ABSTRACT

Indian economy is basically a rural economy to promote, rural development there is urgent attention needed with the rural oriented projects and commitment farmers by supplying quality of milk. The cooperative movement which has not been designated as a distinct sector, even today had to fight its own battle and carve out a niche for itself in the economy. Indirect state participation through milk cooperatives, in the financial setup of Milk cooperatives became an integral part of the deliberate policy of the Government to promote Milk cooperatives. Agricultural development became a major plank of the government. Milk cooperatives were to support the massive programmes for increasing agriculture production and creating suitable post-harvest facilities. The wide network of credit movement was assisted by non-credit Milk cooperatives in various areas of socio-economic activities. There was mushroom growth of Milk cooperatives in credit and non-credit areas which has been served only with economies of scale. Both credit and non-credit Milk cooperatives had various tiers extending from primary to national levels. There was massive diversification of Milk cooperatives in all spheres of the economy be it primary, secondary and tertiary sectors. Today India is the second largest milk producer in the world in the world. This has permeated all walks of life i.e., agriculture, horticulture, credit and banking, housing, agro-industries, rural electrification, irrigation, water harvesting, labour, weaker sections, dairy, consumers, public distribution system, tribals, international trade, exports, agri-business, human resource development, information technology.

KEYWORDS: Milk cooperatives, Bangalore milk union, Agriculture

OBJECTIVES

1. To understand nature and scope of milk cooperatives in study region.
2. To understand impact of milk cooperatives on social development.

Analytical Frame:

Primary data and secondary data were analyzed using simple statistical tools such as average, data regarding the cattle census, the district milk production and productivity, animals inseminated, calves born, vaccinations, mini kits distributed, etc. for the reference period from 2000-2014 were analyzed. In addition data on social development aspects like literacy, school dropouts, infant mortality rate, malnutrition, migration, farmer’s suicides income and employment were also analyzed for the reference period.
METHODOLOGY
The present study is conducted in district leading in milk production, namely Bangalore milk union of Karnataka. The primary data were collected through the structured schedule which was developed and administered for this purpose. From each taluk 25 milk cooperative personal were selected randomly from dairy farmers of. The variables of the study included the livestock holding, land holding, dairy type/category, herd size and composition, family labour utilization, annual family income, family milk consumption pattern, inter caving period, proportion of crossbred animals, breed up gradation efforts, cost of milk production, cropping pattern, feeding practices, extension support and service delivery, technology adoption, productivity, access to market, price realization, market channels, effect of processing units/dairies, income and employment generation, Social development aspects like migration, school dropouts, infant mortality rates, malnutrition, incidence of farmers suicides, etc., Data were also collected from secondary sources of information such as official documents, records, registers and reports of Department of Animal Husbandry, Milk Unions / Private dairies.

Role of Karnataka Milk Federation in Dairying
The Co-operative Movement in India took birth in 1904 by the enactment of Co-operative Societies Act 1904 and after making a long journey it has entered into the new millennium with lots of hopes and expectations. Two movements in the last century had a cascading effect on the well-being of the vast population of this country. The independence movement got India rid of foreign yoke. Soon it was realized that political freedom had no meaning unless the country enjoyed the fruits of sustained economic growth. Independence movement was the movement of the people. And so has been the cooperative movement. Enshrined in both the movements had been the urge and aspirations of the teeming millions of India – small and marginal farmers, landless laborers, workers, members of the weaker sections of the community viz. handloom weavers, fishermen, artisans etc. who were otherwise steeped in poverty and deprived of the means and fruits of an economic upsurge for centuries. The post independence era witnessed the saga of human struggle not only to better the lot of the poor people but also to ensure equitable distribution of wealth and in this endeavor Milk cooperatives had a crucial role to play. People from various classes assembled under the umbrella of Milk cooperatives. Be it green (agriculture), white (dairy), yellow (poultry) and blue (fishery) revolutions, their success depended on the vast cooperative network spread in the nook and corner of the country. The age old institution of money lenders crumbled under the weight of credit Milk cooperatives and banking institutions in rural and urban conglomerations. Spread of the movement in non-credit sector also followed in a big way.

About Bangalore milk union
The Bangalore milk union consist of Bangalore Urban, Rural & Ramanagara Districts, The Bangalore milk union (BMUL) was established during 1975 under Operation Flood II by keeping "AMUL" as its Roll Model. At present Bamul has Bangalore Urban, Bangalore Rural & Ramanagaram Districts of Karnataka State as its area of operation for Milk Procurement and selling milk in part of Bruhath Bangalore Mahanagara Palika (BBMP) area. Since its inception the Union is constantly striving further for dairy development and marketing activities in its milk shed area. The Bangalore Milk Union Ltd., (BMUL) is a unit of Karnataka Cooperative Milk Producers Federation Limited (KMF) which is the Apex Body in Karnataka representing Dairy Farmers Co-operatives. It is the second largest dairy co-operative amongst the dairy cooperatives in the country. In South India it stands first in terms of procurement as well as sales. The Brand "nandini" is the household name for Pure and Fresh milk and milk products.

PRINCIPLES OF CO-OPERATION
- Voluntary & Open Membership Milk cooperatives are voluntary organizations, open to all individuals capable of utilizing their services and willing to assume the obligations of membership, without discrimination on the ground of gender, societal status, racial, political ideologies or religious consideration.
- Democratic Member Control Milk cooperatives are democratic organizations controlled by their members, who actively participate in laying out their policies and decision making. Elected representatives of these Milk cooperatives are responsible and accountable to their members.
- Member's Economic Participation Members contribute equitably and control, the capital of their cooperative democratically. At least a portion of the surplus arising out of the economic activity would be the common property of the Milk cooperatives. The remaining surplus could be utilized benefitting the members in proportion to their shares in the cooperative.
- Autonomy & Independence Milk cooperatives are autonomous, self-help organizations controlled by their members. If Milk cooperatives enter into agreements with other organizations, including government or raise capital from external sources, they do so on the terms that ensure democratic control by members and maintenance of cooperative autonomy.
- Education, Training & Information Milk cooperatives provide education and training to their members, elected representatives and employees so that they can contribute effectively to the development of these institutions. They also make the general public, particularly young people and leaders aware of the nature and benefits of cooperation.
- Cooperation among Milk cooperatives Milk cooperatives serve their members most effectively and strengthen the cooperative movement by working together through the available local, regional, national and international structure. Concern for Community Cooperatives work for the sustainable
development of their communities through policies approved by their members

ECONOMICS OF CO OPERATIVES
Transaction cost economics offers an approach to further probe the nature of the cooperative. Cooperatives are transaction governance structures, just like other firms (firms other than cooperatives). Depending on the lines of business that a cooperative or a firm operates, the transactions are under all possible governance modes. Cooperatives adapt to various governance modes for economizing on transaction costs, just as other firms do. For entering into credible contractual relationships with buyers (processors), the cooperative’s functions of providing market access and exercising countervailing power put its members, collectively through Some States have enacted new cooperative laws in recent years that allow cooperatives to have on patron members (investors) as well as patron members. These laws vary from serving the voting power to member patrons only to setting a minimum level of voting power for member patrons. Requirements regarding arming distribution between patron members and non-patron members also differ substantially. Differences in governance and earning distribution rules and the type of non-patron members involved (for example, for-profit investors, non-profit economic development organizations, community supporters, etc.) will cause the cooperative’s structure, organization, governance, equity financing, and operation to deviate in various ways from the uniqueness of the cooperative model that was described earlier in the report. These organization shave to be analyzed case by case because of the variety of State laws. The cooperative, on a relatively more equal footing with buyers. This should make credible contractual relationships with buyers more attainable and stable. Furthermore, as its members’ collective marketing agency, the cooperative serves as a single transaction entity for credible contracting with buyers and infuses order and eliminates conflicts among members in individually competing for customers. This should reduce the transaction cost.

COOPERATIVE MOVEMENT IN INDIA
After the establishment of National Dairy Development Board (NDDB) and introduction of Operation flood (OF) programme in the year 1970, Dairy farming is transformed from subsistence level to commercial level. It is agriculture allied activity, which offers the potential for generating additional income and employment opportunities for the rural households and improving their nutritional standards. The magnitude of income generation by an enterprise reflects its economic soundness and viability, besides income is the ultimate indicators through the impact of any development programme can assessed .With a view to exploiting the potential for dairy development in the country. In three phases of Operation flood the programme covered 262 of the total of 478 districts in the country. The approach of linking the potential milk sheds in the country with the milk unions under Operation Flood yielded rich dividends in the form of increased availability of milk to the urban consumers and remunerative prices to the rural milk producers through the mechanism of milk producers’ cooperatives. India among the world’s largest and fastest growing markets for milk and milk product. The average annual growth rate milk production has been 4% during the last decade. The average population growth is around 1.8%this shows per capita availability of milk tends to be higher. However the country’s per capita milk availability 252 grams in the year 2008, but it is lower than the words average of 285 grams. India has emerged as world’s largest producer of milk. The Indian Dairy Industry acquired substantial growth momentum from 9th Plan onwards and in 2007-08 the production of milk reached to the level of 104.84 million tonnes. The per capita availability of the milk has reached the level of 252 grams per day in the year 2007-08. Backbone of Indian dairy system is milk cooperatives. Dairy cooperatives accounts for the manger share of processed liquid milk marketed in the country. Milk processed and marketed by 170 milk producer cooperative union which federates into 15 state cooperatives milk market marketing federations. In 1964, when late Prime Minister Lal Bahadur Shastri spent a night at Ajapur, during his visit to Gujarat, was impressed with working of the village milk cooperative society. He requested Mr.Verghese Kurien, the general manager of AMUL, to extend Anand type of dairy cooperatives to other parts of the country. He also wrote to the chief ministers of different states to take the initiatives to set up Anand type milk cooperative societies. This led to the establishment of National Dairy Development Board (NDDB) in 1965 and its sister organization called Indian Dairy Cooperation in 1970 to implement a well-known programme known as Operation Flood, which essentially entails the setting up of Anand type of dairy cooperatives throughout the country.

COOPERATIVE MOVEMENT IN KARNATAKA
The first co-operative society of our country was registered in 1905 at Kanaginahal village of Gadag district in Karnataka. Sri Siddanagouda Sannaramana Gouda Patil is considered as the pioneer in the co-operative movement as he is the founder president of the said co-operative society in our country. The Mysore Co-operative Societies Act 1959 is the first legislation in our state pertaining to the co-operative societies and has come into being from 25-05-1960.Karnataka occupies third position in the co-operative movement in India. It has been playing an important role in improving the economic condition of people involved in co-operative movement and has spread to almost all sectors of economic activities, both in rural and urban areas. Karnataka is the first state where in Agricultural loans through co-operatives are available at 3% which, is the lowest in the country. This facility is also extended to the loans borrowed by weavers and fishermen. Loans are available, if borrowed through co-operatives, for self-help groups at 4%. Government of Karnataka is subsidizing the co-operatives by providing
Interest- subsidy through budgetary provisions. Since the implementation of the recommendations of Prof. Vaidyanathan Committee through MOU with Government of India, NABARD and the state Government in March 2008, the role of the state Government in respect of Agricultural credit structure Institutions has metamorphosed from the role of regulator. The first milk cooperative was set up in kodadagu dist. A new era of co-operative credit structure through self-governance and independent decision making has come in to being and it is hoped that the co-operatives will become professionally efficient and financially viable in the years to come. The state has witnessed a tremendous growth in the Cooperative Sector. In 1973, the government of Karnataka prepared a dairy development project and submitted it to the World Bank for funding. The total project cost of Rs 509.9 million was to be met by the government of Karnataka and the World Bank. The project report stipulated that the project should adopt Anand type dairy cooperative societies and NDDB should act as consultant to the project. The actual fieldwork was taken up in 1975. The project under Operation Flood-I organized the Karnataka Dairy Development Corporation (KDDC) which covered eight districts under four milk unions, namely Bangalore (Bangalore and Kolar), Mysore (Mysore, Mandya and part of Kodagu), Hassan (Hassan, Chikmagalur and part of Kodagu) and Tumkur (Tumkur and part of Mandya). Later during 1983 under Operational Flood-II all the districts were covered.

Nature of milk cooperative societies
Following are the Institutions engaged in dairying in Karnataka.

1) Primary level: Primary Milk Producers Co-operative Societies at Rural level.

2) District level: District Co-operative Milk Producers Union Ltd.

3) State level: Karnataka State Cooperative Milk Producers Federation Limited, Bangalore. (K.M.F)

The milk producers of the village with the support of the milk union form a village dairy cooperative society. The milk producers become members by buying a minimum of one share of the society and paying an entrance fee as per the bye-laws. All these members form the general body of the society, which has the supreme powers subject to the State Cooperative Act, Rules and Bye-laws. The society has an elected Managing Committee (MC) including the Chairman from amongst the member producers as per the provisions of the bye-laws. All the positions of the MC are honorary. The committee employs paid staff to run the day-to-day affairs of the society. The number of such staff depends upon the size of the business of the society. The provisions of the bye-laws govern the term of the MC and the Chairman of the society. The committee decides policy matters and frames guidelines for efficient running of the society. The committee holds its monthly meetings to discuss issues pertaining to society, members, milk producers, suggestions/guidelines provided by the Milk Union and other relevant matters. The society’s major operations can be classified in two groups: milk trading and providing input services. Milk trading involves reception, testing, local and sample milk sale, dispatch of milk to milk union, payment and accounts keeping. Input services include animal health coverage, breeding, supply of cattle feed, fodder development, clean milk production and extension services to producer members.

BANGALORE MILK UNION AT A GLANCE

Table -1

<table>
<thead>
<tr>
<th>Procurement &amp; Input</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhabited Villages</td>
<td>3,672</td>
</tr>
<tr>
<td>Milk Procurement Routes + BMC Routes</td>
<td>249</td>
</tr>
<tr>
<td>Artificial Insemination Centers single</td>
<td>260</td>
</tr>
<tr>
<td>Artificial Insemination Centers Cluster</td>
<td>121</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procurement &amp; Input</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk Producer Members</td>
<td>342170</td>
</tr>
<tr>
<td>Dairy Co-operative Societies</td>
<td>1938</td>
</tr>
<tr>
<td>Bangalore Dairy</td>
<td>6,00,000 LPD capacity</td>
</tr>
<tr>
<td>Anekal Chilling Center</td>
<td>60,000 LPD</td>
</tr>
<tr>
<td>Byrapatna Chilling Center</td>
<td>60,000 LPD</td>
</tr>
<tr>
<td>Doddaballapura Chilling Center</td>
<td>60,000 LPD</td>
</tr>
<tr>
<td>Hosakote Chilling Center</td>
<td>1,50,000 LPD</td>
</tr>
<tr>
<td>Solur Chilling Center LPD</td>
<td>60,000 LPD</td>
</tr>
</tbody>
</table>
Vijayapura Chilling Center 1,00,000 LPD
Kanakapura Chilling Center 1,00,000 LPD
Bulk Milk Coolers 215000 LPD
Number of Distribution Routes 265
Retailers 1627
Franchisee Outlets 32
Milk Parlors 32
Total Share Capital (Rs in Lakhs) 1813.33
Annual Turnover (2012-13) (Rs in Lakhs) 96597.28
Net Profit (2012-13) (Rs in Lakhs) 521.83

Source - kmf

FUNCTIONS OF A MILK PRODUCERS’ COOPERATIVE UNION
The major functions of Milk Union are

a) **Collection of milk twice a day from farmers.**
   Each society has milk collection centre either in an owned or hired premise. Each morning and evening, the milk producers bring milk in their own containers (stainless steel) to the society. A representative sample of milk is drawn for testing the quality milk. Milk is collected in milk cans or directly to the cooler as the case may be. The collection accessories are made up of stainless steel (AISI 304). The measurement of milk is done carefully so as to avoid foam, shortage etc. Quantity of milk supplied by each individual along with the sample bottle of milk is recorded against her/his name in the purchase register and the card/pass book of the pourer. In many of the societies the process is semi-automatic with the help of computer and Electronic Milko Tester placed on line. A printed slip is generated for each member giving details about the date, shift, type of milk, producer identification number, weight and fat% of milk, rate, price etc.

b) **Make regular payment to suppliers.**
   The milk union depending upon the policy it adopts on pricing decides the price of the milk. Quality and quantity form the basis for the payment. Normally a price chart or ready reckoner is prepared and supplied by the union to the societies. The society pays the pourers daily/weekly/after every ten days as per the decision of the managing committee. The relevant entries are made in the Card/Pass Book of the members and the registers of the society. Milk union generally pays the prices of milk so procured from societies through bank advice on a regular interval i.e. weekly, every ten days as the case may be. This frequency is generally not changed and is same for all the societies.

c) **Dispatch the milk collected to Milk union**
   Lids cover all the filled milk cans tightly and the cans are loaded in the milk vehicle/truck as per the time schedule of a particular society. The staff of the truck deliver the fat slip of previous shift, letters from milk union, other materials as indented by the society. This is done quickly to avoid any stoppage of the vehicle more than the schedule. The vehicle also unloads the cleaned empty cans received from the dairy plant for the use of the society for the next shift milk collection. Wherever the AMCU/Bulk Cooler is installed in the society, the milk tanker from dairy/chilling centre comes once or twice in a day as per requirement to lift the chilled milk from the society.

d) **Cleanliness**
   Milk is a perishable commodity. In order to have improved quality of raw milk and avoid spoilage besides contamination of milk, a society maintains cleanliness through the clean milk production process and techniques from producers to society level. Various activities and steps are undertaken for cleanliness of the utensils, staff, equipment/ accessories and building emphasizing procurement of clean milk.
   a. Procure, process and market milk and milk products.
   b. Arrange/Provide macro level inputs like cattle-feed, animal health and breeding care, etc.
   c. Arrange for training and education of managing committee members, staff, and members of dairy cooperative society and also for the Board members, managers and staff of the milk union.

e) **Provide to members:**
   The second important work of a society after milk trading is making available the technical inputs to the milk producers for production enhancement activities. Generally the basic facilities are owned by the milk unions and the services are provided to the members through the societies on cost / no profit no loss / grant basis as decided by the milk union. The society has a trained Artificial Insemination (AI) and Veterinary First Aid (VFA) Worker who looks after the job regularly through Single or Cluster Centre basis. Generally the milk union supplies liquid nitrogen, semen doses and veterinary medicine, cattle feed, fodder seed to the society on cost for the members. Apart from this cattle insurance and other group insurance schemes are also available for the benefits of the members. Balanced cattle feed, Fodder seeds of improved variety. Services for animal health care, Services for breeding of milch animals, Patronage based portion of the surplus.
Every morning and evening, the society buys the surplus milk from the member-producers. The producer is paid for the milk at an interval usually decided by the managing committee of the society. The payment is made on the basis of milk quality (fat, SNF, bacteriological) content of milk supplied by individual producer. The union’s dairy plant organizes the transport of milk from all its member-societies. The producers in this system are not only assured of regular and remunerative payment for their milk but also benefit from the milk production enhancement inputs. The micro-level inputs such as veterinary first-aid and artificial insemination are organized by village societies with the support of the milk union. One staff member of the society is trained for carrying out these functions. In addition, the supply of balanced cattle feed and the sale of fodder seeds are also channelized through the societies. Society also organises other services such as cattle insurance, health insurance and promotional activities for the members and the village. In general, the Union carries out five important functions: procurement, processing and marketing of milk and milk products, providing technical inputs, institutional strengthening of milk cooperatives, enhancing women involvement in dairy cooperatives, organization of extension activities and rural development services. The union owns and operates dairy plant; cattle feed plant, fodder and bull mother farms, semen collection station etc. for animal husbandry activities. In addition to the above, the milk union carries out research development and other promotional activities for the overall benefit of milk producers. The milk union organizes the macro-level inputs such as compounded cattle feed, fodder seeds, and various veterinary services for treatment of sick animals, all of which are made available to the milk producers through the dairy cooperative societies. Thus, it is at the Union level that professional skills are hired for specialized purposes, which individual producers cannot afford to do. The union pays to the society’s dividends on their shares and bonus in relation to the quantity of milk supplied by them during the year.

SUPPLY OF MILK AND SCHOOL

<table>
<thead>
<tr>
<th>SL No.</th>
<th>District</th>
<th>No of schools</th>
<th>No of Childrens</th>
<th>WMP Supply (In Kgs)</th>
<th>No of schools</th>
<th>No of Childrens</th>
<th>WMP Supply (In Kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangalore Urban</td>
<td>2250</td>
<td>331314</td>
<td>286383</td>
<td>2097</td>
<td>124050</td>
<td>156306</td>
</tr>
<tr>
<td>2</td>
<td>Bangalore Rural</td>
<td>1192</td>
<td>84783</td>
<td>72722</td>
<td>1209</td>
<td>51014</td>
<td>58060</td>
</tr>
<tr>
<td>3</td>
<td>Ramanagara</td>
<td>1484</td>
<td>101017</td>
<td>79811</td>
<td>1525</td>
<td>59054</td>
<td>54449</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4926</td>
<td>517114</td>
<td>438916</td>
<td>4831</td>
<td>234118</td>
<td>268815</td>
</tr>
</tbody>
</table>

Source-KMF

From the above table-2 it is clear that, social development by Bangalore milk union there are total 4926 school with 517114 students and supplied 438919 Kg of milk similarly 4831 anganavadi schools with 234118 students supplied 268815 of milk under Bangalore milk union, there by dropout rate decreased.

LOGISTIC ACTIVITIES OF DAIRY

<table>
<thead>
<tr>
<th>Details</th>
<th>Bangalore Urban</th>
<th>Bangalore Rural</th>
<th>Ramanagara</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total mobile Routes</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Total mobile Emergency Routes</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Total Mobile Route Cases</td>
<td>6894</td>
<td>10164</td>
<td>9630</td>
<td>26,688</td>
</tr>
<tr>
<td>Total Emergency Cases</td>
<td>2276</td>
<td>4234</td>
<td>5297</td>
<td>11807</td>
</tr>
<tr>
<td>First Aid Centres</td>
<td>378</td>
<td>436</td>
<td>631</td>
<td>1,445</td>
</tr>
</tbody>
</table>
**MILK SUBSIDY PAID**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rs. in Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>30.51</td>
</tr>
<tr>
<td>2009-10</td>
<td>61.45</td>
</tr>
<tr>
<td>2010-11</td>
<td>62.52</td>
</tr>
<tr>
<td>2011-12</td>
<td>69.34</td>
</tr>
<tr>
<td>2012-13</td>
<td>76.92</td>
</tr>
<tr>
<td>2013-14</td>
<td>159.68</td>
</tr>
<tr>
<td>2014-15 * till July</td>
<td>61.62</td>
</tr>
</tbody>
</table>

Source: KMF

It is to understand milk subsidy paid in the year Rs.30.51 crore has increased to Rs.159.68 crore in the year 2013-14.

**NUMBER OF DAIRY UNDER BANGALORE MILK UNION**

Table-5

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Bangalore Urban</th>
<th>Bangalore Rural</th>
<th>Ramanagara</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional DCS</td>
<td>462</td>
<td>748</td>
<td>774</td>
<td>1984</td>
</tr>
<tr>
<td>Women DCS</td>
<td>50</td>
<td>53</td>
<td>87</td>
<td>190</td>
</tr>
<tr>
<td>STEP DCS</td>
<td>27</td>
<td>36</td>
<td>54</td>
<td>117</td>
</tr>
<tr>
<td>BMCs</td>
<td>58</td>
<td>65</td>
<td>50</td>
<td>173</td>
</tr>
<tr>
<td>AMCUs</td>
<td>134</td>
<td>293</td>
<td>223</td>
<td>650</td>
</tr>
<tr>
<td>EWS</td>
<td>162</td>
<td>262</td>
<td>456</td>
<td>870</td>
</tr>
<tr>
<td>EMT</td>
<td>112</td>
<td>197</td>
<td>181</td>
<td>500</td>
</tr>
<tr>
<td>Milking Machines</td>
<td>114</td>
<td>74</td>
<td>16</td>
<td>204</td>
</tr>
<tr>
<td>DCS With Own Building</td>
<td>214</td>
<td>494</td>
<td>180</td>
<td>888</td>
</tr>
<tr>
<td>Milking Analyser</td>
<td>35</td>
<td>100</td>
<td>82</td>
<td>217</td>
</tr>
</tbody>
</table>

Source: KMF

From the above table it is clear that, Bangalore milk union has, 1984 functional DCS, 190 Women DCS, 117 STEP DCS which indicates social equity in union.

**FINDINGS OF THE STUDY**

- The union has 1984 functional DCS and 190 Women DCS
- Bamul is marketing milk and milk products in the brand name of "Nandini" through 1280 retailers, 38 Franchisee Outlets, 26 Milk Parlors, 240 distribution routes.
- The milk procurement price paid is Rs.21.66 for every Kg of milk supplied by the Union. Which is 80% of total cost of production.
- The milk procurement has increased by 11% when compared to the last year where as national average is 6%.
- The milk subsidy has increased from Rs .30 crore in the year 2008 to Rs. 160 in the year 2013.
- The union has emergency first aid treatment centres 1445.
- The Unions daily average milk procurement is 9.40 lakh Kgs, which works out to be 510 kgs per day per DCS.
- Bamul has Seven Chilling Centers geographically located around Bangalore and 85 Bulk Milk Coolers at DCS Level.
- Milk collected at DCS will be transported to Chilling Centers, through 110 Milk Procurement Can Routes, by traveling 18,410 KMs every day. 23 Bulk Milk Cooler (BMC) Routes are also in operation, which collects milk.
from 121 BMC centers of 344 DCS directly transported to Bangalore Dairy through insulated tankers.

- As on NOVEMBER 2012 there are 1886 DCS in these DCS, there are 3,39,906 milk producer members are enrolled and out of which 1,11,585 are women and 45,216 members belong to Schedule caste and 15,648 members belong to schedule Tribes.

- In these DCSs, there are 3,35,944 milk producer members. Among them 1,09,988 members are women and 664 members belong to schedule caste and 15,530 Schedule Tribes.

- The milk shed area of Bamul comprises of 2611 revenue villages. As of now the Union has organized 1868 Dairy Co-operatives Societies (DCS) in 2425 villages, thereby covering 87% of the total village in these two districts.

- Bamul has supplied 438916 kg milk to the school children

CONCLUSIONS
Milk cooperative does not own the assets that are employed by members for farm production; the assets and the investment hazard associated with asset specificity belong to members. By pooling members’ products in its marketing efforts, the cooperative in essence also pools the investment hazard. As a result, each member’s share of the hazard conceivably is less than if the member individually markets his or her products. The fact that asset specificity and the associated investment hazard belong to individual members reaffirms the cooperative’s unique economic structure of being an aggregate of its member farms. As posited by Emelianoff, this unique economic structure entails its uniqueness in organization, governance, equity financing and operation and unique economics of operation for marketing cooperatives.

REFERENCES


21. Task Force Report 141, Council for Agricultural Sciences and Technology, USA, p 120


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