Chapter 1

INTRODUCTION

Livestock are important to the livelihoods of a large percentage of rural population and Livestock related interventions are found to be a successful strategy for poverty alleviation all over the world. About 900 million of the world’s 1.2 billion extremely poor people live in rural areas and most of them rely on agriculture as a livelihood option and livestock keeping is crucial for the rural poor. Approximately 600 million poor smallholders keep nearly one billion heads of livestock. Livestock contribute 40% percent of the global value of agricultural output and support the livelihoods and food security of almost a billion people. Food security exists “when all people at all times have access to adequate levels of safe, nutritious food for an active and healthy life and livestock sector is central to food security, not only for rural small holders who rely directly on livestock for food, incomes and services, but also for urban consumers who benefit from affordable high quality animal based food” (FAO, 2009) Livestock keeping is traditionally linked to the culture of rural India as a key livelihood and risk mitigation strategy. It contributes to the livelihood of the poor in many ways - income from products, insurance against drought, emergency cash requirements, household nutrition, fuel for cooking, manure for crops and draught power for farming. The smallholders and landless farmers together control 75% of country’s livestock resources. Since the livestock wealth of India is mostly distributed among the marginal and small landholders, any growth in the sector would be beneficial to the rural poor of India.

The livestock and fisheries sector contributed over 4.07 per cent of the total GDP during 2008-09 and about 26.8 per cent value of output from total agriculture and allied activities. Livestock
sector has been growing faster than many other sectors of agriculture in India and the Eleventh Five Year Plan envisaged an overall growth of 6-7 percent per annum for the sector. (GOI, 2010)

1.1 Dairying - A Major Livestock enterprise in India

Dairy Farming is a major livestock enterprise in India where small and marginal farmers are engaged to earn their livelihood. India has emerged as the largest producer of milk in the world in 2001 with an annual production of 84 million tonnes and continues to occupy the top position in the subsequent years and in the year 2008-09, the milk production was 108.5 million tonnes. The annual milk production of India was 17.0 & 21.2 million tonnes in the years in 1950-51 & 1968-69 respectively. The per capita availability of milk has also increased from 112 grams per day in 1968-69 to 258 grams per day in 2008-09, but still below the world average of 265 grams per day.

Dairying is recognized as an important source of income for small and marginal farmers in India since on an average 22-26 per cent of the income of the rural households is contributed by milk. A large majority of milk producers have one or two milch animals and account for about 70 per cent of milk production. Low capital intensity, short operating cycle, steady returns make dairying a preferred livelihood activity among the small and marginal farmers. Lack of other lucrative and alternate employment opportunities in the villages often make dairying the only viable option for many villagers. It helps to improve the status of rural masses especially weaker sections, consisting of small and marginal farmers and landless labourers and women of low income families.

The World Bank funded Operation Flood (OF) Programme covering all its three Phases (1970-1996) commonly known as ‘White Revolution’ was instrumental for enhancing the milk
production in the country. The importance of Operation Flood Programme was its focus on small rural producers.

### 1.2 Dairy Co-operatives: Producer Organization of the Farmers

The Anand Pattern Co-operatives formed under “White Revolution” in India, comprises of a three tier system with village level dairy co-operative societies (DCSs), which promote district level union, which in turn promote the state level marketing federation. The Anand model was replicated all over the country under Operation Flood Programme with decentralized milk production by small milk producers, milk procurement by primary dairy co-operatives of milk producers, centralized milk processing by union of dairy co-operatives and marketing of milk and milk products done by federation of unions. The primary milk producers govern the entire three tier structure to ensure that the gains at all levels come back to the benefit of the primary milk producers. According to Dr.Verghese Kurien, the chief architect of White Revolution, “the core feature of Anand Pattern model is farmer control on all the three stages, which are procurement, processing and marketing of milk and milk products. The value addition at procurement and processing stages can be realized by co-operatives only through control over marketing, thus making control over marketing an essential and critical feature for success. In contrast, many dairy co-operatives worldwide end up as suppliers of raw material to private companies as the private companies own the brands and marketing.”

Dairy co-operative movement in India has always helped to provide a safety net to the rural poor, the most vulnerable and marginalized sections of the population which otherwise suffer the worst consequences of any economic crisis (Scholten, 2011). Dairy Co-operatives have created the necessary infrastructure and marketing networks so that people in the villages can confidently
engage in dairy farming because of the assured market for their produces through the dairy co-operative network.

1.3 Constraints and Challenges faced by Co-operative Dairy Sector

The dairy co-operative networks have covered above one lakh villages in India with 11 million farmer members but about 80 per cent of milk produced in the country is still handled in the unorganized sector and the remaining 20 percent is equally shared by co-operatives and private dairies. Building up co-operative infrastructure in Non-Operation Flood areas, revitalization of sick dairy co-operatives and federations are required to enhance the market share of co-operatives in dairy sector.

The demand for milk and milk products are increasing in the country and as per the estimate of National Dairy Development Board (NDDB) and other experts in dairy sector, the projected demand for milk is about 180 MMT by 2021-22. In order to meet the estimated demand, milk production in the country has to grow by 5 MMT annually, twice the present growth of 2.5 MMT per annum. Despite an average four per cent annual growth in milk production over the past decade, India is heading for a painful shortage of milk especially in summer seasons and the situation is characterized as “White Crisis”. According to the chairperson of NDDB, "The demand for milk is increasing much faster than production" and “The higher GDP growth rate, enhanced income of rural households through programmes such as National Rural Employment Guarantee Act(NREGA) and the farm debt waiver as well as salary hike of government employees after the recent Pay Commission report are influencing the demand for milk, both in rural and urban areas and consequently consumption of milk and milk products have significantly gone up in the country”. Along with the increasing demand for milk in all parts of
the county, the increased cost of cattle feed and shortfall in milk procurement during the flush (winter) season has resulted in the increase of the price of milk in the market. (Ghore, 2010)

Cattle feed and fodder contributes over 70 - 80 per cent of the cost of milk production. According to the Economic Survey 2009-10, there is a green fodder shortage of about 34 per cent in the country. This shortage and the resultant high cost of fodder have led to about a 40 per cent increase in its cost and more than 20 per cent increase in the cost of milk production. As per Industry sources India's de-oiled cake exports had increased from Rs 3,177 crore in 2004-05 to Rs 10,000 crore in 2008-09 and this has resulted in the increase in price of oilcake in domestic market, which is a major cattle feed. Besides many common grazing grounds are diverted for other uses and seeds of good fodder varieties are not readily available.

According to N.R. Bhasin, President of Indian Dairy Association (IDA), "There is a neglect of the dairy sector, lack of investments to promote higher yield, policy lacunae regarding cattle feed and non-availability of credit to small producers." Despite dairy contributing 25- 30 per cent of the agriculture input to the GDP, it has never been given more than eight per cent of the total allocation for agriculture. B.M. Vyas, Managing Director, Gujarat Co-operative Milk Marketing Federation (GCMMF), Anand has observed that “Absence of significant initiatives after completion of Operation Flood in 1994-95 is a policy lacuna. Apart from lack of investment, we have dithered from the policy direction which we had followed during 1960s to the '90s." (Ghore, 2010)

The January 2010 report of the advisory committee constituted by the Planning Commission on animal husbandry and dairying has also commented that the overall investment made in livestock and dairy sector has been insufficient over the plan period. With the meagre budgetary allocation made to the sector, it would not be possible to achieve the desired growth rate of six per cent
targeted in the 11th Plan. The inadequate governmental support and the emerging adverse grass-root situation in the dairy sector are endangering the livelihood option of the marginal framers. The landless poor are becoming increasingly marginalized in terms of ownership as well as share in livestock population, with increasing exodus of the landless household out of live stock production due to reduced access to grazing resources, lack of access to non exploitative market and credit and other services. Farmer based organizations (co-operatives, associations) are considered as an option for small farmers to unite and stand together to overcome the hurdles in earning a decent livelihood in livestock rearing (IFAD, 2004)

The Anand Pattern Co-operative Societies formed under the White Revolution have to rediscover their organized strength and willingness of the farmers to join together in a co-operative spirit to overcome the problems they are encountering in dairy enterprise so that the increasing demand for milk and milk products in the county could be effectively utilized by increased supply of quality milk and milk products in the market under co-operative marketing networks which could ultimately results in economic gains for the village level milk producers in the country.

1.4 The Situation of Dairy Farmers in Kerala

Dairying is mainly a subsidiary occupation to agriculture in Kerala. Majority of the dairy farmers in the state are organized under village level dairy co-operatives. The Anand Model was implemented in Kerala under the second and third phases of Operation Flood Project (1980-96) with formation of Kerala Co-operative Milk Marketing Federation (KCMMF) popularly known as MILMA and the Regional Unions and village level Anand pattern Co-operative Societies (APCOS). The Period 1980-1997 was considered as a golden era in the history of dairy development in Kerala with MILMA taking leadership in all aspects of dairy development in the state viz., formation of village level dairy co-operatives, programmes for enhancement of milk
production, diary extension and veterinary services and training of dairy farmers, procurement, processing and marketing of milk and milk products including the price control of milk in the market. MILMA could replicate the successful Anand model in Kerala. The milk production in the state has reached a situation of plenty where MILMA was even struggling to manage the excess milk through production of value added products and by applying various marketing strategies to increase the sale of milk in the State. Once the contract of the Government of Kerala with National Dairy Development Board (NDDB) regarding the implementation of Operation Flood Project was over in 1996, policy of the government has changed in such a way that the MILMA became only a milk procurement and marketing agency. The foundational aspects of local level milk production namely, the administrative control of dairy co-operative societies, formation of new dairy co-operatives, dairy development initiatives, extension services and animal health care services were entrusted back to the government departments of Dairy Development, Animal Husbandry and Kerala Live Stock Development Board with MILMA having no significant roles in the key aspects of dairy development and consequently the business model of Anand Patten got weakened in the State. Excessive control of government in the dairy sector has resulted in weakening of the federal co-operative organization of the people. The leadership which was with farmers in all stages of milk production and marketing has changed in favour of officials of the departments under the government policy decision to control the administration of APCOS through Dairy Development Department. The APCOS had become units fully controlled by government department and co-operative system has weakened with the weakening of people’s organizations in the villages. The farmers had become just producers and suppliers of milk and milk price too is determined by the government.
There is a growing dissatisfaction among dairy farmers and many farmers have given up the dairy farming in search of better livelihood options. Dairying is a kind of job which demands hard work with continuous and around the clock monitoring of the milch animals. The daily routine analysis of dairy farmers has shown that the work of a dairy farmer starts at 5 am in the morning and continues till 5pm in the evening with almost 12 hours of work per day. The return on investment in terms of finance and time spend are very low and available subsides and schemes are not very effective to address the problems of the field.

Inadequate feed and fodder, low productivity of the cross breed animals and limited availability of veterinary services and poor dairy management practices among the farmers are the reported problems of the dairy sector in Kerala. The existing polices and programmes in the sector are not effective in finding lasting solutions to the persisting problems. Many a time programmes are planned and executed by officials without necessary grass root level consultation with farmers and their organizations. Animal Husbandry is not granted an equal consideration with agriculture in terms of subsidies and other services from the governmental and banking institutions. The credit facility is not adequate for dairy farming with farmers have to pay around 12 per cent interest for loans for dairy farming while agriculture enterprises are granted credit at 4 per cent by the banking institutions.

It is also observed that there is no proportionate return from dairying due to the increased cost of milk production. The cost of milk production has gone up in the state with the escalating cost of cattle feed and fodder. The declining quality of cross breed animals, non availability of around the clock veterinary services at affordable cost, and the low quality of semen supplied are the associated problems experienced by the farmers in the sector. The governmental regulation of the price of milk in the market has also affected the profitability of farmers from dairying.
Commenting on the various problems of dairy sector in Kerala, Dr. Verghese Kurian suggested his same old solution that “entrust the whole process of dairy development in the hands of the dairy farmers” i.e., the leadership should be with farmers in all stages of milk production and marketing and present challenge is how to realize autonomy to the dairy co-operative organizations with minimal governmental interference. A farmer owned and farmer controlled dairy organization with professional management alone can find sustainable solutions to the problems of sector which in turn results in social, economic and political empowerment of the lacs of poor and marginal farmers in the State of Kerala. Democratic member control and professional management are the means to achieve the development of the village level milk producers through the dairy based business enterprise which is explained by Dr Verghese Kurian as “if development of producers is the goal behind the business, then this goal could be best achieved by ensuring that the business is managed by professional and technocrats who are and ‘feel accountable to producers through their elected board’.

1.5 Significance of the Study

India is the largest milk producer of the world with an average four per cent annual growth in milk production. The demand for milk and milk products are increasing in India with socio-economic development of the country and the demand for milk is projected as about 180 MMT by 2021-22 and milk production in the country has to grow by 5 MMT annually, twice the present growth of 2.5 MMT per annum. In spite of the consistent growth rate, the dairy sector in India is expected to face the shortage of milk in the near future.

India’s white revolution under Anand model co-operative institutions had demonstrated the organized strength and capabilities of marginal farmers in leading the country to a situation of self sufficiency in milk production. The emerging situation of milk shortage, characterized by
media as ‘White Crisis’ is yet another opportunity for small and marginal farmers to reorganize themselves under their own co-operative organizations to improve the dairy development activities to enhance milk production and attain economic advantages in the globalised economy. The white revolution was realized in the context of a controlled economic environment in India but the co-operative organizations have to accommodate the dynamics of globalised economy in approaching the emerging situation where they have to compete with multinational corporate to gain benefits for their member farmers.

The organized strength of ‘the weak’ is the key to survival and growth in a competitive world. The history of co-operatives all over the world had revealed that the co-operative movements were people’s revolution against capitalism where the workers, wage earners, farmers, small income people united and helped one another for the survival and growth in a competitive world.

The co-operatives worldwide have not been seriously affected by the ‘economic recession’ and they are cushioned from the effects of global recession because co-operatives were not involved in speculative activities. The co-operative banks have shown growth with consistent upward trends in the recession hit capitalized economy. The current economic crisis is often seen as a “moral crisis” of capitalism which solely believed in realizing maximum profits. On the other hand the success of co-operatives in different parts of the world proves the feasibility and effectiveness of value based economic enterprises. Co-operatives are idealistic form of corporate structure and “concept of co-operatives guided by principles of co-operation was evolved on account of economy of scale for weaker sections of society to provide them deserved opportunities to meet their needs and earn their livelihood”. The challenges before the co-operative movement in the global recession are to defend the co-operatives and their members,
workers, consumers from repercussions of the crisis and to survive both as a business as well as a co-operative organization of people. The Green and White revolutions became possible in India due to the vast new work of co-operatives with federal characteristics. (Berberini, 2009)

Recognizing the contribution of co-operatives towards social development, United Nations Organization (UNO) has declared 2012 as the International Year of Co-operatives to highlight the importance of co-operatives in development and to create better awareness among the member nations about the prospects of co-operative organizations in enhancing socio-political and economic empowerment of people.

The Dairy Co-operative organizations in the county could strengthen its co-operative foundations so that in the continuing “economic crisis”, they could emerge as poor people’s organizations with necessary ethical basis to reap maximum benefit from the projected demand of milk and milk products in the country. The dairy co-operatives have to identify their strengths and advantages and reorganize their dairy related business to resolve various operational and structural problems so that maximum benefits could be provided for the member farmers who are the small and marginal farmers of this county.

The present study focuses on the village level diary co-operative organizations, popularly known as APCOS in Kerala which are federated under KCMMF (MILMA). The data were collected from 360 dairy farmers of 36 APCOS from Thiruvananthapuram, Kottayam and Palakkad Districts. The various aspects of dairying in Kerala with its major constraints experienced by the farmers are studied to understand the grass root situation of the dairy farmers. The perception of farmers regarding the co-operative identity, their level of awareness about the polices and programmes in dairy sector, the participation of members in the developmental activities of both
dairy co-operatives and of the villages, extent of utilization of the support services and linkages of dairy sector, and the effectiveness of leadership in dairy co-operatives are examined to identify the present scenario of dairy co-operative societies in Kerala. The study has also examined the resources and facilities created by APCOS in the villages to understand the strengths of dairy co-operatives in enhancing the dairy development activities in the villages for the better socio-economic empowerment of the small and marginal farmers. This study is significant as it analyses the multiple aspects of village dairy co-operatives and identifies the problems and prospects of dairy sector in Kerala from the perspectives of the dairy farmers. The findings of the study would provide adequate information and insights for the planners and policy makers to formulate appropriate measures/action programmes to strengthen the co-operative foundations of the diary co-operatives and to provide required autonomy to the dairy co-operatives to function as pro poor producer organizations.