

GUJARAT CO-OPERATIVE MILK MARKETING FEDERATION

Ltd. (GCMMF)

We have traversed a path few have dared to. We are continuing on a path still fewer have the courage to follow. We must pursue a path that even fewer can dream to pursue. Yet we must, because we hold in trust the aims and aspirations of millions of our countrymen. I am confident – as I know you are – that with the nation's dairy farmers by our side we cannot fail! Let us therefore resolve that however fulfilling our first twenty five years have been, in the next twenty five years we will transform the lives of millions more, opening for them the door to an India that is the land of our dreams.



*Dr. Verghese Kurien
Chairman, Gujarat Co-operative Milk Marketing Federation¹*

Across India, every morning, millions wake up to the taste of Amul, the flagship brand name for a variety of dairy products marketed by the Gujarat Co-operative Milk Marketing Federation (GCMMF). One could start the day by boiling (as is the traditional Indian practice) one of the different varieties of liquid milk supplied in pouches and making one's morning tea or coffee. If one preferred to use creamer, one could reach for the Amulya creamer on the shelf. For the breakfast, butter the toasts with Amul regular butter or, if you are calorie conscious, with Amul Lite butter. Drink a cup of Amul chocolate milk. Make sandwiches with one of the different varieties of Amul cheese and take them to the office; add Amul ghee (clarified butter) to one's dishes for lunch; cook your lunch with a curry containing Amul *paneer* or cottage cheese and have a sweet dish made from Amul *gulab jamun* mix. If it is a hot day, have an Amul ice cream; and when you return home after the office; relax with tea or coffee, whitened with Amulya creamer or Amul milk. If you are a pizza fan, bake a pizza and top it with Amul mozzarella cheese, and finally retire for the day with a glass of warm Amul milk. In India, Amul was not merely one of the most well known brands, way ahead of Coca Cola or Pepsi, and even ahead of age old brands such as Dalda, Lifebuoy and Lux, but a life style range of products, consumed in some form or other by a large number of Indians of different income and social strata.

GCMMF was the sole marketing agency for the products produced by the different milk co-operative member societies of the State of Gujarat (see Exhibit 1 for a brief note on Gujarat and Exhibit 2 for a map of India showing Gujarat) and for those of other States marketing their products under the Amul brand name.

There was no doubt that from the time of its inception in 1973, GCMMF was a great success story, as indeed was the co-operative movement in the milk sector initiated and carried to great heights by the "milkman of India", Dr. Verghese Kurien. But as on the year 2000, GCMMF was faced with a question of whether it should stick to its core business in dairy products, or diversify into other products, in particular into processed foods such as jams, sauces and fruit juices.

Historical Background of GCMMF

In the 1940s, in the district of Kaira in the State of Gujarat, India, a unique experiment was conducted that became one of the most celebrated success stories of India. At that time, In

Prepared by Prof. S. Manikutty for the purpose of classroom discussion. Copyright ©2002 by the author. Not to be copied or used without the author's permission. Not to be used outside IIMA.

The author wishes to express his gratitude to Dr. V. Kurien, Chairman, GCMMF, Mr. B.M. Vyas, Managing Director, GCMMF and the other executives of GCMMF for providing access and data needed to prepare the case. The author also wishes to thank the Research and Publications Committee, IIMA for providing the support for writing an earlier version of this case.

Gujarat, milk was procured from farmers by private milk contractors and by a private company, Polson's Dairy in Anand, the headquarters of the district. The company had a virtual stranglehold on the farmers, deciding the prices both of the procured as well as the sold milk. Polson's Dairy chilled the milk and supplied it to the city of Bombay. It also extracted dairy products such as cheese and butter.

In 1946, under inspiration from a leading freedom fighter, Mr. Vallabhbhai Patel (who belonged to Gujarat and who later became the Home Minister of the Central Government), Mr. Tribhuvandas Patel, a local farmer, freedom fighter and social worker, organized the farmers into co-operatives. These co-operatives would procure milk from the farmers, process the milk and sell it in Gujarat and in Bombay. In 1949, purely by chance, a dairy engineer, named Dr. Verghese Kurien, who had just completed his studies in dairy engineering in the U.S.A., came to India and was posted by the Government of India to a job at the Dairy Research Institute at Anand. A chance meeting between Dr. Kurien and Mr. Tribhuvandas Patel changed Dr. Kurien's life and the course of India's dairy industry. Though the purpose of this meeting was to simply to elicit some technical help from Dr. Kurien on commissioning some of the equipment just purchased by his co-operative, especially the chilling and pasteurizing equipment, the two men instantly struck a rapport. After the commissioning problem was solved, Dr. Kurien's involvement with the Kaira District Co-operative Milk Producers' Union Limited (that was the name of the co-operative registered) grew very rapidly and it soon extended to the larger sociological issues involved in organizing the farmers into co-operatives and running these co-operatives effectively. He observed the exploitation of farmers by the private milk contractors and Polson's Dairy and understood how co-operatives could transform the lives of the members.

At first, the main activity was collection and processing of the milk brought everyday by the member farmers to the local office of the co-operative. It was soon realized that it was not enough to merely act as the collection and selling agents for the farmers. A variety of support services were required to enable the farmers to continue selling their milk of adequate quality and to avoid disasters such as death of their cattle (for a family owning just one or two cattle and depending on its milk for their income, death of cattle could indeed be a disaster). The farmers were progressively given new services such as veterinary care for their cattle, supply of cattle feed of good quality, education on better feeding of cattle and facilities for artificial insemination of their cattle². All these were strictly on payment basis: none of the services were free.

This experiment of organizing farmers into co-operatives was one of the most successful interventions in India. A very loyal clientele of member farmers was built up who experienced prosperity on a scale they could not have dreamt of ten years earlier, since with good prices paid for their milk, raising milch cattle could become a good supplementary source of revenue to many households. The co-operatives were expanded to cover more and more areas of Gujarat and in each area, a network of local village level co-operatives and district level co-operatives were formed on a pattern similar to that at Anand (the so called Anand pattern). Kaira District Co-operative Milk Producers' Union became better known by the brand name of the products marketed by it (Amul) than by the name of the co-operative itself. Amul meant priceless in Sanskrit. It was also a word that was easy to pronounce, easy to remember and that carried a wholly positive connotation. This became the flagship brand for all the dairy products made by this Union.

In 1954, Kaira District Co-operative Milk Producers' Union built a plant to convert surplus milk produced in the cold seasons into milk powder and butter³. In 1958, a plant to manufacture cheese

and one to produce baby food were added. Subsequent years saw the addition of more plants to produce different products. In 1973, the milk societies/district level unions decided to set up a marketing agency to market their products. This agency was the GCMMF. It was registered as a co-operative society on 9 July 1973⁴. It had, as its members (ordinary share holders), the district level milk unions. No individual could become a shareholder in GCMMF. Starting from a daily procurement of 250 litres per day in 1946, GCMMF had become a milk giant with the milk procurement at about 4 million litres per day by 1999 with 12 dairy plants all over the State of Gujarat.

The Structure of the Anand Pattern

The most important feature of the milk co-operative system of Gujarat that evolved was that they were run not by a separate bureaucracy with its own vested interests, but by the member-farmers themselves, with all the major decisions being taken by the latter alone. Any farmer could become a member by committing to supply a certain quantity of milk for a certain number of days in a year and would continue to be a member only if he kept up this commitment. Each day, the farmers (or, actually, in most cases, their wives and daughters) would bring their milk to the village collection centres where the milk would be checked for the quantity in full view of all, and the quality (the fat content) would be checked through a simple hydrometer, again in full view of all. The farmers would be paid in the evening for the milk supplied by them in the morning, and in the morning for the evening milk. This prompt settlement in cash was a great attraction to the farmers who were usually cash starved. Thanks to the above mechanism, there were no disputes regarding quantity or quality of the milk supplied by each farmer.

The co-operative system formed under the so-called Anand pattern had a three-tiered structure (Exhibit 3). At the base was the village level dairy co-operative society. This was composed of the milk producers, mostly residents of the same area, who had joined the co-operative society. A typical membership figure would be about 200. A managing committee, of about eight to nine members was elected, one of whom would be elected as the Chairperson. Care was taken to ensure that these meetings were held, and seen to be held, in an open and transparent manner. The next level was at the district, and this co-operative (called unions) had, as its members, the village dairy co-operative societies within the district, represented by the Chairpersons of the village level societies. For this co-operative, a Board of Directors, consisting of 12 persons, was elected from among the members (i.e., the Chairpersons of the village level co-operatives), with its own Chief Executive, called the Managing Director. The third level was at the State, where the co-operative (GCMMF in Gujarat) was formed with district level milk unions (and certain other milk unions from other states) as members. The State level organization was called the Federation. The Board of Directors of the Federation consisted of the Chairpersons of the district level co-operatives as the members, and in addition, the following *ex officio* members:

1. The Registrar of Co-operatives of the State concerned.
2. A representative from the National Dairy Development Board (NDDB), which was a body created by the Government of India to replicate the Anand pattern in the other States of India.
3. One nominated technical expert.
4. The Managing Director (CEO) of the State level federation.

GCMMF was the State level federation for Gujarat.

Broadly, the village level co-operatives did the procurement; the district level did the transportation and processing; and the Federation marketed the product. The Federation also handled strategic planning and investment.

Each of the levels had a substantial amount of autonomy. For example, the village level societies decided entirely on their own, as to who should be admitted as a member, and what price the farmers should be paid for their milk. Thus the prices paid to farmers by different village societies in the State could be, and in fact were different. The district level unions purchased milk from the village level societies and decided what price they would pay for the milk supplied by the village level societies. They, in turn, supplied milk to the State level Union, which decided what price it would pay the district unions. The price paid to all the district unions was the same.

In this system, GCMMF planned what products it would sell and arrange to manufacture for each year and how much. Milk products were produced at different factories all over the State. These were owned by the district unions. There were, for example, six butter factories and seven milk powder factories in Gujarat. GCMMF did not have its own factories as such until recently, when it had set up a dairy at Gandhinagar near Ahmedabad, the capital of Gujarat State. There was a committee, called the Programming Committee, which consisted of (i) Managing Director of GCMMF (ii) Managing Directors of the District Unions (iii) Their Head, Quality Control, GCMMF and (iv) Head, Finance, GCMMF. This committee finally decided the product mix for the coming year, based on the plans made by GCMMF, and translated the plans into monthly allocations for each union for the milk to be supplied.

As on April 2000, there were 10,800 village level co-operatives in Gujarat under the GCMMF umbrella with 2.1 million milk producers. Out of 25 districts in Gujarat, there were district level unions in 12 districts⁵.

A pattern similar to the Anand pattern had been built in other States in India also. This was done under a programme launched by the Government of India, under the title "Operation Flood". The operation was co-ordinated by National Dairy Development Board (NDDB), a body formed by the Government of India with this objective. Dr. Kurien was the Chairperson of the NDDB and the main moving force behind this programme. As on April 2000, there were 22 State federations in India, with 170 district level unions, 72,774 village level societies and 9.31 million milk producer members in the different States.

Each of the State level federations marketed their own brands. Amul was the brand marketed by GCMMF. Vijaya was the brand name marketed by the federation in the State of Andhra Pradesh. Interestingly, the State level federations could market their own products under their own brands anywhere in India, thus competing against their sister federations. Thus GCMMF could market its Amul brand butter in Andhra Pradesh competing with Vijaya butter. It was believed by the officials of the National Dairy Development Board that such competition was healthy and would curb monopolistic tendencies.

Objectives and Business Philosophy of GCMMF

The main stakeholder of GCMMF was the farmer member for whose welfare, the GCMMF executives felt, it existed. Thus in an interesting reply, the Managing director of GCMMF, Mr. B.M. Vyas, told the case writer:

Unlike other organizations, our objective is not to maximize our profit. After all, the farmers themselves are the owners of the Federation. We are restricted, by our bye-laws, to giving a maximum of 12 percent on the paid share capital as the dividend. So we are more interested in giving the best price for the farmers for their milk than in making a large profit. Thus we look at the price given to our suppliers as not a cost but as an objective.

GCMMF had, as its main objective, “carrying out activities for the economic development of agriculturists by efficiently organizing marketing of milk and dairy produce, veterinary medicines, vaccines and other animal health products, agricultural produce in raw and/or processed form and other allied produce”⁶. This was to be done through:

- Common branding
- Centralized marketing
- Centralized quality control
- Centralized purchases and
- Pooling of milk efficiently.

GCMMF had declared, as its business philosophy, the following⁷:

- To serve the interests of milk producers
- To provide quality products that offer the best value to consumers for money spent.

The biggest strength of GCMMF was the trust it had created in the minds of its consumers regarding the quality of its products. GCMMF, and its brand Amul, explained Mr. Vyas, stood for guaranteed purity of whatever products it had produced. Adulteration was simply not done in any of its products. In India, where such trust was hard to come by, this could provide a central anchor for GCMMF’s future business plans, said Mr. Vyas.

Organization Structure of GCMMF (See Exhibit 4)

GCMMF was a lean organization, which their executives believed led to a cost advantage. At its headquarters in the town of Anand, three General Managers and two assistant General Managers assisted the Managing Director (or the Chief Executive). The three General Managers looked after the functions of Marketing, Human Resource Development (HRD) and Quality Assurance. The General Manager (Marketing) was in charge of the whole marketing operation of the dairy products, liquid milk and ice cream. This General Manager was assisted by one Assistant General Manager (Marketing, Dairy Products)⁸ and Managers (Commercial), (Exports) and (Liquid Milk). The General Manager (HRD) also looked after edible oils, administration, legal matters and new opportunities. The whole country was divided into five zones, each headed by a Zonal Manager responsible for the sales of all the products under his zone. They reported to the Chief Executive (Managing Director), but functionally each reported also to the various Assistant General Managers/General Managers at the headquarters. Under the zonal managers were the branch managers. Generally there were three product managers in each branch reporting to the branch manager: one each for the edible oil, dairy products and ice cream. They were assisted by sales officers and field salespersons. There were 48 sales offices spread over the country (of which only two were in Gujarat). The entire country had been represented in this structure. GCMMF had one overseas office, at Dubai.

GCMMF had links with the Institute of Rural Management, Anand (IRMA), a premier management institute set up to produce MBAs who would work in rural areas. GCMMF attracted a number of its managers from the IRMA graduates, as well as from other business schools in India, although not from its premier management schools. The salaries offered by GCMMF were decent, but nowhere near those offered by the private sector, especially multi-national corporations. The gap between the salaries that could be offered by organizations such as GCMMF and the salaries expected by graduates from business schools was increasing in recent years. GCMMF executives, in interviews with the case writer, did not see this as a major problem. They stated that GCMMF in any case had never relied on talent from top business schools, since the graduates from these schools would not fit with the culture and value systems in the company. The Managing Director, Mr. B.M. Vyas was of the view that GCMMF offered excellent prospects for growth and job satisfaction, and it would not find it difficult to attract suitable talent⁹.

GCMMF had an extensive sales and distribution system and a cold chain network starting from the milk producer and ending at the eventual consumer. It had a dealer network of 3600 dealers and 400,000 retailers, one of the largest such networks in India. A cold chain had been established that linked all these dealers and retailers. The cold chain consisted of:

- A set of chillers near each village that could ensure chilling of milk;
- Quick transportation to the district Union facilities where the milk could be further chilled and dispatched to the consumers or to the processing units for conversion into milk products;
- Chilled trucks which could transport the milk products such as butter and cheese in refrigerated condition from the factories;
- Local chilling of milk to ensure its quick distribution to the customers through a network of trucks in many cities so that most consumers could have their milk sachets by 6 A.M. if not earlier;
- Deep freezers and refrigeration equipment in the dealers' premises to keep the products cold and prevent their deterioration; and
- Facilities in super markets and even larger retail stores to keep the products fresh.

GCMMF had excellent relationships with what could be called super markets in India (actually these were just large departmental stores) which stocked their products, especially cheese, butter, milk powder, sweets and, in some cases, milk.

Diversification Moves by GCMMF

Even at the time of its formation, GCMMF had three major products in its portfolio: liquid milk, butter and milk powder. Gradually, many new products were added to its range, largely milk derivatives. In milk alone, it sold full cream milk, semi toned milk, and fully toned milk, all with different names and in readily identifiable pouches. By reducing the fat, it could not only sell separately fat derivatives such as cream and butter (which were also products that yielded a higher margin), but also make the resultant milk available at cheaper prices, so that poorer people also could consume milk. It had undertaken a unique experiment in the 1970s to supply milk to places as far away as Delhi and Calcutta through insulated rail tankers, and this was so successful that it had continued since then. In the 1970s, GCMMF introduced its cheddar cheese and in 1983, a cheese spread. In the same year, it entered also the sweet market (milk based) through the introduction of *Amul Shrikhand*, a sweetish sour item produced by milk and curd (a form of yogurt). Amulya, a dairy whitener was introduced and was priced below the prevailing brands

and soon became the market leader. In 1990s, GCMMF introduced a whole lot of new products: a condensed milk called *Amul Mithaimate*; *Amul Lite*, a low fat, low cholesterol spread butter, and Amul ice cream. After 1996, it went on to introduce a still greater variety of products: pizza (mozzarella) cheese, cheese slice, cheese powder, *malai paneer* (a form of cottage cheese), *gulab jamun* (a sweet primer to be processed by deep frying to make a sweet called *gulab jamun*), buttermilk, a chocolate based beverage called Nutramul and chocolates.

In 1996, GCMMF launched its Amul brand ice cream. India's ice cream market was estimated to be around Rs.8 billion in the year 2000. GCMMF launched its ice creams in fourteen flavors in the city of Mumbai and the State of Gujarat. It was priced at about 30 percent less than the prevailing prices, and it also emphasized that it was fully vegetarian, i.e., it did not contain any gelatin. This was an important attribute to many consumers in Gujarat, which was a predominantly vegetarian state. In less than a year, Amul ice cream commanded a share of about 55 percent in Gujarat and 30 percent in Mumbai¹⁰; by the year 2000, its share in India as a whole had reached 30 percent. In 1997, GCMMF also scored a major achievement when it managed to get some of the co-operatives in the other States of the country, trying to launch their own ice cream brands, to sell all their ice creams under the Amul brand name. This enabled GCMMF to leverage the capacity of more than 180 co-operatives in the country, with a milk procurement of more than 11 million litres per day, and located close to the markets¹¹.

In addition, it also diversified into non-milk products. The most important of this diversification was into edible oils in 1988. At that time, the prices of edible oils were being manipulated by oil traders with the result that the prices were shooting up to unacceptable levels. Even though oil seed growers' co-operatives existed, most of them were run badly and losing money. Edible oils have always been a very sensitive subject in India, leading to even fall of governments. Hence the government persuaded NDDDB to arrange for procurement of clean, unadulterated groundnut oil and sell it through its own outlets. Thus it was essentially a market intervention operation. Besides, this provided NDDDB to reorganize the groundnut farmers' co-operatives as it had done with milk producing farmers four decades earlier. Gujarat was the right State for this experiment, since more than 60 percent of the country's groundnut oil production was accounted for by Gujarat. GCMMF marketed this oil on behalf of NDDDB. GCMMF launched a new brand, named Dhara (literally meaning flow), not wanting to carry over the Amul brand name which was deeply associated in the public mind with milk derivatives. It sold its oil on a platform of absolute purity, a claim it could justifiably make. Since much of the edible oil in India was (and continues to be) adulterated, purity could be a differentiating factor. It also coined a slogan, *Dhara, Shudh Dhara*, meaning, literally, flow, pure flow. The launch was also supported by an advertising campaign with a catchy jingle. Later, mustard and certain other oils were also marketed under the Dhara brand name. Even though the oil traders fought back bitterly and often violently, and used their political connections to the full, Dhara was able to hold its own and became the leading brand of packaged edible oils. However, it must be said that dealing in edible oils was found to be a far more difficult task as compared to dealing in milk, and the success achieved in organizing groundnut farmers into co-operatives was limited.

In the late 1990s, GCMMF undertook distribution of fruit based products on behalf of NDDDB. This was done under yet another brand name introduced by GCMMF: Safal (literally meaning fruitful, having achieved). Under this name were launched a mango drink sold under tetrapack (also in small 100ml. sizes to be served in aircraft), tomato ketchup, and a mixed fruit jam. In fact, the launches of all these products were completed during a single year, 1998-99. The success of these products was very limited as on the year 2000.

By the year 2000, the range of products marketed by GCMMF was truly wide: three varieties of milk, flavored milk, buttermilk, four varieties of milk powder, two varieties of butter, five varieties of cheese, two varieties of ghee clarified butter), chocolates, chocolate drink, sweets, ice cream, edible oils and fruit and vegetable based products. Exhibit 5 gives the product portfolio of GCMMF as on the year 2000. At the time of writing this case, GCMMF was launching milk in tetra packs in the market of Mumbai.

Except in ice creams, chocolate and chocolate-based beverages, Amul brand was the market leader in each and every one of its products. Exhibit 5 also shows the market shares of the various products of GCMMF. Its main sources of competitive advantage were seen by its executives as: (i) low costs due to the elimination of middle men, a lean organization and relatively lower pay scales as compared to MNCs (ii) its scale and scope of operations and (iii) its strong brand name which stood for purity and quality.

Out of the total procurement of 4.6 million litres of milk per day by GCMMF, about 2.2 million litres were sold as liquid milk and the rest as milk products. The milk consumption in India in 1999 at about 225 grams per day was still way below that in developed countries, and even less than in many developing countries. The variation in availability between rural and urban areas was strikingly high: 121 grams vs. 400 grams per day. Thus there was a need and scope for increasing the consumption of milk in its liquid form, especially in rural areas, although for every rupee spent, the nutrition value of milk was way below other high protein and fat items, both vegetarian and non-vegetarian. It was expected that by the year 2011-12, the milk production in India would reach 180.76 million tons, and the per capita consumption would be about 547 grams¹². Exports were negligible: about Rs.271 million in 1999-2000¹³.

Out of GCMMF's total income of Rs.18 billion, approximately Rs.2.75 billion was accounted for by sale of liquid milk; about Rs.3 billion by the sale of edible oils; Rs.4 billion by butter; about Rs.2.4 billion by ice creams; and the rest by the other products. The exact breakup of these products was not available. The share of processed fruits and vegetable items was still quite small.

The growth rates of GCMMF's sales in different segments were quite different. The following table gives the approximate growth rates in these segments:

Table 1			
Growth rates in GCMMF's Businesses			
(Percent)			
	1996-97	1997-98	1998-99
Liquid milk procurement	24.6	3.8	3.6
Liquid milk	N.A.	14	10
Butter	27	8	13
Cheese	N.A.	37	39
Ghee	41	31	N.A.
Milk powder	0	0	18
Ice cream	N.A.	100	100
Edible oils	13	20	18

(N.A. stands for “not applicable”).

Source: GCMMF Annual reports.

The profit margin in milk was generally low, due to the need to keep down the price of this essential commodity, which was also consumed by the poor and the lower middle class. NDDB and GCMMF had, as one of their important objectives, promotion of milk consumption, especially by the poorer people, and hence to achieve its objective, GCMMF endeavored to keep the price of liquid milk as low as it could. Edible oils were also low margin items, their sales prices being controlled rigidly by the government and input prices being essentially set by the oil traders. In the words of Mr. Kurien, they were in this business due to larger societal considerations than for the sake of profits.

Competition in Different Products

The nature of competition varied among the different products. In the case of liquid milk, competition was from private dairies and contractors. There was also competition from newly emerging private dairies that had started supplying milk to the consumers as well as sweet makers. There was intense competition for the supply of milk, which was sought after, especially in the festival seasons, by the sweet makers who derived large profits from the sale of their sweets. Consumers were generally not very particular about the brand of liquid milk, so that the sales depended to a large extent on dealer push. However, there was scope to establish differentiation through appraising the customers of the quality not only of the initial milk itself, but also the quality of the supply chain, which ensured the stability of milk.

For butter and cheese, new entrants were making their mark. Britannia, a firm engaged in manufacture and sale of biscuits, had entered into foods business, and more particularly in milk and milk related products such as butter. Britannia had introduced new forms of cheese such as cheddar cheese slices, and supported its products with extensive advertising campaigns. It was believed that advertisements played a powerful role in the demand for particular brands of butter and cheese.

The sweet market was highly fragmented, with numerous small time local operators producing their own brands and unbranded forms of sweets. The sales of sweets soared in the festival seasons, drawing milk supply by offering higher prices. Other food companies such as Hindustan Lever Ltd. (HLL), a subsidiary of Unilevers, and Nestlé had also entered into the business of ready made or near ready sweets (such as gulab jamun, which just needed to be deep fried to get it ready). Branded ready or near ready sweets were advertised and heavily promoted through campaigns such as through mail orders to housewives.

The ice creams market was an emerging market in India, witnessing the entry of numerous players. The national scene was dominated by Hindustan Lever with its Kwality and Walls brands, accounting for about 45 percent of the market. GCMMF was the other national player, with about 30 percent of the market. There were, in addition, very powerful regional players such as Vadilal Ice Creams in the Western India who commanded substantial (in excess of 30 percent) of the regional market shares. Ice creams were largely promoted through local promotions, hoardings (billboards) and advertisements. About ice creams, Mr. Vyas said in an interview with the case writer:

In ice creams, positioning and promotions are not the only things. Indian ice cream market is likely to expand very rapidly. The Indian consumer is changing. They will not just stick to milk. Ice creams will no longer be made at home. A large number of consumers with disposable incomes will seek value added products, including ice cream. We shall target these consumers. Our strategy will be to make them locally and market them locally through our network. Our emphasis will be on quality. Our devotion to quality will be total and constant.

Edible oils were of two types: loose and branded. Loose oil constituted the bulk (perhaps about 70 percent) of the total market. Among the branded oils, there were many which were just local brands with little brand recall, but just served the purpose of being put in a tin with a name on top. The main branded players were Dhara and ITC¹⁴'s oil division, with many brands. It was believed that with increasing discretionary income, the tastes of consumers would swing more to the branded end of the market. Most of the advertisements were either on the purity platform or on the health platform (zero cholesterol or low cholesterol).

In the processed fruits and vegetable foods business, there were numerous players, many regional. The largest player was Hindustan Lever, which was moving away from its soaps and detergents business to foods business. Hindustan Lever was the largest fast moving consumer goods company in India, with a turnover of Rs.101 billion and profit of Rs.1 billion in the year 1998-99¹⁵. The company had a turnover of Rs.42 billion in its core business of soaps and detergents, Rs.18 billion in personal care products, Rs.20 billion in beverages (tea and coffee, mainly), Rs.6 billion in spreads, cooking products and baking products, Rs.1.64 billion in ice cream and frozen desserts, Rs.2.7 billion in branded staple foods such as salt, wheat flour and rice, and Rs.1.35 billion in canned and processed fruits and vegetables. In the last two years, it had undertaken a massive expansion through acquisitions, the most notable of them being in the tea, ready to cook flour, bread and ice cream businesses. Hindustan Lever was considered to be a well-run company, with aggressive marketing styles and a highly result oriented culture. It was one of the largest ad spenders of India. It had recently announced its so-called Millennium Plan, which envisioned a growth rate of 100 percent every four years, most of it coming from its food business. It owned many powerful brands such as Kisan in the ketch ups and jams.

Nestlé, a subsidiary of the MNC of the same name, was another major player. Nestlé India had a turnover of Rs.15.4 billion in 1998-99. Its main business segments were: beverages with its flagship brand of Nescafe (30 percent), milk based products including infant milk products and infant cereal products (38 percent), chocolate (15 percent) and ready to cook food products such as sauces, ketchups, soups, pickles and instant snacks (15 percent). Nestlé and its brands were well established in India and commanded a large brand loyalty. For example, its instant coffee, Nescafe, its chocolate malted drink Milo, its infant milk food Lactogen, infant cereal Nestum, its food products with an umbrella brand of Maggie, its milk products such as Everyday and Tea Mate (whiteners), Milk Maid (condensed milk) and a number of brands in the chocolates. Nestle had diversified into different milk products such as liquid milk, curd and butter, and was making huge investments in the dairy related businesses.

Cadbury's and Heinz were the other players but their presence in the processed food sector in India was small. Heinz had acquired some formidable brands such as Farex (infant cereal) and Complan (health drink) from Glaxo. These were well known brands in India. Cadbury's presence was mainly in the chocolate market.

It could be expected that these companies would also expand their operations in the coming years.

Advertisement and Promotion by GCMMF

GCMMF had shown itself to be remarkably savvy in its advertisement and promotion campaigns. It had coined truly memorable slogans such as the one for butter: “Utterly Butterly Delicious”; for edible oils: “Dhara, Shudh Dhara”, emphasizing its purity¹⁶; a campaign titled “The Taste of India” for all its products, featuring Indian recipes and life style; a campaign to promote drinking of milk, purely based on the nutritional value and the taste. It was the first Indian company to put up advertisement hoardings (bill boards) based on a topical and current news item that almost brought traffic to a stop. The hoardings, started in 1967, were changed weekly and every week it had a current and a new theme. They have continued till this day. For example, during the emergency in 1976-77, when forced sterilizations were done under government compulsion, the Amul hoarding read: “We have always practised compulsory sterilization”. When UK was having the problem of the Mad Cows’ Disease, GCMMF came out with an ad titled “Union Jacked by Mad cows”. These advertisements, topical, witty and humorous, served the purpose of high recall, powerful appeal and a sustained awareness of the products.

In ice creams, GCMMF emphasized in its advertisements that its ice cream was entirely vegetarian, made of pure milk and that it did not have any gelatin content unlike that made by many of its competitors (Indian ice creams usually contained vegetable oils and gelatin in addition to milk, so that in a sense, they were frozen desserts rather than ice creams). According to Mr. Vyas, the Managing Director, the aim of the ads was not merely to stimulate interest, but also to expand the markets so that ice creams would not be seen as a food for the rich.

GCMMF sponsored television programmes as well. It was the sponsor, from the very beginning, of one of India’s most widely watched and appreciated programmes, named *Surabhi*, in India’s largest television network, the State run Doordarshan. Doordarshan had a reach of more than 85 percent of India’s population, and its programmes commanded viewerships exceeding 60 percent, far more than any of the cable networks which in case had a limited reach in cities and towns. *Surabhi* was a programme of one hour’s duration beamed at 9 P.M. on Sundays and featured India’s culture and traditions. The programme had started the concept of posing questions at the end of each programme and inviting readers to give their replies, with handsome prizes for correct replies. The innovation was such a success that many viewers watched the programme for this feature, and their replies were so much in number that it almost choked the postal system (a typical programme drew about 50,000 to 100,000 replies!). GCMMF also sponsored a popular show, called Amul India Show on Star TV, and beamed at 10 A.M. on Sundays, was a very popular programme.

GCMMF had sponsored two well-received feature films. The first film was titled “*Manthan*” and featured the exploitation of village farmers and the formation of co-operatives. It was, in a sense, the story of GCMMF itself. The second film, titled “*Sardar*” featuring the life of Sardar Vallabhbhai Patel, the first home minister of Indian and, known as the “Iron Man of India”, brought about the unification of the different princely states of India.

In addition, GCMMF had produced a number of TV campaigns of 30 to 60 seconds’ duration, on some or many of its products.

GCMMF and Its Programme for Management of Change

The Government of India liberalized its dairy sector in 1991, making it possible for private players to enter this industry (it was hitherto reserved for the co-operative sector). Based on this stimulus, GCMMF looked at all its operations, strengths and weaknesses as well as opportunities available, and came to the conclusion that it had to become more customer centred (rather than merely being farmer or supplier centred, as was the case hitherto). This required paying close attention to the customer needs and quality. GCMMF realized that it was not enough that GCMMF itself was wedded to these ideas; the entire supply chain had to conform. Hence it launched a “Total Quality Management” or TQM to ensure the high quality of the products from the starting point (the village farmer who supplied milk) right through the value chain until it reached the consumer. This meant the need for the involvement of farmers, transporters, factory personnel, wholesalers and retailers, each of whom had a role to play. For example, if the retailer did not take care with his refrigeration, the product could deteriorate, leading to a bad name for GCMMF and for its brand Amul.

What began as a TQM movement gradually became a movement for management of change in the entire value chain. GCMMF’s Management of Change (MOC) initiative was launched in six areas: cleanliness of the dairy co-operative societies, planning and budgeting of the dairy co-operative society, artificial insemination service, quality testing and milk measurement by the dairy co-operatives, animal feeding and management practices and self leadership development.

Growth and Financials of GCMMF

In the recent years, GCMMF had been registering an annual growth of nearly 20 percent. Exhibit 6 shows the growth rate from 1984-85 till 1998-99. Exhibit 7 gives the salient financial data of GCMMF over the years 1993-94 till 1998-99.

The sales of the milk and milk related products depended on the procurement of milk that could be done. Exhibit 8 shows the growth in milk procurement by GCMMF from 1983-84 till 1998-99. The rate of growth in milk procurement was in the region of five percent per year.

The total milk production in India was in the region of 86 million tonnes per year (see Exhibit 9 for the growth in the total milk production in India). It was believed that less than half (about 46 percent) of this was procured by organized agencies, the rest being retained by farmers for their own consumption at home or retailed by themselves or small contractors).

GCMMF in the Year 2000

The new Millennium presented GCMMF with new opportunities as well as uncertainties. The milk market appeared to be getting saturated from the supply side. The rate of growth of milk production was around 6 percent per annum. The demand, however, could be expected to grow at 8 to 10 percent per annum, according to industry experts. The per capita milk consumption in India still being around 225 grams per day, as compared to more than 600 grams in many other countries, there was scope for increasing the consumption of milk still further. But the problems on the supply side were formidable. The yield of Indian cattle, at about 1000 kg per lactation per animal, still was much lower than in other dairy countries such as New Zealand and Holland (about two tons), and an increase was possible, but presented a challenge. But at least in the medium run, the supply side would pose constraints in the development of the milk market. Said Dr. Kurien in an interview with the case writer: “In the case of milk and milk products, the limiting factor is not so much marketing, but supplies (of milk)”.

Opportunities abounded in the market, both domestic as well export. GCMMF had been making major efforts to make its brand known in many countries, including U.S.A., where it had entered into an alliance with Kanan Dairy Products, Illinois to market its products. It had established offices and agencies in New Zealand, Gulf, Sri Lanka and Australia. It had entered into E-commerce in a fairly big way, with all its products available for ordering through the net in India as well as abroad. Through its TV programmes in the Star TV, it hoped to increase the brand awareness in the SAARC countries.

But opportunities abounded in the other sectors as well, especially in the processed food sector. With an arable area of land 40 percent larger than that of China, India's food production (of about 600 million tons) was about 30 percent less than that of China. This situation was considered to be due to low farm productivity, lack of technology inputs and absence of land reforms. The land holdings were small and in the hands of small families which essentially did subsistence farming. Most of these subsistence farmers cultivated basic food such as cereals, pulses and some vegetable. But fruits and vegetables for processing did not figure among their priorities. Large farmers cultivated fruits, vegetables and cash crops.

The total area of land in which fruits were cultivated in India was about 3.7 million hectares, and that for vegetables was about 5.63 million hectares. The production was 40 and 73 million tones respectively in 1997-98¹⁷. The increase in cultivated area for fruits between 1996-97 and 1997-98 was 2.9 percent; that for vegetables was stagnant. Production had increased by 5.3 percent for fruits and vegetables over the above period. The major fruits were: bananas (10 million tons), mangos (10 million tons), citrus fruits (4.3 million tons) apples, papayas and guava (about 1.5 million tons each). The major States producing fruits were Karnataka, Uttar Pradesh (including the newly created State of Uttaranchal from Uttar Pradesh), Tamil Nadu, Bihar, Andhra Pradesh and Maharashtra. These States accounted for 22 million tons of production. Gujarat's production was only 1.82 million tons. The major States producing vegetables were Bihar, West Bengal, Uttar Pradesh, Orissa, Karnataka and Maharashtra, accounting for 50 million tons. Gujarat produced about 2.25 million tons.

However, with improved per capita income and living standards, there was a general shift in the eating habits of Indians towards premium food. It was estimated that while subsistence foods would grow by 14 percent in the decade ending in the year 2005, premium food consumption would increase by 150 percent¹⁸. It was estimated that by the year 2010, total demand for fruits and vegetables would grow to 169 million tons, and assuming a processing rate of five percent, the processing industry would grow to 8.45 million tons¹⁹.

Another feature of India's food sector was a highly inefficient food logistics and distribution system. At the points of production, storage and handling facilities were poor, so that ripening of fruit was not controlled. There were six to seven intermediaries as compared to an average of two in the U.S., and these intermediaries performed the functions of transport, storage and eventual movement to the markets. The transport was extremely inefficient; packaging was poor and temperature control, non-existent. Due to these inefficiencies, it was estimated that about 35 percent of fruit and vegetable production was wasted.

In addition, the mark up at each stage was very high, the commission at each stage being about 25 to 30 percent. The price at the consumer end was anything between three to six times the price paid to the farmer. The high levels of commission charges were also related to wastage in

logistics, since at each stage, the intermediary had to throw away about 20 percent of the receipts due to the products having become unfit for consumption.

The Indian food chain was also poor with respect to the processing it went through. Only about 1.3 percent of India's total fruit and vegetable production was processed commercially as compared to 70 percent in the U.S., Philippines and Brazil, 80 percent in Malaysia and 30 percent in Thailand. The value addition in India was only about seven percent in India as compared to 23 percent in China, 45 percent in Philippines and 188 percent in U.K.

Thus it was a situation GCMMF was familiar with: a wasteful production system, and poor prices paid to farmers. If the farmers could be organized into co-operatives, as it had done with milk, GCMMF might be able to become a truly major player in India's processed food market. India's processed foods market was currently estimated to be around Rs.20 billion with a total production of around 0.94 million tons²⁰. But it was also the case that particular fruits and vegetables, especially the former, were grown in particular parts of the country. For example, mangos were grown in Maharashtra, Andhra Pradesh, Uttar Pradesh, Bihar and Gujarat. Grapes were grown in Andhra Pradesh, while apples were grown in Himachal Pradesh and Kashmir. Organizing farmers in these States could be a difficult job. Land ceiling acts were in force in all the States, each with different rules, and this was considered to be a major deterrent for large scale cultivation of fruits and vegetables²¹.

The food processing industry was extremely fragmented, with 5112 units registered under the Fruits Products Order of the Ministry of Agriculture, besides a very large number of cottage and small-scale units. The installed capacity was estimated to be 2.1 million tons²². Most of them used outmoded technology, using traditional preserving and processing techniques. The processing companies were concentrated in Maharashtra, Uttar Pradesh and Tamil Nadu. Recently a few units had begun to employ state-of-the-art technologies such as vacuum concentration, aseptic packaging, freeze-drying and individual quick-freezing. Some well-known Multi Nationals such as Hindustan Lever had established modern facilities with capacities of about 30 tons per hour.

The opportunities provided by this new market were thus quite exciting. But the magnitude of the problems in these new areas was also not to be underestimated. The competitors such as Hindustan Lever and Nestlé were formidable, although Mr. Vyas was quite confident that he and his team would be able to meet the competition. They believed that with the Amul, Dhara and Safal names, customer centered product offerings, good quality of the product and a dedicated team, GCMMF would be quite capable of meeting these challenges. However, not all the competition played a fair game. As Dr. Kurien lamented in one of his speeches to the Annual Meeting of the shareholders:

Most of our competitors are registered under the Companies Act, a law that in spirit and practice respects the rights of owners and observed due process. By contrast, our co-operatives operate under archaic, colonial co-operative legislation, in which the rights of owners are observed in the breach and in which due process finds scant place. For example, while your federation and all the member unions are a part of the same three tier co-operative structure, yet you have to pay four percent Central sales tax when your products are transferred from your member unions to any of the branches of your Federation that lie outside Gujarat. You then again pay local sales tax, when the product is sold within that State. On the other hand if a private company transfers its product from its plant to any of its branches outside the State, it does not have to pay Central Sales Tax.....As long as co-operatives remain in their present legal and regulatory shackles, competition can neither be free nor fair...²³

During his speech to the shareholders, Dr. Kurien said:

I find it sad that I must once again mention that co-operatives do not enjoy a level playing field in dairying – despite what the MNCs and business houses might say. Unlike private firms, co-operatives invest heavily in helping the farmers to increase their productivity. They provide breeding services, veterinary care, extension advice and inputs – often at cost or less. These are functions that, in the absence of co-operatives, would need to be played by the State. Co-operatives are committed to quality and will not compromise for the sake of easy money. Co-operatives pay their taxes and the full cost of their utilities²⁴. Most important, they operate under Co-operative Acts, which, in most States, invest the Registrar of Co-operatives with the power to intervene and overturn business decisions. Can you imagine the Registrar of Companies acting in the same fashion? At the same time, in many States, private firms are eligible for tax holidays, exemption from sales tax, subsidized utilities and the like²⁵.

Many GCMMF officials felt that the problem was even more serious than what appeared from the above statements. Many of the private sector companies did not pay taxes, at least not fully, bribed factory and other inspectors to by pass legislation and lower costs, and many did not even pay for electricity: with connivance of officials of electricity boards, they simply stole electricity. Thus it was that GCMMF officials felt that the playing field they had was anything but level.

But Dr. Kurien was not daunted by these problems. Said he to the case writer: “GCMMF’s strength is in its integrity. It is the honest man you cannot break”.

However, it could be safely assumed that, whatever the path GCMMF took, it was not going to be a smooth one.

Exhibit 1

GUJARAT STATE: A PROFILE

Gujarat is one of the States of India, located on the Western side of India. It lies to the north of Maharashtra, whose capital is Bombay (now Mumbai). It has an area of 196,000 sq. km. and a population of 41 million (India's total area: 3,287,590 sq. kms). It has a population of 41 million (India's population: 1 billion). Its capital is Gandhi Nagar, about 30 KMs. from Ahmedabad, the State's largest city located about 600 Kms. from Bombay. Gujarat is among the most industrially advanced states of India and is also one of the more prosperous. India's per capita income in 1989-99 was \$1360, while Gujarat's is \$1430 (at PPP rates). Gujarat's literacy rate in 1998-99 was 73 percent for males and 49 percent for females, with an average of around 61 percent, much higher than India's average of 52 percent.

Gujarat had a history of political non violence (Mahatma Gandhi came from this state) as well as cooperation among its people. This certainly made it easier to start co-operative movements there. Even today, Gujarat is considered to be one of the best states of India to live in.

The climate of Gujarat varies a lot. On the western side is a rain-starved region, including a desert. The north Gujarat receives more rain, but many regions in this region are semi arid. South Gujarat is fertile and receives about 700 mms of rains per year. Many types of fruits are grown in this region, including mangoes and guavas, and a large variety of vegetables. Fodder for cattle is naturally linked with availability of rain, and many families in Gujarat have milch cattle in their houses, generally as a second source of income. There are a number of people with cattle who are wanderers, and go in search of food and fodder.

[Insert Exhibit 2 here]

Exhibit 3

The Anand Pattern

State Marketing Federation
All dairies in a State (GCMMF in Gujarat)
22 State Federations in India

District Milk Processing Unions
Every district in the state
12 district unions in Gujarat
170 unions all over India

Village Co-operative Societies
All villages in a district
72,774 villages in India

Milk Producers
All milk producers in a village]
2.1 million in Gujarat
9.31 million in India

Organization Structure of GCMMF

[Insert Exhibit 4 here]

EXHIBIT 5

GCCMMF: PRODUCT PORTFOLIO

<i>Category</i>	<i>Market Share</i>	<i>Market Position</i>
Liquid Milk	N.A.	1
Full fat milk		
Semi toned milk		
Fully toned milk		
Butter		
Amul Butter	85	1
Amul Lite, a low fat butter spread	80	1
Amul Ghee and	8	2
Sagar Ghee (two different brands), a highly aromatic clarified butter	10	1
Milk Powder		
Amul Spray, infant milk food	65	1
Amul Milk Powder, instant full cream milk powder	80	1
Sagar, skimmed milk powder	40	1
Amulya, dairy whitener	60	1
Cheese		
Amul pasteurized processed cheddar cheese	50	1
Amul cheese spreads in three flavors	90	1
Amul Mozzarella Cheese, pizza cheese	100	
Amul Emmental Cheese, a form of cheese similar to Swiss cheese		
Amul Paneer, cottage cheese to be used in Indian curries		
Amul cheese powder		
Ice Creams		
Amul Ice Creams	30	2
Sweets		
Amul Shrikhand	50	1
Amul Mithai Gulab Jamun		
Amul Mithai Mate, condensed milk		
Chocolates		

Amul Chocolates in a wide variety of flavors	10	3
--	----	---

Chocolate Drinks

Nutramul	15	4
----------	----	---

Edible Oils	12	
--------------------	----	--

Dhara Edible Oils, groundnut, vegetable (mustard)
Dhara Health, a low cholesterol oil

Fruit and Vegetable based Products	N.A.	
---	------	--

Safal fruit drinks
Safal tomato ketchup
Safal mixed fruit jam

Source: Data supplied by GCMMF.

Exhibit 6

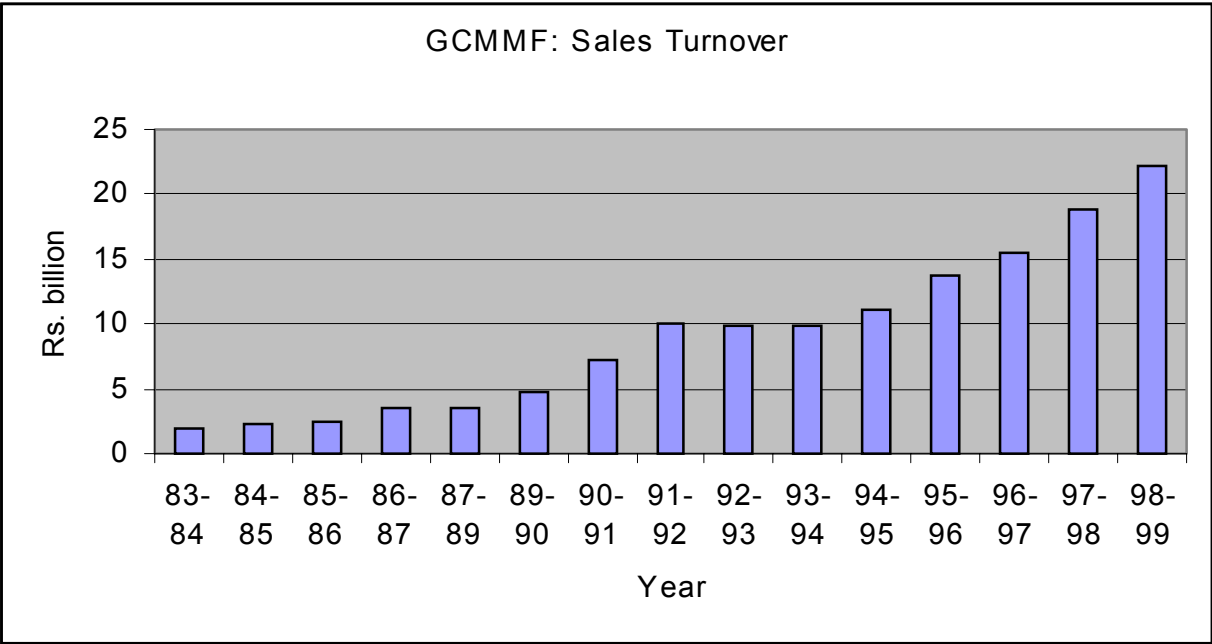


EXHIBIT 7

GCCMMF: SALIENT FINANCIAL DATA, 1994-99 (Rs.Million)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Sales (excl.Dhara)	7633.62	9081.20	11116.89	12529.53	15137.57	18113.01
Purchases of finished goods	7349.45	8496.70	10493.62	12117.79	14053.49	16856.28
Manufacturing expenses	41.26	66.16	153.73	192.04	164.10	196.83
Marketing expenses	265.41	244.77	301.03	360.56	439.82	492.47
Finance charges	45.95	83.25	70.82	66.19	57.10	67.98
Depreciation	4.64	72.22	107.32	105.61	125.99	138.80
Net Profit	7.89	13.44	81.79	77.85	84.80	130.12
Inventories	735.91	665.64	762.01	1194.67	1050.41	837.03
Total Gross Fixed Assets	56.78	699.77	1144.56	1264.27	1438.61	1606.55
Net Fixed Assets	32.56	604.27	941.86	957.32	870.45	872.64
Cash & bank balance	200.41	216.54	527.82	591.65	414.00	528.34
Share capital	69.20	80.00	80.10	130.00	200.00	200.00
Reserves	36.61	38.80	42.88	114.80	240.84	340.66
Grant from NDDB	243.52	300.76	314.86	321.08	177.03	150.92
Loan from NDDB	610.77	817.31	546.42	579.63	547.33	555.06
Long term loans from banks	NIL	NIL	NIL	NIL	NIL	NIL

Exhibit 8

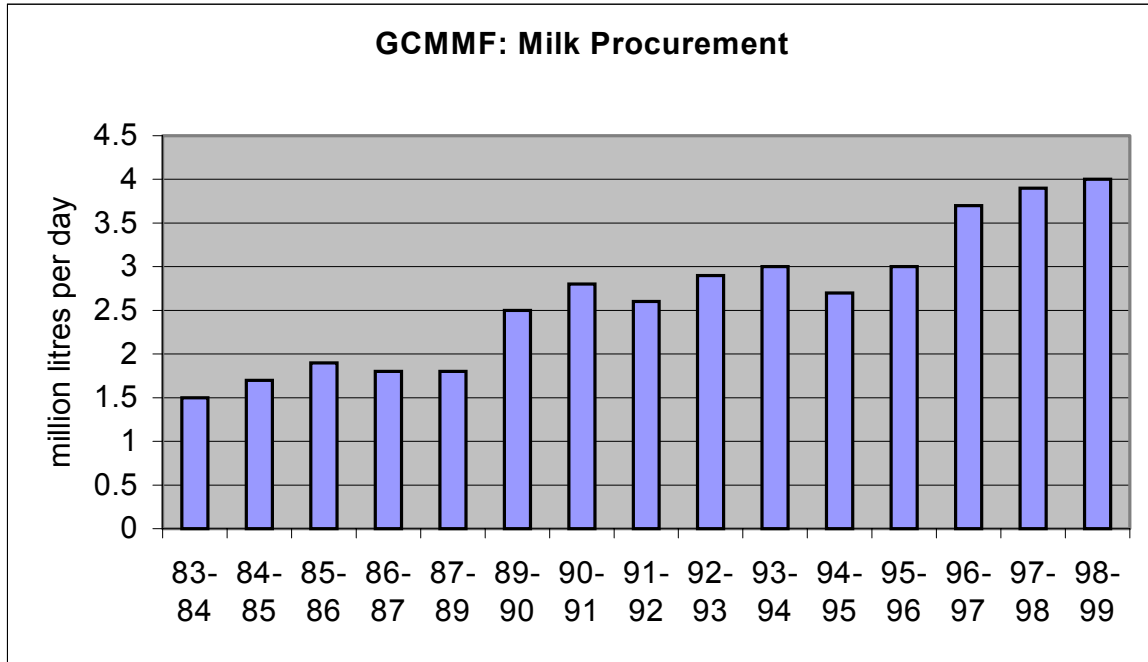


Exhibit 9



LIST OF ACRONYMS USED

GCMMF: Gujarat Co-operative Milk Marketing Federation Limited.

HLL: Hindustan Lever Limited.

HRD: Human Resource Development.

IRMA: Institute of Rural Management, Anand.

MNC: Multi National Corporation.

MOC: (GCMMF's) Management of Change programme.

NDDB: National Dairy Development Board.

TQM: Total Quality Management.

End notes

¹ Chairman's speech, Annual Report of GCMMF, 1998-99, pp.14.

² For a detailed account of the formation of the co-operatives and their early years, the reader is referred to Ruth Heredia 1977, *The Amul India Story* (Delhi: Tata McGraw Hill Publishing Company Limited). About the details of the nationwide programme for increasing the availability of milk and forming farmers' co-operatives for milk production in other States of India as a part of a co-ordinated programme, see Samuel Paul 1982, *Managing Development Programmes: The Lessons of Success* (Boulder, Colorado: Westview Press).

³ This was a feature of India's dairy industry. The milk output of cows varied heavily during the seasons, with the winter season leading to heavy oversupply of milk. This naturally led to depressed prices, unless the milk could be converted into other products that could be stored for a long time.

⁴ An organization registered as a co-operative society had certain restrictions on its operations. These will be presented in this case in due course.

⁵ Some of the districts that had no district level unions were those formed through reorganization of existing districts at different points of time.

⁶ Bye-Law # 5.1 of GCMMF.

⁷ Provided to the case writer by GCMMF.

⁸ Including ice cream.

⁹ Interview with the case writer.

¹⁰ "Amul and India's National Dairy Development Board", Case # N9-599-060, Harvard Business School, 1998, pp.8.

¹¹ *Ibid.*, pp.8.

¹² Satish Deodhar, Gopal Naik and Vijay Paul Sharma 2001. Food Processing Industry in India in the Post-WTO regime: Opportunities and Challenges. Ahmedabad: Centre for Management of Agriculture, Indian Institute of Management (Mimeo).

¹³ *Ibid.*

¹⁴ ITC Ltd. was the largest Indian cigarette and tobacco company, earlier known as Indian Tobacco Limited. It also had interests in hotels, export trading and edible oils.

¹⁵ Annual Report of Hindustan Lever Limited, 1998-99.

¹⁶ "Shudh" in Hindi meant pure.

¹⁷ All the information in this para taken from the web site of Ministry of Food processing Industries, Government of India, www.mofpi.nic.in; the page on Fruits and Vegetables.

¹⁸ Based on the findings of a study by McKinsey & Co for the Council of Indian Industries (CII).

¹⁹ Deodhar, Naik and Sharma, *Op. Cit.*

²⁰ Web site <http://www.nic.in/mofpi/food-sectors/secfvp.html> of the Department of Food Processing Industries, Ministry of Agriculture, Government of India.

²¹ Deodhar, Naik and Sharma, *Op. Cit.*

²² *Ibid*; Web site of the Department of Food Processing Industries, Ministry of Agriculture, Government of India.

²³ Chairman's speech, 26th Annual report, 1996-97, pp.13.

²⁴ It is a fact that in India, many private companies do not pay their taxes, which they avoid by bribing officials.

²⁵ Chairman's speech, Annual report, 1997-98, pp.10-11.