“Role of Dairy Cooperatives in Inclusive Growth- A Revolutionary Case of AMUL”

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Abstract

The cooperative sector is one of the well designed segments of Indian economy and has contributed significantly for the growth and development of SMEs in India. In the cooperative segment the growth of dairy cooperatives during the last three decades has been quite impressive. It plays a predominant role in balancing the rural inequality by promoting growth in income, employment and social justice. Dairy cooperatives have enabled India to achieve self-sufficiency in milk and dairy products. AMUL- a pioneering and successful case of dairy cooperative, has changed the lives of poverty stricken farmers through its Operation Flood Programme, which is one of the world’s largest rural development programme. Considering the fact, this paper is an attempt to represent Amul as a revolutionary dairy cooperative which has transformed the face of India’s Dairy Sector thereby contributing to social inclusion. AMUL- the pioneering dairy with its innovative strategy has helped dairy cooperatives to come together and make India the world’s largest producer of milk.

Keywords: Dairy cooperatives, Milk, Inclusive growth, Amul model

“Cooperatives are model for Inclusive Growth”- Dr. D. Subbarao

Growth with the proper pace and pattern, which again are interlinked and addressed together, can be called as inclusive growth. In this 21st century growth with rapid pace has become a bare necessity for substantial poverty reduction in particular and for long run sustainable growth in general. The challenges which are appearing in the path of inclusive and equitable growth are not less for a developing economy like India, as the interest of all segments of people need to be addressed here. To make the growth process more equitable and inclusive, the 12th Five Year Plan (2012-2017) aimed at “faster, sustainable and more inclusive growth”. India is predominantly an agricultural country and the contribution of national GDP from agriculture is only 16 to 17 percentage and involving around 55 to
58 per cent of population (National Cooperative Union of India, 2012). In spite of this the rural mass of India is always being deprived of the basic necessities. Hence, poverty, food security, unemployment, quality education, and lack of other basic infrastructures are the common problems of rural India. Cooperative societies act as the catalyst to combat the above said problem to a greater extent as they promote inclusion and social upliftment through their unique approach towards business.

Co-operatives are significant economic players in a developing economy like India which in general contribute to sustained economic growth and in particular assist to tackle rural poverty, expand poor people’s access to financial services, provides opportunities for self determination and empowerment, social cohesion and transformation to name a few. Cooperatives in India covers a wide array of activities like credit & banking, fertilizer, sugar, dairy, marketing, consumer goods, handloom, handicraft, fisheries and housing. Among these the success of dairy cooperative has made India the world’s largest milk producer. From a milk-deficit status in the early 1960s, production has been increasing exponentially for the last two decades, growing from 56 million tons in 1991-92 to 127.9 in the year 2011-12. It is also expected that India’s milk production will be equal to that of whole European Union by 2021 (National Dairy Development Board, 2012). The whole credit for this goes to the dairy sector which is now the leading agricultural output in the country. IMARC (International Market Analysis Research and Consulting) Group, one of the world’s leading research and advisory firms, finds in its new report entitled “Indian Dairy Market Report & Forecasts 2012-2017” that driven by a strong growth in both urban and rural demand for milk products in India is expected to surpass US$ 163 Billion by 2017. India has achieved this level by involving the poor farmers and other people as producers, distributors and consumers. According to NDDB statistics, twelve million Indian farmers (primarily small, marginal farmers and landless labourers) are engaged in milk production, are organized in 122,500 village Dairy Cooperative Societies (DCS), supplying 23 million kilograms of milk per day, operate in more than 346 districts.

2. Objective of the Study
The prime objective of this study is to analyze the inclusive approach of AMUL to reach Bottom of Pyramid thereby promoting social upliftment.

3. Methodology

The description of economic success of AMUL and its contribution to inclusive growth and social upliftment are based on secondary data. The paper emphasis the role of Amul as a role model in empowering and improving the social status of members of dairy cooperatives and hence data related to Amul is collected from the official website of Amul and GCMMF.

4. Dairy Cooperatives of India

The last decade of 19th century had witness the beginning of co-operative movement in India, with the twofold objective to protect the farmers from the hands of the private money lenders and to improve their economic condition. Madras province was the birth-place of this movement. With the setting up of an Agricultural Co-operative Banks the movement took root in our land and slowly gained strength. The golden era of Co-operative movement began after India had won freedom. Within two decades of independence the membership of primary societies had increased four times while the share capital and working capital increased 23 and 31 times respectively (Bandyopadhyay, 1996). India is the world’s largest producer of dairy products by volume and has the world’s largest dairy herd. The country accounts for more than 17% of world’s total milk production and is also the world’s largest consumer of dairy products, consuming almost all of its own milk production (Global Agriculture Information Report, 2012).

Table 1: Key Statistics for India’s Dairy Industry

<table>
<thead>
<tr>
<th>Annual Milk Production (2011-12)</th>
<th>127.9 Million Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of World Dairy Production (2011-12)</td>
<td>17%</td>
</tr>
<tr>
<td>Number of Milk Producers’ Cooperative Unions (2011-12)</td>
<td>177</td>
</tr>
<tr>
<td>Number of Village Dairy Cooperatives (2011-12)</td>
<td>1,48,965</td>
</tr>
<tr>
<td>Number of State Cooperative (2011-12)</td>
<td>15</td>
</tr>
</tbody>
</table>
Per Capita Consumption (Drinking milk) (2011-12) | 291 g/day
Dairy Industry Workforce (2011-12) | 15 Million


**Figure1: Milk Production in India (1991-2012)**
(Source: National Dairy Development Board)

5. AMUL: A Role Model for Dairy Cooperatives

In 20th century cooperatives have played an important role in developing and developed countries. However, in emerging economy like India, there are two major challenges that always stand as the prime hurdle to have large scale cooperative business operations in dairy products. First, how to reach the large population which is so well spread and which comprises mainly lower middle class with low purchasing power. The second challenge is related to milk procurement from the members of cooperative society who are not so literate. Overcoming the above two challenges would give benefit to the customers as they can be supplied with milk & milk products at affordable rates and to the members in terms of reasonable returns. Innovative business model was needed to be adopted in this market situation. The traditional business models mainly concentrating on profit maximization which is not suitable to tackle this complex situation. AMUL
(Anand Milk Union Limited) in India successfully developed such model and was solely responsible for white revolution in India.

5.1 Background

AMUL meant different things to different people. To a milk producer, it’s a life enriching experience; to a consumer, it’s an assurance of having wholesome milk; to a mother, it’s a reliable source of nourishment for her child and to the country, it’s a weapon for rural development and self reliance. Amul, the biggest dairy cooperative in India has derived its name from a sanskrit word Amoolya which means “priceless”. This largest dairy cooperative is based at Anand, in the state of Gujarat. The establishment of Amul has back-ground of long struggle and movements. It had its genesis in pre-independence India when the dairy sector was dominated by private companies that exploited the poor farmers. In 1946, the milk producers in the state of Gujarat, led by Sardar Vallabhai Patel, established the first cooperative society: the Kaira District Cooperative Milk Producers’ Union Limited (KDCMPUL) which was started with just two village cooperative societies and 247 liters of milk and today its better known as Amul Dairy. With the high degree of success of Amul, the then Prime Minister of India, Lal Bahadur Shastri decided that the same approach should become the basis of a National Dairy Development policy. This instance in 1965 the National Dairy Development Board was set up with the basic objective of replicating the Amul model. Dr. Verghese Kurien was chosen to head the institution as its Chairman and asked to replicate this model throughout the country. The Gujarat Cooperative Milk Marketing Federation (GCMMF) was established in the year 1973 as an apex organization solely responsible for marketing the milk and milk products of cooperative unions particularly in the state of Gujarat.
AMUL at a glance

- Year of Establishment: 1946
- Location: Aanand, Gujarat
- Founder: Verghese Kurien
- Chairman: Shri Ramsinh Prabhat Parmar
- Financier: Government
- Legal Structure: Dairy Cooperative
- Value Chain Approach: Relational chain, Producer-driven
- Number of Producer Members: 6,76,349
- Number of Village Dairy Cooperative Societies: 1195
- Total Milk Handling Capacity: 14.5 Million liters per day
- Milk Collection (Daily Average): 1.7 Million liters
- Sales Turnover (2012-13): 28500 (₹) Million

5.2 Objectives and Business Philosophy

The main stakeholder of AMUL is the farmer member for whose welfare it exists. AMUL aimed at providing proper marketing facilities for the milk producers. Thus, AMUL’s business strategy is driven by its twin objectives of

(i) Long-term, sustainable growth to its member farmers, and

(ii) Value proposition to a large customer base by providing milk and other dairy products at a low price.

Amul aimed at achieving the said objective by implementing the following techniques and procedures:

- Adopting most modern technologies and innovative ideas to strengthen the cooperative principle.
- Strengthening the cooperation and unity with professional approach in order to face any challenge ahead.

- By optimum utilization of our resources, reduce cost of production.
- Increase milk production, procurement and quality awareness at village level.
- Being consumer oriented and emphasize on quality.

5.3 The AMUL Model

The Amul Model was initiated with an aim to bring out a great change in the socio-economic conditions of the people. In the meantime the National Dairy Development Board (NDDB) was established in 1965 at Anand. This NDDB had come up with the most popular and successful dairy development programme known as “Operation Flood” or “White Revolution”.

Operation Flood, a national-scale, federally sponsored intervention, is one of the world’s largest rural development programme which has transformed the face of India’s Dairy industry. The Operation Flood Programme, organizing dairy farmers' cooperatives in rural areas and linking them with urban consumers created a strong network for procurement, processing, and distribution of milk over lakh villages in rural India. Started with the three fold objectives of increasing milk production, augment rural income and reasonable prices for consumers, this programme has been implemented in three different phases by the National Dairy Development Board designated by the Government of India. The Operation Flood Programme successfully ran for 26 years and eventually helped India to emerge as the world’s largest milk producer.

Table 2: Operation Floods’ Geographic Coverage

<table>
<thead>
<tr>
<th>Operation Flood</th>
<th>Milk shed</th>
<th>Districts Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I (July 71- Mar 81)</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Phase II (Apr 81- Mar 85)</td>
<td>97</td>
<td>161</td>
</tr>
<tr>
<td>Phase III (Apr 85- Mar 96)</td>
<td>34</td>
<td>162</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>362</td>
</tr>
</tbody>
</table>

(Source: National Dairy Development Board)

The Amul Model of dairy development is a three-tiered structure with the Dairy Co-operative Societies (DCS) at the village level affiliated to a milk union at the District level which in turn is further federated into a Milk Federation at the state level. The first tier- Village dairy cooperative society has membership of milk producers of the village and is governed by an elected management committee consisting of 9-12 elected representatives of the milk producers. The village society further appoints a secretary and member secretary of the management committee for management of day to day functions. A district dairy cooperative- the second tier has membership of village dairy societies of the district and is governed by a board of Directors consisting of 9-18 elected representatives of the village societies. It also appoints a professional MD for management of day to day function. The state level co-operative i.e., GCMMF is the
third tier solely responsible for national and international marketing of milk and milk products. All the chairmen of the district cooperatives are the members of GCMMF and this state level cooperative is managed by a board consist of the elected members from the chairmen of district cooperatives. The above three-tier structure was set up in order to delegate the various functions; milk collection is done at the Village Dairy Societies, milk procurement & processing at the District Milk Union, and milk & milk product marketing at the State Milk Federation. This helps in eliminating not only internal competition but also ensuring that economies of scale are achieved.

Fig 2: The Amul Model
Source: www.amul.com
The unique feature of Amul model is its professional management. In the case with other dairy cooperatives the Managing Director/ Chairman of the federation which is apex body is an IAS on deputation (Prasad & Satsangi, 2013). For instance in Bihar the popular Sudha diary, in Andhra Pradesh Vijaya diary, in West Bengal
Benmilk dairy and in Odisha Omfed have an IAS as the Chairman/Managing Director. As he is not in one federation permanently that does not give him the feeling of ownership which is very essential for a co-operative to be successful (Prasad & Satsangi, 2013). Where as in the case of Amul the Chairman is an agriculturist/farmer by profession and the Managing Director is appointed by the board of directors which is comprises of the farmers members who come from the respective societies. So, at each level the decision making lies in the hands of the producers only, which give them a feeling of ownership.

5.4 Economic impact of AMUL in rural development

The rural India represents 68 percent of India’s population with the total rural population of 845,151,713 (World Bank Report, 2012). As per the UNDP report currently India’s poverty rate is 32.7% and per capita income is $1,330. We cannot dream for a poverty free nation without thinking about the rural segment. Mahatma Gandhi had repeatedly asserted that the ‘real India’ lives in its villages. He stressed emphatically on leveraging the ‘cooperative form of organization as an effective instrument of rural development. Dairy cooperatives across India are prime example of cooperatives which have promoted and sustained rural development. Today India has progressed from a milk-deficit country to the largest milk-producing nation in the world and for this the whole credit goes to the Amul pattern of dairy cooperatives. In the process, they have generated millions of days of employment for the rural poor and improved their socio-economic condition.

5.4.1 Dairying a tool for poverty alleviation

The Swarnjayanti Gram Swarozgar Yojana (SGSY) of The Government of India (Ministry of Rural Development) which is a special programme for poverty alleviation through self-employment is being implemented by Amul in its special project on “Improving Socio-economic Conditions of BPL Families of Kheda District through Animal Husbandry and Dairying”. The Swarnjayanti Gram Swarozagar Yojana, a holistic self-employment programme started with the basic objective to bring below poverty line families above poverty line by providing them in generating assets to become self-employed.
More than 8,755 beneficiaries have covered by Amul under this programme for a novel cause. Under this project to bring these poor households into mainstream economy by transforming dairying into active income-generation enterprises, the beneficiaries were given membership of dairy co-operatives. Apart from this, under the project Amul has also provided training to 12,647 women and men in dairy husbandry, constructed a number of cattle sheds, developed green fodder plots, distributed chaff cutters and stainless steel cans (Amul dairy, 2013). Further, it facilitates loan disbursement from banks to the needy by acting as a guarantor on behalf of the farmers for the loan repayment.

Before Amul, Polson dairy was the only dairy in Anand which used to control the marketing and distribution system of milk. As milk is perishable, milk producers were compelled to sell milk at a very low price to these middlemen. Patel’s vision of organizing the farmers to enable them to gain control over procurement, processing and marketing while eliminating the middlemen was successful by the Amul model. This model directly linked the farmers with the final customer. There are no middlemen; the cooperative collects the milk directly at the producers’ doorsteps.

5.4.2 Market access to rural produce

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Figure 3: AMUL Value Chain

5.4.3 Incentive pricing
The prime reason behind the success of Amul pattern is its strategy to give benefit both to the farmers and customers i.e., farmers in the terms of fair price for their milk and for customers its high quality milk and milk products. What would have been middlemen’s profits in the earlier system got absorbed into development projects for primary producer or lower cost for the consumer. The Operation Flood Programme of Amul has succeeded in linking and creating a better network among the milk producers throughout India, thereby reducing seasonal and regional price variations while ensuring that the producer gets fair market prices in a transparent manner on a regular basis.

5.4.4 Promoting employment

Cooperative dairying on the Amul Pattern forms a source of assured employment and a sustainable basis of competitive advantage for India. Although Operation Flood was not designed to eradicate the problems of poverty and unemployment, it is true that millions of landless, marginal, and small farmers who were engaged in milk production benefited greatly from the increased income and employment opportunities generated by Operation Flood Programme. Presently Amul is providing employment opportunity to millions of people both directly and indirectly in rural and urban areas. Amul has created white-collar jobs too.

5.4.5 Health and sanitation for all

Amul not only make its producer members’ financially self sufficient but also take care of their health and provide sanitation to all. One of the most successful Integrated Rural Health & Development Programme of Amul is Tribhuvandas Foundation. Because of its contribution in fulfilling the basic health care needs of the villages, primary treatment for various common ailments and active involvement in promoting preventive health practices, Tribhuvandas Foundation of Amul has become one of Asia’s largest community healthcare service providers presently covering more than 700 villages (Amul dairy, 2013). It also provides continuous training and retraining to Village Health Workers who are chosen from villages with the help of the Dairy Co-operative Societies.
Amul has started another novel scheme related to rural sanitation with the support of District Rural Development Agency (DRDA) and set a target for itself whereby not a single milk producer will attend to nature’s call in the open. Further, the scheme aimed at providing interest free loans to its milk producers in Anand and Kheda districts to set up ‘pucca’ toilet blocks (Amul dairy, 2013). In five years’ time, dairy wishes to achieve the target of providing 100 per cent toilet facilities in all villages where Amul has a milk society. Amul has prepared a model low-cost toilet block that cost ₹11,500 per unit. DRDA support this initiative through subsidy ranging between ₹4500-₹4600 for BPL/APL families and it also provide interest free loan refundable in 5 years’ time.

5.4.6 Strengthening education in villages

Amul’s vision is to see educated, talented and strong youth in a developed India. To achieve the said vision, Amul introduced scholarship schemes in 1992 to encourage outstanding children of farmers in pursuing higher studies. This effort has motivated greatly children to excel in their studies and spread education in rural areas. Some other similar programmes introduced by Amul to promote education are; Amul Scholar Felicitation Programme, Amul Vidya Shree for state wise 10th toppers and Vidya Bhushan for state wise 12th toppers. Vidya Bhushan is India’s first of its kind award that recognizes and rewards brilliant minds of India.

5.4.7 Training for all

Since its inception, Amul believes the development of the institution lies in the development of the people – producer members. Thus, it organizes various training programmes based on the need of the farmers and village society. Few of the successful programmes of Amul includes; VMS (Vision, Mission & Strategy) Workshop, Milk Day Celebration, Amul Darshan, Management Development Programme, Zonal Meeting, Village Group Discussion, Awareness and Refreshers Training, Dairymen Training, Development Review and Self managing Leadership Programme. It has developed in-house modules for training and competence building to improve and upgrade of their knowledge; communication skills to understand the customer, be responsive to customer requirements, and communicate clearly for trouble shooting of problems. In
order to strengthen knowledge and skill base of young girls and women of the villages about milk production management, Amul along with technical collaboration and resources of Anand Agriculture University, has initiated "Mahila Pashupalan Talim Karyakram"; for women resource persons of the Member Unions and in the year 2011, 418 women resource persons have been trained under this programme. The prime objective of these training programmes is to bring together all the members of cooperative to work collectively in order to strengthen the cooperative through continuous improvement which in return would improve the income and quality of life of the farmers. Apart from this, Amul also carry out Cooperative Development Programmes in order to chase its target of producing 25 lakh litres of pure and quality milk per day.

To improve the socio-economic conditions and livelihood of dairy-farmers, Amul has come up with various schemes to increase cattle holding per farmers thereby their income. Further, dairy demonstration farm has been set up to demonstrate scientific method of farming.

5.4.8 Corporate Social Responsibility

In the last five years (2007-2011) the milk producers have planted around 311.98 lakhs trees. The most striking feature of these entire programmes was that it has been initiated by milk producer members of the dairy cooperatives. The unique fact about the programme was that the milk producer members took up the oath to protect tree sapling till it survives and grow into tree. The programme which was initiated with a novel idea for giving back to nature was a huge success as the entire plantation activity was coordinated at all the three tiers of Anand pattern. This effort to provide green cover to the earth was also acknowledged when the state level apex body of Gujarat Dairy Cooperatives- GCMMF received four successive prestigious “SRISHTI’s G-Cube Award”- 2007, 2008, 2009 and 2010 for Good Green Governance in the “Service Category”. Further, “Amul Green” movement has also been awarded by International Dairy Federation for best environment initiative in the “sustainability category” during the 4th Global Dairy Conference held at Salzbugr Congress Center, Austria on 28th Aril, 2010.

GCMMF had formed a specific organization named “Amul Relief Trust” (ART) under the Chairmanship of Dr. V. Kurien in 2001
with a donation of ₹ 50 Million and reconstructed school buildings damaged in the 2001 earthquake in Kutch area.

There is no end to the journey of Amul as giving back to the society is one of its major concern. With this approach, Amul is also associated with the Indian Red Cross Society to motivate and initiate humanitarian services to alleviate and avert human suffering at all times to contribute for “Humanity to Peace”. Towards this objective Amul initiated blood donation campaign since 1987. Blood donation camps are organized regularly in rural areas through Village Dairy Co-operative Societies. Similarly camps are organized in Amul Dairy Campus wherein employees and their family members join in donating blood.

5.5 Conclusion

Globalization and Liberalization are the mantras of the new economy today, which is now on the fast track. Industrial production is rapidly moving forward. The dairy industry is no exception. Still a lot more need to be done in order to strengthen the sector so that it can further contribute to a greater extent to transform the socio-economic landscape of rural India. After analyzing the role of Amul as a change agent which is playing a prime role in renovating the life of rural mass, there is no doubt that Amul can be an instrument for national development. Still it will not be sufficient for dairy cooperatives to enjoy outstanding success without integrating the state level cooperatives and for this the support of the government is highly desirable. We need to ensure that we continue to inspire other dairy cooperatives by strengthening them at the grass root level, which will enable them to play a lead role in socio-economic upliftment of their respective regions. All the cooperatives of our nation need to work as a collective whole in order to promote inclusive growth which will propel Indian economy and society to occupy centre stage in the global scenario.

References

Comparative Study Between the Kaira District Co-operative Milk Producers’ Union Limited and the Himalayan Co-operative Milk Producers’ Union Limited),” Finance India, Vol. 10, No 2, pp: 406-411