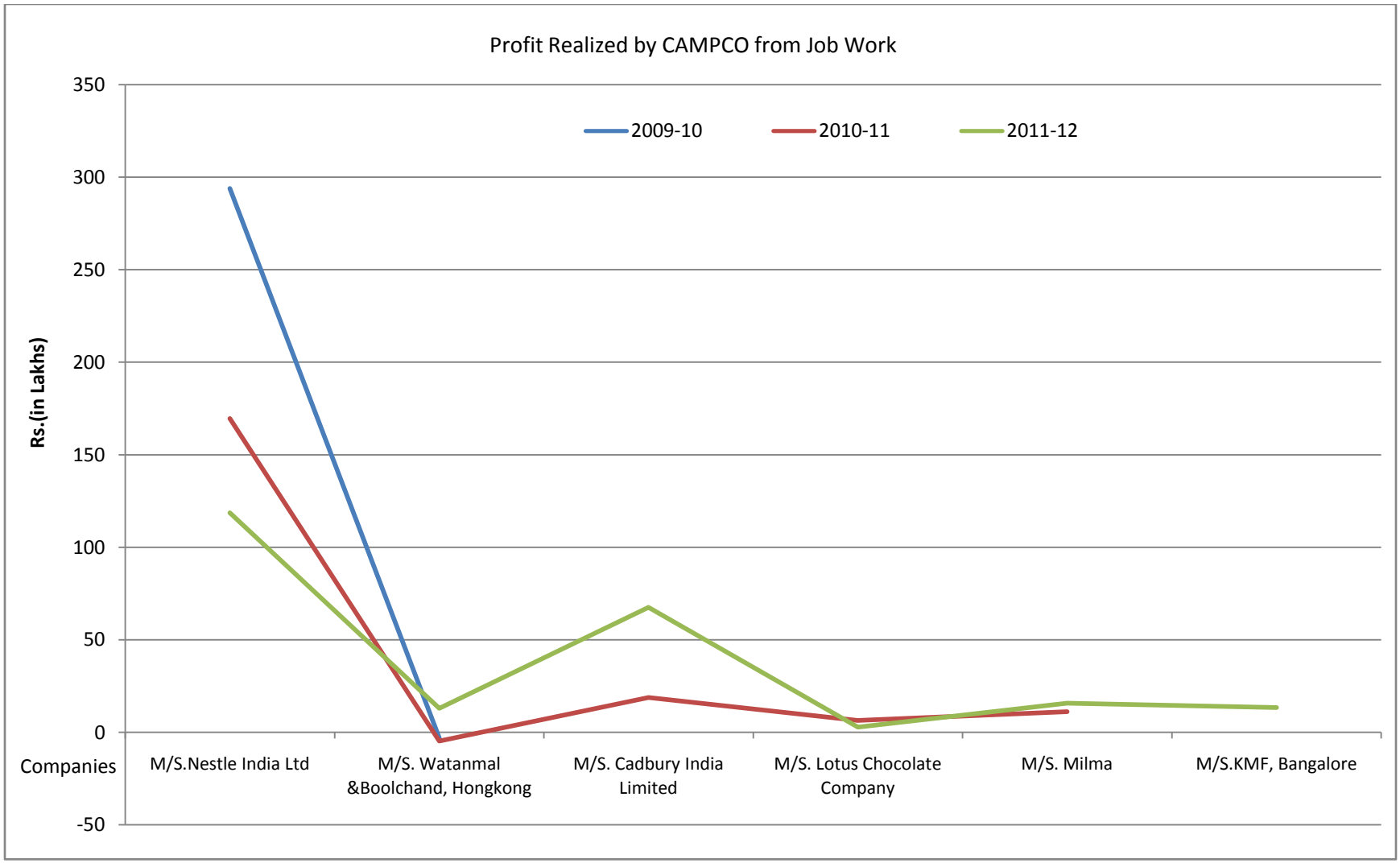


Fig. 4.4: Realization of Profit from CAMPCO by Job Work

Table 4.13: Major Buyers of Finished Products from CAMPCO Chocolate Factory

Sl. No.	Company Name
1.	Amul
2.	Britannia Industries Limited
3.	ITC Limited
4.	Jindal Food
5.	Cadbury India Limited
6.	Hangyo Ice Creams Private Ltd.
7.	Ideal Ice Cream
8.	Nestle India Ltd
9.	Valsad District Cooperative Milk Producers' Union Limited
10.	Mother Dairy,Gandhinagar
11.	Perfetti Van Melle India Private Ltd.
12.	Lotte Foods India Private Limited

Source: Account section, CAMPCO Chocolate Factory, 2013.

4.3 Problems in Marketing of Cocoa Products.

- Entry of too many companies and products in the market.
- Advertisement is very expensive.
- Non availability of sufficient fund in time.
- Transportation is a major problem because of frequent increase in prices of diesel.
- Less fund allocation for promotional activities.
- Non-availability of cold storage in the interior may affect the quality of cocoa products.

  Therefore, it was suggested to promote the CAMPCO Chocolate brand through aggressive marketing, involving sales promos, advertisement, sponsoring, competitive price etc.

DISCUSSION

CHAPTER V
DISCUSSION

The results of the investigation presented in the preceding chapter are discussed in detail in this chapter. The discussions are made under the following heads.

5.1 Forms and channels of procurement by CAMPCO

5.2 Processing cost and total profit of CAMPCO products

5.3 Profited products of CAMPCO products

5.4 Problems in marketing of Cocoa products

5.1 Forms and Channels of Procurement of CAMPCO

The CAMPCO ltd was established in 1973 with the objective of procurement, processing and marketing of arecanut, cocoa and rubber. The area of operation of CAMPCO was extended to the Karnataka and Kerala but for the marketing activity, it has been extended to whole country.

The percentage annual compound growth rates of procurement, quantity and value of CAMPCO are estimated. The result of analysis (Table 4.1) indicated that procurement of cocoa pod had negative growth (with the growth rate of -9.78) because the growers switched on from sale of cocoa pods to sale of cocoa wet beans in expectation of higher returns. Therefore the positive growth of cocoa wet beans (with the growth rate of 2.90) and the procurement of cocoa dry bean also shown positive growth(with the growth rate of 79.94) because the CAMPCO launched a chocolate factory for which cocoa dry beans were one of the important inputs. So, there is more need of cocoa dry beans this resulted in purchase of cocoa dry bean from private party. The same result is indicated by Jagadish Alse (1998).

The month-wise procurement of cocoa pod by CAMPCO for the year 2012-13 is indicated in Table 4.2. and Fig.4.1. It shows the quantity and value of cocoa pod procurement. The monthly procurement of cocoa pod is suddenly increased and reached maximum in the month of June. It might be due to more irrigation (because it is a rainy season crop). Fig 4.2 shows that the quantity and value of cocoa wet bean is more in the month of June because of more crop yield in that month. Fig 4.3 shows that the CAMPCO procured dry bean from farmers and other parties are more in the month of March and May. It may be due to demand of cocoa dry bean is more in that month.

5.2 Processing Cost of CAMPCO Products

5.2.1 Processing Cost of Finished Products

It can be seen from the Table 4.5 that CAMPCO is producing 55 different products by different names. In that Melto is producing in five different quantities viz., 8g, 10g, 21g and 25g. In that production of Melto 21 g is more and the processing cost is Rs. 1,67,110/tonne.

Funtan is also produced in five quantities, here in that production of Funtan 19g is more and the processing cost is Rs. 2,19,316/tonne because of its good taste and colour. Processing cost of both Melto and Funtan is Rs. 18,45,430/tonne. They also produce Krust and Funda in different flavours to increase its consumption. And the processing cost of both is Rs. 20,08,178/tonne.

CAMPCO produces more of éclair types viz., melto, strawberry, coffee etc., because processing cost of these products is less compared to other CAMPCO products and also its marketing margin is high. The total processing cost of all finished products is Rs. 67,50,254/tonne.

5.2.2 Total Cost of Finished Products

The total cost of finished products for the year 2011-12 (Table 4.6) indicates that the overall total cost of CAMPCO includes total processing cost of Rs. 67,50,253/tonne, marketing cost of Rs. 33,16,827/tonne, excise duty on percent of the MRP of Rs. 10,69,163 and freight cost of Rs.3,02,500/tonne. The total cost of all finished products of CAMPCO is Rs. 1,14,38,744/tonne.

5.2.3 Profit of Finished Products

It is observed that the total profit of CAMPCO in the year 2011-12 was Rs. 3,30,42,741.53/tonne (Table 4.7). As though some of the products like Funtan 25g, mini bar 7g, melto eclairs, eclairs, winner and assorted gift boxes brought loss to the company but all other products gained profit and contributed in 8-9 percent share in chocolate market in India. In the total profit, the profit per tonne is Rs. 7,41,505/tonne. They manufacture assorted range of products to attract low and high price elastic consumer.

5.2.4 Processing Costs of Semi-finished Products

CAMPCO produces 34 different varieties of semi-finished products (Table 4.8). The processing cost of cocao powder is more compared to other semi-finished products because of high cost of raw materials. The total processing cost is Rs. 7,22,247/tonne. As same as finished product, semi-finished products also produced in different quantities but these were produced in Kgs.

5.2.5 Total Profit of Semi-finished Products

The total profit of the various semi-finished products for the year 2011-12 is indicated in Table 4.9. The total profit/tonne of semi-finished products of CAMPCO is Rs. 6,78,91,428. Here also some products like

Liquid Chaco paste 15 kgs and white chaco mass (low budget) caused loss and other semi-finished products gained profit. On the whole, it is observed that semi-finished products gain more profit compared to finished products because of no marketing and freight charges for semi-finished products.

5.3 Profited products of CAMPCO

5.3.1 Top Ten Profited Finished Products of CAMPCO from the Year 2009-10 to 2011-12

In CAMPCO product, Cream 27g got highest percentage of profit (16.77) in the year 2009-10, Turbo 15g got highest percentage of profit (15.97) in the year 2010-11 and Cream 21g got highest percentage of profit (14.73) in the year 2011-12 as shown in Table 4.10.

5.3.2 Top Ten Profited Semi-finished Products of CAMPCO from the Year 2009-10 to 2011-12

In semi-finished products, Cocao butter got highest percentage of profit (38.23) in the year 2009-10, Cocao powder 10-12% dark got highest percentage of profit (40.26) in the year 2010-11 and Cocao powder 10-12% dark got highest percentage of profit (38.30) in the year 2011-12, which is shown in Table 4.11. Here Cocao powder 10-12 % dark had gained highest percentage of profit in two years.

5.3.3 Profit of CAMPCO from Job Work

Table 4.12 indicated that also CAMPCO gains profits from job work like Nestle India Ltd., Watanmal and Boolchand, Hongkong, Cadbury India Ltd., Lotus Chocolate Company, Milma and KMF, Bangalore. Campco has the largest cocoa crushing capacity of 4,500 tonnes in the country. Though, it is getting only 3,000 tonnes of cocoa and the balance

capacity had been lying idle. To make use of this capacity it has entered into job work.

CAMPCO gains profit of Rs.290.79 Lakhs from job work in the year 2009-10, Rs. 200.98 Lakhs in the year 2010-11, Rs. 231. 17 Lakhs in the year 2011-12. Here we observe that the CAMPCO profits from job work have increased year by year.

5.4. Problems in Marketing of Cocoa Products

The different problems faced in marketing of cocoa products by CAMPCO were competition from well established MNC brands such as Cadbury, Nestle,etc., expensive advertisement, transportation, etc,.

SUMMARY AND POLICY IMPLICATIONS

CHAPTER VI

SUMMARY AND POLICY IMPLICATIONS

Cocoa is cultivated as intercrop in Coconut and Arecanut garden in India. The production of cocoa in India is 18,000 tonne. India also imports some cocoa for its domestic market. Kerala is the highest cocoa growing area in India followed by Karnataka, Tamilnadu and Andra Pradesh. The cocoa growing is increasing day by day because it requires minimum labour compared to other crop.

Cocoa is basic raw material for chocolate industries. It needs to be pulverized before preparing different products. Chocolate consumption is gaining popularity in India. Therefore, the demand of cocoa increasing both at the National and International level. In India, Cadbury, Nestle, Jindal foods, Amul and CAMPCO are the major players of the Chocolate. They procures cocoa and produces chocolate and chocolate based products.

In India, to secure a good quality raw material for chocolate production, Cadbury India, Amul, Jindal foods and CAMPCO encouraging farmers for cocoa cultivation. CAMPCO is a co-operative agency and it procures cocoa from farmers in India. It was established in the year 1973 and its head office is at Mangalore. It has Chocolate Unit which is located at Puttur. The CAMPCO procures arecanut and rubber also.

It produces finished and semi-finished products in its unit. The sale of CAMPCO chocolate is Rs.18061.83 with the quantity of 91914.20 in the year 2012-13. But the market share of Campco is less compared to other major chocolate industry it may be due to less area of operation and quality of products. Therefore, a detailed study of procurement and

processing of cocoa by CAMPCO could be help to evaluate the CAMPCO and Cocoa crop. The specific objectives of the study are:

1. To analyze the pattern of procurement of cocoa by CAMPCO,
2. To analyze the processing cost and returns of CAMPCO Ltd and
3. To assess the problems in marketing of cocoa products**.**

6.1 Methodology

The data were collected both primary and secondary data. The information regarding the procurement, processing and marketing problems were collected from officials of the CAMPCO Ltd using pre-tested structured schedule. The secondary data was collected from the published annual reports, documents maintained by CAMPCO Ltd. And the data were collected for the period from 2009-10 to 2011-12. The data collected was analyzed by using various techniques viz., Compound Growth Rate Analysis (CGRA) and tabular analysis.

6.2 Major findings of the study

- The compound growth rates in respect of physical indicators viz., quantity and value of cocoa pod, cocoa wet bean and cocoa dry bean were all not significant except for value of cocoa wet bean, value and quantity of cocoa dry bean.

- The CAMPCO made immediate payment to the member farmers immediately after purchase of cocoa.

- The procurement of cocoa pod is more in the month of June (Value of Rs. 0.23 Lakhs), cocoa wet bean procurement is more in the month of May (Value of Rs. 680.23 lakhs) and the procurement of cocoa dry bean is more in the month of March(Value of Rs. 385.55 Lakhs).

- The total processing costs involved for preparation of different finished products were Rs. 6,75,0254 and the total profit is Rs. 33,042,741.

- The total processing costs involved for preparation of different semi-finished products were Rs. 7,22,247 and the total profit is Rs. 6,78,91,428.

- The CAMPCO revealed profit from job work to companies like Nestle India Ltd., Watanmal and Boolchand, Hongkong, Cadbury India Ltd., Lotus Chocolate Company, Milma and KMF, Bangalore and the profit is Rs. 231 lakhs/tonne in the year 2011-12.

- The CAMPCO produces large quantity of semi-finished products because the CAMPCO has large number of buyers for semi-finished products.

- CAMPCO products are available in different kind and in various quantities. These will help the consumer to choose the required quantity.

- The major problems faced in marketing of cocoa products by CAMPCO were competition from well established MNC brands such as Cadbury, Nestle,etc., advertisement is very expensive, etc,.

6.3 Conclusion

- The Central Arecanut and Cocoa Marketing and Processing Cooperative Ltd (CAMPCO), the Mangalore-based multi-state cooperative of Karnataka and Kerala, it operates all over India mainly on procurement, processing and marketing of cocoa.

- There is a great demand for cocoa both at national and global level. So that the price and procurement of cocoa increasing day by day.

- The demand of cocoa will be increase because recently, there was news that world will run out of cocoa products by 2020. Expert has warned that the world will run out of cocoa-the basic ingredient of chocolate within the next seven years due to pressures of rising global demand.

- The processing of cocoa by CAMPCO made it to stand good position in the market.

- The CAMPCO also increase its profit by work done of other chocolate industries.

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CHAPTER VII

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