Chapter - I

INTRODUCTION

Milk was a commodity for charity in this country and was not a marketable commodity in the past. Now there has been a phenomenal change in the outlook and attitude of the people. Milk has grown to the stature of Dairy Industry. Dairying became a subsidiary of agriculture and now in stature and economic importance it has overshadowed agriculture and has been playing a critical role in development of rural India.

1.1. Background

John P Lewis aptly remarks India’s struggle to achieve a Radical Economic Transformation by peaceful means is apt to be won or lost in the countryside. Agriculture is the culture of our sub continent from ancient times. When Europe was dependent on hunting but this sub continent was familiar with rice, sugarcane, cattle and animal rearing. Agricultural progress is normally regarded as a prerequisite of economic development.

Since ancient times India has been called as agrarian economy as 75% of the population still depend on agriculture for their livelihood directly or indirectly. This trend is changing with the passage of time and in the post globalized environment, the contribution of agriculture to GDP has reduced substantially but the dependence of population on agriculture still remains at 60 per cent. In India Dairying is the second important subsidiary occupation in rural areas. Livestock, sub-sector alone generates 25 per cent of the total value of agricultural GDP. The development of Dairy Industry in India is well known because of White Revolution, which has
played significant role in the development agenda of India. Dairy farming is visualized by the farmers in India not as a separate business entity, but inclusive in the agricultural system where dairy and agriculture complement each other.

**1.2. Milk- India’s White Hope**

Excessive dependence on Agriculture without any quality transformation will harm the growth of the nation. Despite 60% of the population being dependent on Agriculture, the rural economy persistently continues to reel under poverty. Instability of prices, natural calamities, unscrupulous role played by the middlemen have pushed the farmer to a miserable condition. Migration of the rural masses to the city is the cumulative consequence of these factors. In this situation milk came as a boon to the farmer. The emphasis has shifted from mere Agriculture to other subsidiary occupation like, Dairying and Horticulture. Between the two, Dairying has become more organized and has been a source of regular income to the farmers. Indeed Dairying has brought about a sea change in the life of rural India.

As milk is consumed by people of all ages and income groups, the dependence for milk has been consistently on the increase. Since it has medicinal properties its use has been suggested as a curative substance.

Dairying has grown to the stature of an Industry. Co-operative unions and corporate bodies in India have come into being to organize the Dairy Industry in this country. The co-operatives all over the country have played an important role in the Dairy industry and of late the companies have come into being in the private sector.
1.3. Four Phases of Dairy Industry

Conveniently the growth of Diary Industry can be identified in four distinct phases viz.,

(i) Traditional phase covering traditional milk
(ii) Traditional milk and milk products
(iii) Modern milk and Dairy products
(iv) Manufacturing of functional foods suiting to different class of consumers.

In First Phase the Dairy Industry was non existence in its present form. However, individuals who use to rare one or two milking animals use to sell the surplus after domestic consumption to non-farmers at a price informally fixed without any scientific rationale. For that matter to begin with, milk was a charitable commodity and later the surplus was sold without expecting a return.

The milk marketing assumed a little bigger dimension in Phase Two. Here besides milk the traditional milk products were also generated. The products included butter, curds and butter milk. Of this, butter was tradable commodity whereas other two were given in charity. In recent days all the by-products of milk have become a tradable commodities. With the modernization of the Dairy Industry, consumers are craving for traditional milk and milk products which of course difficult to get in the market.
The Phase Three represents formation of the Dairy Industry itself. In this phase Dairies were organized either as co-operatives or corporate bodies. The emphasis is shifted from a tiny scale activity at the farmer’s level has moved into the villages, district, state and the nation. Small scale operation has given the way to large and massive scale operation. From sheer milk procurement and distribution the activity has diversified into producing many forms of milk as well as new and untried milk products through scientific synthesis of milk. These products include ultra high temperature treated milk, fat free milk, lactose free milk, cultured milk with food additives, pro-biotic curds, pro-biotic ice creams, sugar free ice creams and sweets. In this phase the Dairy Industry was performing the role of procurer, processor and distributor. To enhance milk procurement, incentives were given to farmers such as veterinary facilities, balanced cattle feed etc. For physical assembly of milk noodle points were created in villages and talukas. Transport arrangements were made available to smoothen the assembly process. Further as a distributor and marketer a professionalized approach for marketing the Dairy products is been followed in this phase. In nutshell Dairy Industry in the form of a most sophisticated, mechanized and computerized was in existence.

The Fourth Phase is the extension of phase III. Besides continuing the activities of Phase III, in the IV Phase, a new dimension has been added. Here the emphasis is laid on the formation and production of functional foods as well as nutritional foods. Of course this Phase in India appears to be the forte of private sector.
In the ultimate analysis it may be stated that, the Dairy Industry has passed through several Phases of growth, each Phase have some uniqueness in development.

1.4. Indian Dairy Industry – Present Scenario

Quantitatively the growth registered by the Dairy Industry has been consistent. Seeing the potential of the Industry, of late there has been an entry of private sector companies into the field.

India’s Dairy sector is expected to triple its production in the next 10 years in view of expanding potential for export to Europe and the West. Moreover, with WTO regulations expected to come into force in coming years, all the developed countries which are among big exporters today would have to withdraw the support and subsidy to their domestic milk products sector. Also India today is the lowest cost producer of per litre of milk in the world, at 27 cents, compared with the U.S at 563 cent. Also to take advantage of this lowest cost of milk production and increasing production in the country, multinational companies are planning to expand their activities here. Some of these milk producers have already obtained quality standard certificates from the authorities. This will help them in marketing their products in foreign countries in processed form. In Table-1 milk production trends from 2005-06 to 2020 have been presented.
### Table 1.1
India’s Projected Population, Milk Production and Per Capita Availability, 2005-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (million)</th>
<th>Milk Production (million tonnes)</th>
<th>Per Capita Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>1,080</td>
<td>94.5</td>
<td>240 87.5</td>
</tr>
<tr>
<td>2006-07</td>
<td>1,094</td>
<td>97.0</td>
<td>243 88.6</td>
</tr>
<tr>
<td>2007-08</td>
<td>1,110</td>
<td>100.0</td>
<td>247 90.1</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,127</td>
<td>103.5</td>
<td>252 91.8</td>
</tr>
<tr>
<td>2009-10</td>
<td>1,144</td>
<td>107.0</td>
<td>256 93.5</td>
</tr>
<tr>
<td>2010</td>
<td>1,161</td>
<td>111.0</td>
<td>263 96.0</td>
</tr>
<tr>
<td>2015</td>
<td>1,246</td>
<td>134.0</td>
<td>296 108.0</td>
</tr>
<tr>
<td>2020</td>
<td>1,331</td>
<td>165.0</td>
<td>340 124.0</td>
</tr>
</tbody>
</table>


It may be seen that milk production has increased from 94.5 million tonnes in 2005-06 to 111 million tonnes by 2010. Further, the production is projected to touch 134 million tonnes by 2015 and 165.0 million tonnes by 2020. It may be further noted that per capita availability has risen from 240 grams per day in 2005-06 to 263 grams per day by 2010. The projected data in this regard is 296 in 2015 and 340 in 2020. Such increasing tendencies are noticed even in year wise per capita availability expressed in terms of kilograms.
India owns the largest livestock population in the world consisting of 194 million cows and 155 million buffaloes. Total cattle population in the country as on October 2006 stood at 473 million. More than 50 per cent of the buffaloes and twenty per cent of the cattle in the world are found in India and most of these are milching cows and buffaloes.

Indian Dairy sector contributes the large share in Agricultural Gross Domestic Products. Presently there are around 70,000 village dairy cooperatives across the country. The co-operative societies are federated into 170 district milk producers unions, which in turn have 22 state co-operative dairy federations. Milk production gives employment to more than 72 million farmers. In terms of total production, India is the leading producer of milk in the world followed by United State of America. The milk production in 2009-10 was estimated at 111 Million Metric Tonnes. Out of this total produce of 111 Million Metric Tonnes, cow milk constitutes 66 million metric tonnes while rest is from other types. All these highlight the socio-economic importance of Dairy industry in the country.

While world milk production declined by 2 per cent in the last three years, according to FAO estimates, India’s 3.9 per cent annual growth of milk production between 1995-96 and 2009-10 surpasses the 2 per cent growth in population, the net increase in availability is around 2 per cent per year. The milk production in India accounts for more than 13% of the total world output and 57% of total Asia’s production. The top five milk producing nations in the world are India, USA, Russia, Germany and France.
1.5. Succour to the Farmer – NDDB

The National Dairy and Development Board (NDDB) was founded in 1965, with the mission of organizing poor milk producers, thereby transforming dairying into an instrument for the economic development of rural India. The formation of the NDDB stemmed from the vision of the then prime minister of India, the late Lal Bahadur Shastri, to extend the success of the Kaira Co-operative Milk Producer’s Union (in the state of Gujarat) to other parts of India. NDDB launched ‘Operation Flood’ programme in 1970’s with the World Bank assistance and this programme lasted for 19 years and now India is considered as world’s largest milk producing nation. During this period, dairy commodity surpluses were building up in Europe. Imports from Europe had already adversely affected the dairy industry in India. Imports by individual players in India would have resulted in a market glut and a fall in the prices throughout the country.

With the backing of Government and with the assistance if the World Food Programme, NDDB imported food aid in the form of Milk Powder and Butter Oil, and marketed it under its own brand name. The surplus from these sales was invested in the expansion of the co-operative movement in the dairy industry. Operation Flood’s II and III started in 1984 and 1987 covering the remaining parts of Karnataka. Thirteen milk unions are organized in 176 talukas of all 28 districts then and field work was extended by organizing more Milk Producer’s Co-operatives Societies.
As on March 2008, India’s 1,17,577 village dairy co-operative federated into 170 milk unions and 15 federations procured on an average 21.5 million liters of milk every day. 12.4 million farmers are presently members of village dairy co-operatives. Since its inception, the Dairy Board has planned and spearheaded India’s dairy programmes by placing dairy development in the hands of milk producers and the professionals they employ to manage their co-operatives. In addition, NDDB also promotes other commodity based co-operatives, allied industries and veterinary biological on an intensive and nation-wide basis.

1.6. Third Sector and Dairy industry

The Co-operative movement started in India in the last decade of the 19th century with a view to release the farmers from the clutches of money lenders and to improve the economic conditions of the farming community as a whole. With the setting up of Agricultural Co-operative Banks, the movement took root in our Land and slowly gained strength. However, the growth of Co-operative movement in India during British rule was very slow and haphazard. The foreign rulers had only made some committees or framed few rules and regulations. But they did not take any wide-ranging programmes to spread the movement all over the country. The golden era of Co-operative movement began after India gained independence. Within two decades of independence the membership of primary societies had increased four times while the share capital and working capital increased by 23 and 31 times respectively.
The history of Dairy Development Movement in India is comparatively of recent origin. During the pre-independence period this movement was limited to a few pockets of Calcutta, Madras, Bangalore and Gujarat. The most notable of this venture was Kaira District Co-operative Milk Producers Union Limited Gujarat. But after independence the National Government took great initiative in setting up new dairy Co-operatives in many parts of the country. The National Dairy Development Board (NDDB) was set up to make the ambitious project a success. The positive role that dairying could play in providing income and employment opportunity was clear to policy-makers long time back and a set of measures were put in place to develop and protect the dairy industry. Immediately after India gained independence, to develop and protect the dairy industry the Milk Control Board was set up which controlled the supply and distribution of milk. This however, led to the emergence of a set of middlemen and the share of producers in the sales declined. With processing units set up in cities, it became difficult to procure and transport milk from the centers of production to the center of processing.

1.7. Liberalization of the Dairy Sector in India

It is the known fact that the corner stone of India’s milk revolution has been the co-operative sector. This is due to the policy pursued by the successive Governments towards the development of Dairy Industry. Formation of Indian Dairy Corporation was a step in right direction. The competition from private sector was controlled through licensing under the Industrial Development and Regulation Act of 1951, which discouraged new entrants into the dairy processing sector. A suitable price-environment was created and it was considered as a key for the impressive growth in
this sector. All this changed in the early nineties when major financial and trade policy reforms were initiated in all sectors of the Indian economy including the dairy sector. The first step was to encourage private participation and the dairy industry was de-licensed in 1991. That dairy is a lucrative business became obvious when within a year of de-licensing; more than 100 privately-owned milk processing plants came up in the major milk producing states. Despite their numerical strength, the co-operative sector did not have the capacity to compete with these private players.

Realizing this, the government had to step in again and the Milk and Milk Products Order (MMPO) was issued in 1992 under the Essential Commodities Act (ECA) to regulate production of milk and dairy products. The MMPO reintroduced licensing and also required private players to set up their own zones of procurement (milk-sheds) that were beyond the existing milk-sheds of co-operatives. This was done to check private players from poaching on milk-sheds of the co-operative sector. However, swept by the wave of liberalization, the government again amended the MMPO in 2001 and allowed State Governments to grant a one-time license to the private sector, and also abolished its renewal. In 2003, restrictions on setting up milk processing and milk product manufacturing plants and also the concept of milk-sheds were eliminated. The amended order emphasized sanitary, hygiene, quality and food safety of milk and milk products. Contract Farming Schemes in the Dairy sector has been permitted and notable sops being offered to the private sector include reimbursement of 10 percent of the funds invested (up to Rs 1 million) by a processor to strengthen the backward linkages, reduction in excise duties on processed
foods and reduction in corporate taxes. Based on the Model Co-operative Law, the Multi State Co-operative Society Act of 1984 was amended and State Governments were asked to amend their Acts on similar lines. This, according to the Government, will make the system ‘market driven’, a well understood code for privatization and competition. Village co-operatives are now expected to run on commercial lines as corporate entities.

1.8. Statement of the Problem

As mentioned earlier, the Dairy industry has registered a Quantitative growth. But often questions are asked about the functioning of the Milk Producer's Co-operative Societies Union. These include (a) Whether these unions have achieved their objectives for which they have been set up? (b) Whether the farmers are economically benefited by these unions? (c) What hurdles these unions face at production and processing centers? (d) Whether the men, materials and money are properly managed? (e) What are the perceptions of the farmers about the functioning of these institutions? (f) How the functional areas in the organization are managed? and (g) Whether the Government policies towards the development of this industry are conducive? These and many more questions appeared before the researcher when he studied the literature pertaining to Dairy industry in the Country. The present Study tries to find answers to some of the questions taking a Case Study of Kolar and Chikkaballapur Milk Producers Co-operative Societies Union.
1.9. Objectives of the Study

The major objective of the present Study is to evaluate and analyze the Working of Milk Producer’s Societies Co-operative Union in KOMUL. However, the specific objectives of the study are:

1. to look into the milk procurement and production enhancement measures of MPCSU-KOMUL;
2. to examine the productivity related issues which have an influence on the overall cost and revenue of KOMUL;
3. to study the marketing mechanism relating to the sale of milk and milk products of KOMUL;
4. to check whether Integrated Business Plan (IBP) of KOMUL is focused and goal oriented; and
5. to suggest policy measures in the light of the findings of the study for effective functioning of KOMUL.

1.10. Hypotheses

To serve as a basis for investigation with the above mentioned objectives, the following Hypotheses were set;

Hypothesis - 1

*Ho: Null Hypothesis*

Increase in Milk production is negatively related to the procurement measures initiated by KOMUL.
**Ha: Alternate Hypothesis**
Increase in Milk production is positively related to the procurement measures initiated by KOMUL

Hypothesis – 2

**Ho: Null Hypothesis**
Productivity trends are on the increase consistently with time.

**Ha: Alternate Hypothesis**
Productivity trends are on the decrease consistently with time.

Hypotheses - 3

**Ho: Null Hypothesis**
Dairy Retailers negatively perceive the Marketing efforts of KOMUL

**Ha: Alternate Hypothesis**
Dairy Retailers positively perceive the Marketing efforts of KOMUL

Hypotheses - 4

**Ho: Null Hypothesis**
Quantitative targets and achievement levels have non linear relationship

**Ha: Alternate Hypothesis**
Quantitative targets and achievement levels have linear relationship
1.11. Materials and Methodology

The researcher has gathered the relevant data from primary and secondary sources. The secondary data was gathered from books, journals and the research work carried out in this area. Published reports by the milk unions at the State and the National levels have been a source for the secondary data. Further, the primary data was gathered through administering a questionnaire to randomly chosen respondents. The sample frame of the respondents is given below:

Sample Frame:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Actual No.</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk Co-operatives</td>
<td>1606</td>
<td>350</td>
</tr>
<tr>
<td>Dairy Agents</td>
<td>380</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>1986</td>
<td>500</td>
</tr>
</tbody>
</table>

Since the socio-economic profiles of the respondents indicate that they are educated and well informed, the researcher used both the questionnaire and interview methods to gather the data. Since the universe was big, a sample of 350 Dairy Co-operative Societies, 150 Dairy Retailers were chosen as our respondents. Luckily the response from the sample members was 100 per cent. For the analysis of the survey data, SPSS Software has been used. Further, statistical tools like Likert’s scale, Graphs, Descriptive Statistics, F-Test, T-Test, Z-Test and Regression analysis have been used.
1.12. Scope of the Study

Dairy industry in the country has set its root all over the country by spreading its tentacles both horizontally and vertically. To express quantitatively there are 175 district milk unions and 15 State milk federations. About 60 per cent of the farming community depends on the Dairy industry directly or indirectly. To carryout a microscopic focused research the present study limits its scope to the Karnataka State taking KOMUL for a case study. Studies are available on the perception of the farmers towards the societies. Hence, this study confines to analyze the perception of the office bearers of the Dairy co-operatives who collect milk from the farmers and supply to district milk unions. Again the study concentrates on the procurement function, processing function, marketing function and finance function of KOMUL. Deliberately human resource function has been kept out of the purview of the present study, as our literature survey revealed that sufficient number of studies on the human resource function have been carried out by individual and institutional researchers. Further, the secondary data gathered is confined for the period 2004-2010.

1.13. Limitations of the Study
An empirical study of this kind has to have some limitations. At the outset these are listed below:

a) The Study has carried out a perceptual analysis based on the opinion expressed by the respondents. There was no occasion to cross check the veracity of the opinions.
b) Since the universe was big, researcher has taken a reasonable sample and the inherent limitations of the sampling are well recognized.

c) Time and finance were the other constraints of the study.

However, honest attempt has been made to present data accurately as far as possible to arrive at logical inferences.

1.14. Chapterisation

The entire treatise has been presented in the following Seven chapters:

I- Introduction
II- Literature Survey
III- Dairying in India
IV- Co-operative Milk Unions
V- Profile of the Study Area
VI- Analysis of Survey Data
VII- Summary of Findings, Suggestions and Conclusion.