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SUMMER INTERNSHIP REPORT 2021

Interim Report AMUL (GCMMF)



Finding ways to improve Distribution in the time of covid-19

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Acknowledgement

AMUL presented the perfect internship opportunity for any Marketing student. It opened doors to a new world for me, a world full of brainstorming, brand research. I consider myself lucky to have been given this opportunity. This internship has prepared me for a job in a marketing agency and has truly taught me a lot. Thus, I would first and foremost like to thank **Mr. Manish Chaudhary** (*district general manager*), for providing me with this work from home opportunity at this time where a global pandemic curtailed the economy.

I would like to thank **Mr Manthan Dadhania** (*senior Territory sales manager*) my mentor at Amul, for taking me under his wing despite his busy schedule and for guiding me. Without him I wouldn't have learned as much as I have, and wouldn't have gained as much exposure. I would also like to thank Mr Himanshu Chauhan for his constant support throughout my internship. I would like to extend the most profound feeling of appreciation to each worker of Amul for their leadership and valuable directions which were remarkably important for my project both practically and theoretically. I see as this open door as a major achievement in my vocation advancement. I will endeavor to utilize picked up aptitudes and information in the most ideal manner, and I will keep on working in their improvement, to accomplish wanted professional target.

Executive summary

Distribution of the goods is the core responsibility of a company and supply chain plays an important role in making it possible. Many businesses went insolvent in time of Covid 19 and big company struggle to stay afloat.

In many parts of India essential commodities are not available and many companies failed to provide the products to their consumers.

The supply chain is disrupted by people who are migrating from one place to another and the nation-wide lockdown which existed for 60+ days.

Amul's management has done a great job in those hard times and has managed to keep the supply chain running efficiently in the time crisis. Every step was taken to save the employee and the customer. Different bio bubbles are made and the rules are followed with utmost sincerity.

While other dairies have decreased production Amul increased due to the upsurge in demand and that shows the flexibility of the organization. This flexibility is needed in the time of Calamity. Distribution chain of Amul is very vast and Amul has presence in almost all the places in Vadodara.

We can see that in all the Pandemic one thing which happened is drop in communication channel and this acts as a barrier for all the industry because they cannot connect to the consumer but in this decade as we have internet we can manage to connect to consumer at any point of time. Amul did great in times of connecting with the consumer and launched the

Amul App and launched new product such as Haldi doodh which shows agility.

What we suggest is Amul can have milk and product vending machine which will lower the load of supply chain and create its own space where Amul doesn't have to put efforts in getting new space in Pharmacy and all. That will also be used to sell most of the products and the new one which is carbonated water.

Company Overview

The Amul logo features the word "Amul" in a white, stylized, gothic-style font. The letters are bold and have a slightly decorative, calligraphic feel. The logo is set against a solid red rectangular background.The slogan "The Taste of India" is written in a white, serif font. It is centered within a horizontal green bar. Below the green bar, there is a thin red horizontal line.

Beginning

The idea of milk co-operation emerged in 1946 in the small town of Anand, Gujarat as a protest against the exploitative trade practices followed by a local company by local farmers. Under the leadership of leaders such as Sardar Patel, Morarji Desai and Thuhuhundandas Patel, local farmers established **Kaira District Co-operative Milk Producers Union Ltd** with only two communities of milk cooperatives and 247 liters of milk. It acquired the name of Amul and is owned by a cooperative community, Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF). Dr Verghese Kurien, chairman and founder of GCMMF for more than 30 years and known as the 'Milkman of India' is credited with Amul's success.

The White Revolution

Amul promoted the White Revolution of India. India was a dairy-free country but after the launch of Operation Flood in 1970, a project under the National Dairy Development Board (which itself builds to replicate the Amul model nationwide), India increased its milk production from 17 million tons by -1950 -51 to 88 million tons in 2002-03.

Amul developed a very successful three-story model that removed the middle ground and connected manufacturers and consumers directly. This model includes dairy co-operative communities at the village level which is integrated under the dairy union at the district level and a member state union at the state level. The milk is collected from the village dairy community, purchased and processed by the District Milk Union and the products marketed at the state dairy organization, eventually consumed by the consumer. The system operates professionally, directly connects the manufacturer with the consumer and gives

manufacturers control over their products. According to Amul, more than 15 million dairy producers pour their milk into 144500 dairy communities across the country. Their milk is processed by 184 Co-operative Unions and sold by 22 Government Advertising Organizations.

Brand Amul



Amul is worth more than Rs 52000 cr but in addition to these figures, most importantly the change it has brought to the lives of the people of India, especially farmers living in rural areas. With more than three million farmers as its members, Amul is present in more than 50 countries, providing a wide range of dairy products such as milk, butter, curd, ice cream, cheese, fresh cream, chocolate to name a few.

Advertising



The Amul logo and motto was designed to preserve the taste and diversity of the country. It reinforces Amul's commitment to bring quality food products to the common people of India.

Amul's mascot, the popular 'Amul' girl, a young Indian girl wearing polka dot with blue hair and a half-tied pony and Amul's advertising campaign dealing with everyday problems has become part of the lives of all Indians. With new inventions such as Any Time Milk (Amul), which delivers a 300-ml milk bag for Rs 10, Amul is constantly trying to rejuvenate itself. It is one of the few Indian brands that has captured the knowledge of the Indian people and made them a great pleasure in the country and in the world.

GCMMF

Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF), is India's largest food product marketing organisation with an annual turnover (2019-20) 38070 cr .

Its daily milk procurement is approx 23 million lit per day from 18600 village milk cooperative societies, 18 member unions covering 33 districts, and 3.6 million milk producer members.

It is the Top organisation of the Dairy Cooperatives of Gujarat, popularly known as '**AMUL**'(**Anand milk Union limited**), which aims to provide financial support and remunerative value of their milk and also serve the interest of consumers by providing top quality products which are best in class and have international quality. Its success is known throughout the world and its modal is adopted by many companies in the world.

Amul has a huge force of people who work in sales and marketing and deliver great results. It operates through **61 Sales Offices** and has a dealer network of **10000 dealers and 10 lakh retailers**, This is one of the biggest network of Retailers in INDIA. T has a huge range of products and has an innovative center which yearly tries to launch more than 100 products, It major product comprises of milk, milk powder, health beverages, ghee, butter, cheese, Pizza cheese, Ice-cream, Paneer, chocolates, and traditional Indian sweets, etc.

GCMMF is India's largest exporter of Dairy Products. It has been awarded a "Trading House status. Many of AMUL products are available in USA, Gulf Countries, Singapore, The Philippines, Japan, China, and Australia. GCMMF is honored by the APEDA Award from the Government of India for Excellence in Dairy Product Exports for the last 16 years. in the year 2009-10, GCMMF has been honored with the "**Golden Trophy**" for its outstanding export performance and contribution in dairy sector by **APEDA**.

In 2013-14, GCMMF took bold steps in expanding its presence in international markets. Amul's presence on Global Dairy Trade (GDT) platform in which only the top six dairy players of the world sell their products, has earned respect and recognition across the world. By selling milk powders on GDT, GCMMF could not only realize better prices as per market demand but it also firmly established Amul in the league of top dairy players in world trade.

GCMMF for its consistent adherence to quality, customer focus, and dependability, GCMMF has received numerous awards and accolades over the years. It has received the Rajiv Gandhi National Quality Award in 1999 in Best of All Category.

In 2002 GCMMF bagged India's Most Respected Company Award instituted by Business World. In 2003, it was awarded the **IMC Ramkrishna Bajaj National Quality Award - 2003** - certificate of merit- for adopting noteworthy quality management practices for logistics and procurement of milk.

GCMMF is the first and only Indian organisation to win topmost **International Dairy Federation Marketing Award for probiotic ice cream launch in 2007**.
For the innovations,

GCMMF Achievements

AIMA-RK Swamy High-Performance brand award 2013

CNN-IBN Innovating for better tomorrow award in 2014.

World Dairy Innovation Awards- 2014 for Best Marketing Campaign - "Eat Milk with Every Meal".

For the tree plantation activity, GCMMF has been honored with seven consecutive Good Green Governance awards from **Srishti from 2007 to 2013.**

The Amul brand is not only a product but also a movement. It is in one way, the representation of the economic freedom of farmers. It has given farmers the courage to dream.

Year of Establishment	1973
Members	18 District Cooperative Milk Producers' Unions
No. of Producer Members	3.6 Million
No. of Village Societies	18,600
Total Milk handling capacity per day	35 Million Litres per day
Milk collection (Daily Average 2018-19)	23 Million Litres per day
Cattlefeed manufacturing Capacity	9200 MTs per day
Sales Turnover -(2019-20)	Rs. 38,550 Crores (US \$ 5.1 Billion)
Name	Designation
Shri Shamalbhai B Patel	Chairman Gujarat Co-operative Milk Marketing Federation Limited Chairman Sabarkantha District Co-operative Milk Producers' Union Limited, Himatnagar.
Shri Valamjibhai R Humbal	Vice Chairman Gujarat Co-operative Milk Marketing Federation Limited Chairman Kutch District Co-operative Milk Producers' Union Limited, Bhuj.
Dr R S Sodhi	Managing Director Gujarat Co-operative Milk Marketing Federation Limited.

GCMFF Member Unions

1. Kaira District Cooperative Milk Producers' Union Ltd., Anand
2. Mehsana District Cooperative Milk Producers' Union Ltd, Mehsana
3. Sabarkantha District Cooperative Milk Producers' Union Ltd., Himatnagar
4. Banaskantha District Cooperative Milk Producers' Union Ltd., Palanpur
5. Surat District Cooperative Milk Producers' Union Ltd., Surat
6. Baroda District Cooperative Milk Producers' Union Ltd., Vadodara
7. Panchmahal District Cooperative Milk Producers' Union Ltd., Godhra
8. Valsad District Cooperative Milk Producers' Union Ltd., Valsad
9. Bharuch District Cooperative Milk Producers' Union Ltd., Bharuch
10. Ahmedabad District Cooperative Milk Producers' Union Ltd., Ahmedabad
11. Rajkot District Cooperative Milk Producers' Union Ltd., Rajkot
12. Gandhinagar District Cooperative Milk Producers' Union Ltd., Gandhinagar
13. Surendranagar District Cooperative Milk Producers' Union Ltd., Surendranagar
14. Amreli District Cooperative Milk Producers Union Ltd., Amreli
15. Bhavnagar District Cooperative Milk Producers Union Ltd., Bhavnagar
16. Kutch District Cooperative Milk Producers' Union Ltd., Anjar
17. Junagadh District Cooperative Milk Producers' Union Limited, Junagadh
18. Porbandar District Cooperative Milk Producers' Union Ltd, Porbanda

GCMFF turnover across the years

Sales Turnover	Rs (million)	US\$ (in million)
1994-95	11140	355
1995-96	13790	400
1996-97	15540	450
1997-98	18840	455
1998-99	22192	493
1999-00	22185	493
2000-01	22588	500
2001-02	23365	500
2002-03	27457	575
2003-04	28941	616
2004-05	29225	672
2005-06	37736	850
2006-07	42778	1050
2007-08	52554	1325
2008-09	67113	1504
2009-10	80053	1700
2010-11	97742	2172
2011-12	116680	2500
2012-13	137350	2540
2013-14	181434	3024
2014-15	207330	3410
2015-16	229720	3500
2016-17	270850	4100
2017-18	292250	4500
2018-19	331500	4800
2019-20	385500	5100

Why AMUL started?



AMUL started as a response to the abuse of farmers by an Indian dairy named POLSON dairy which procured milk from farmers at a low price and sold it to the Bombay government. This unfair exchange price caused the farmers to take a plea to Sardar Vallabhbhai Patel. Results in the formation of **Kaira district Co-operative Milk producers union limited** in Anand that pasteurized milk products by the farmers for the Bombay milk scheme and by the end of 1948 the number of farmers has increased to over 400.

Amul and Indian dairy industry

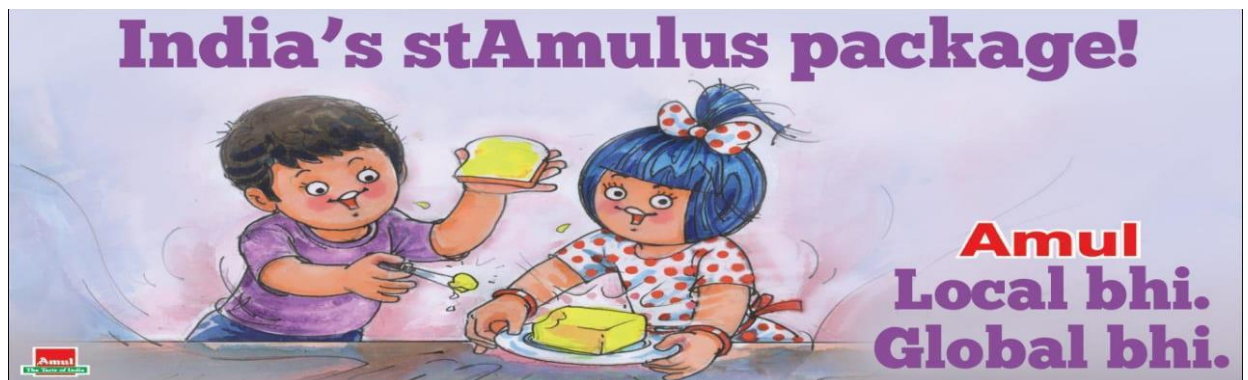
The Indian dairy industry, propelled by cooperatives patterned on the Amul model, is shining, before the emergence of Amul-inspired dairy cooperatives, India was hooked in to the import of dairy products to satisfy the nutritional requirements of its citizens. Till the first 1970s, with barely 110 gm of per-capita milk availability per day, Amul nation was well below World Health Organization (WHO) recommended norms for per-capita milk availability, deemed necessary for minimum nutrition.

However, After the birth of the Amul cooperative movement within the 1940s, its growth and development in subsequent decades, and therefore the replication of the Amul model through 'Operation Flood', completely transformed the face of the Indian dairy sector. By leveraging on the collective strength of many small and marginal farmers, dairy cooperatives catapulted India to an edge of pre-eminence on the worldwide dairy map cornering 21% share of worldwide milk production. For the last 22 years, India has continued to be the most important producer of milk within the world and is probably going to retain its prime position because it has had an annual rate of growth of 4.5% over the last 20 years, as against global milk production, which is growing only at 2%. Indian dairy farmers have ensured self-sufficiency for India in one among the foremost "significant" agri-sector produce – milk and dairy products.

How milk changes lives of Indian farmers

Milk is that the answer to the necessity for economic self-sufficiency and income growth for Amul rural population. Dairying and farming function a sAmulce of livelihood for around 10 crore (100 million) milk producer families of India and this sector contributes around 28% to the Agriculture GDP and 4.5% to National GDP. The dairy sector is actually the economic backbone of rural India. With an annual production of 188 million metric tonnes (MMT) once a year worth INR 8 lakh crore (INR 8 trillion or USD 105 billion), milk is that the largest agricultural sector of India with the worth of its output surpassing the entire combined value of wheat and paddy produced within the country.

India helped Amul



The 36 lakh (3.6 million) farmers of Amul, are thankful to India for taking a firm stand during Regional Comprehensive Economic Partnership (RCEP) negotiations and India took a decision which benefit 10 crore (100 million) dairy farmers of Amul country. The dairy industry of the country will always remain grateful to the govt for shielding its interest and not surrendering to the demand of dairy surplus countries like New Zealand and Australia. Considering the large-scale employment the Indian dairy sector provides, Indian Government has assigned it a really high priority and planned for its growth. As per Niti Aayog's working party Report, India will produce 330 MMT milk by 2033 and become a US\$ 200 billion industry, at current prices, thereby contributing 31% of total world milk production by 2033. for each 1,00,000 liters of milk processed by the organized sector, 6,000 jobs are created. With the large growth projected within the organized dairy sector, we expect a minimum of 1.3 crore (13 million) new jobs to be created within the next one decade, during this sector.

India has 10 crore (100 million) milk farmers, New Zealand has only 10,000 dairy farmers and Australia has only 6,000; but while each of India's dairyman owns merely two cows on a mean, those in New Zealand and Australia own quite 355 cows per farmer. India takes pride in being self-sufficient; while New Zealand exports 93% of the entire milk it produces. If India had allowed import of even 5% of cheaper dairy products from New Zealand, then India would have surrendered around 1/3rd of its foodstuff market which might not be within the interest of Indian dairy farmers. it might have led to a decline of INR 10-12 per liter within the milk price to the farmer and would have resulted in 5 crore (50 million) farmer families moving out of the dairy industry thanks to un-remunerative prices, thereby causing large scale unemployment within the rural areas of the country.

In India, consumers get the simplest quality milk and milk products at the foremost affordable prices and Indian dairy farmers are ready to get the most important share of the consumer's rupee. This share in India is as high as 80%, as compared to only 30-35% in New Zealand, Europe, US and every one major countries of the planet .

Countries who shall sign trade Agreements (FTA) with us have an interest only in dumping their dairy surpluses into India, which can be detrimental to the interests of both Amul rural dairy farmers and also consumers, both within the short term and therefore the future . within the larger interest of Indian farmers, we request the govt of India to not include dairying under the RCEP or any FTA negotiations with New Zealand, Australia, US and EU, in future also .

Amul Federation's Annual Report (Some figures 2019- 2020)

1. Milk Procurement



The total milk procurement by Amul member unions during the year FY 2019-20 averaged 215.96 lakh kilograms (21.59 million kg) per day. The very best procurement was recorded during February 2020 at 250 lakh kg (25 million kg) per day. Interestingly, there's a pointy contrast within the milk procurement scenario before, and through , the Covid-19 crisis. Once the lockdown started on March 24, we witnessed an almost 15% increase in Amul milk procurement, as milk collection within the private dairy sector either stopped completely, or there was a drastic reduction within the milk procurement price paid by private dairies.

Taking a extended view, over the last 10 years, Amul milk procurement has witnessed an outstanding increase of 138%. This enormous growth was a result of the high milk procurement price paid to Amul farmer-members which has increased by 127% during this period. The highly remunerative price has helped us retain the farmers' interest in milk production; and better returns from dairying have motivated them to reinforce their investments in increasing milk production. Amul initiative in promoting the concept of economic , scientific, cooperative dairying is additionally helping to draw in subsequent generation of dairy farmers to stay within the business.

2. Sales

During the fiscal year 2019-20, Amul Federation registered a turnover of INR 38,542 crore (INR 385 billion), which marks a growth of 17% over last year in value terms.

Amul Milk in pouches, which is that the largest category in Amul overall business, maintained leadership altogether major markets like Delhi, Mumbai, Gujarat, Uttar Pradesh and Kolkata with a 11% value growth. During the year, we launched Amul milk in pouches within the States of Bihar and Jharkhand – where the market response was extremely positive. Amul Dahi registered a worth growth of 32% indicating a pointy increase in category demand for Amul brand.

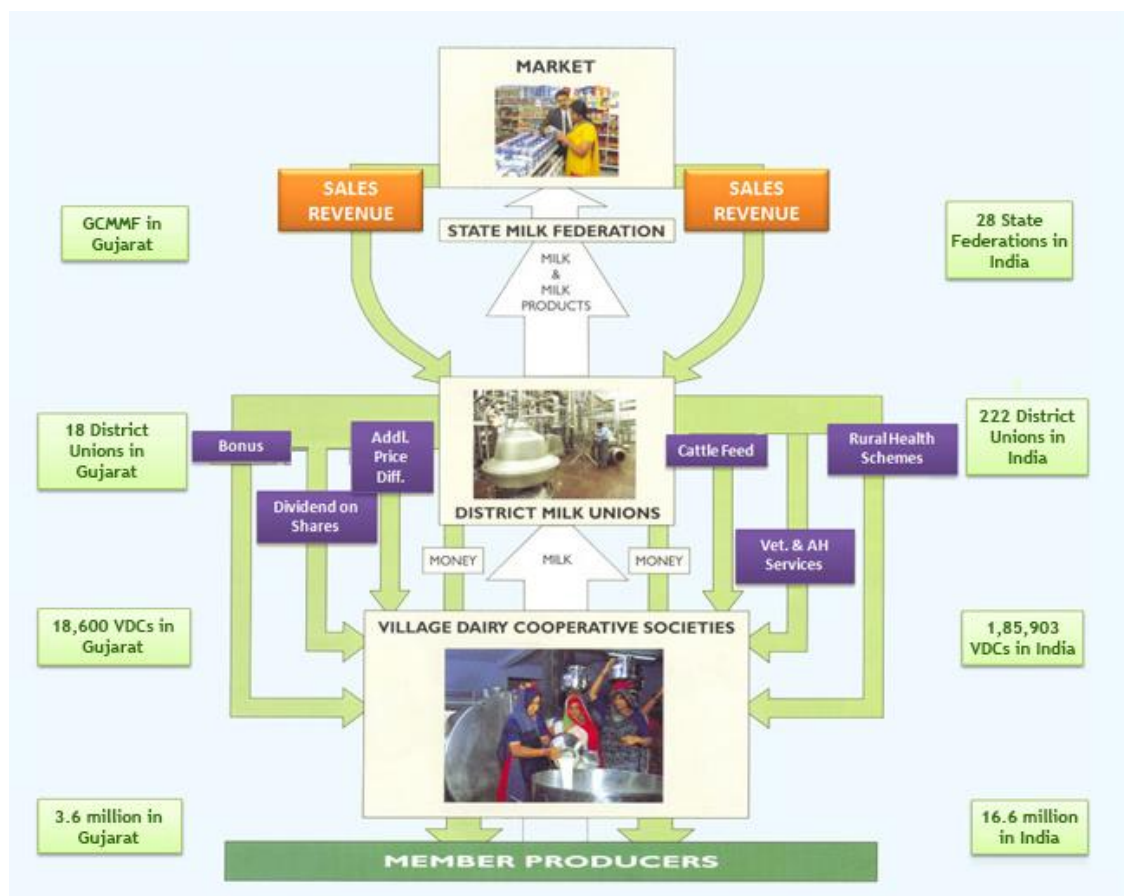
Ghee in consumer packs has achieved 28% value growth thanks to its wide selection and availability throughout the year.

Amul's range of chocolates leveraging on a series of innovative new launches grew by 27% in value terms.

Amul Cheese registered a worth growth of 18% over the last year. This has been possible thanks to creative marketing campaigns to market in-home consumption of cheese and consumer education efforts in promoting usages and applications of cheese in Indian cuisine. Amul are ready to generate a 21% value growth in Amul Paneer and also a high integer growth in Amul cream, UHT milk also as powdered milk consumer packs.

Innovation is ingrained in Amul DNA. Continuing on the trail of product innovation, GCMMF launched 26 new products during the year, most of which have received a really encouraging response from the market. These new products, aside from meeting the demand of the market, also enhanced Amul brand image amongst the consumers significantly.

3. Distribution Network



Innovation is ingrained in Amul DNA. Continuing on the trail of product innovation, GCMMF launched 26 new products during the year 2020, most of which have received a really encouraging response from the market. These new products, aside from meeting the demand of the market, also enhanced Amul brand image amongst the consumers significantly.

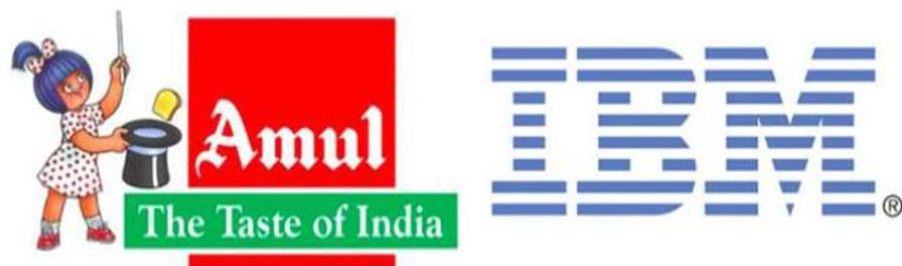
Going ahead on the expansion drive, we started operations from four new branches – at Mehsana, Bhopal, Bhubaneswar and Bareilly – thereby taking the general branch strength to 66.

On Amul continued journey of expanding Amul direct reach to interior markets, GCMMF has added 2,790 Wholesale Dealers (WDs) and Area Milk Distributors (AMDs) within

the current year which represents a growth of 27% over last year. GCMMF now has direct reach in 3,900 towns. This enhanced reach has been made possible by Amul aggressive push in appointing direct distributors in smaller markets of towns with a population of quite 10,000. actually last year Amul have appointed 1,473 direct distributors in such markets. Amul network of roughly 167 Super Stockists in these markets also covers about 3,600 even smaller markets through their sub-distributor network.

As a marketer, Amul has always tried to be before the curve in terms of reaching bent our consumers. Amul are actively engaged with the evolving channels of e-commerce and therefore the new age concept of omnichannel retail, to make sure that it maintains an equivalent leadership and market dominance that it enjoys in traditional trade, in emerging channels, as well. Amul business in modern trade channels has grown by quite 25%; and Amul e-commerce business has increased 2x within the year gone.

4. Information Technology Integration



Amul has completed 7 years on SAP ERP. additionally, to Amul Fed Dairy, Vidya Dairy and others, all 18 member unions also are deriving benefits of using SAP for business transactions.

Amul DMS (Distributor Management Software) has been implemented at 3,300 distributor points. quite 3,700 salesmen of those distributors book orders on mobiles through sales department Automation (SFA). Amul has also implemented mobile-based DMS solution for 350 WDs for capturing secondary sales data of the agricultural areas and little WDs.

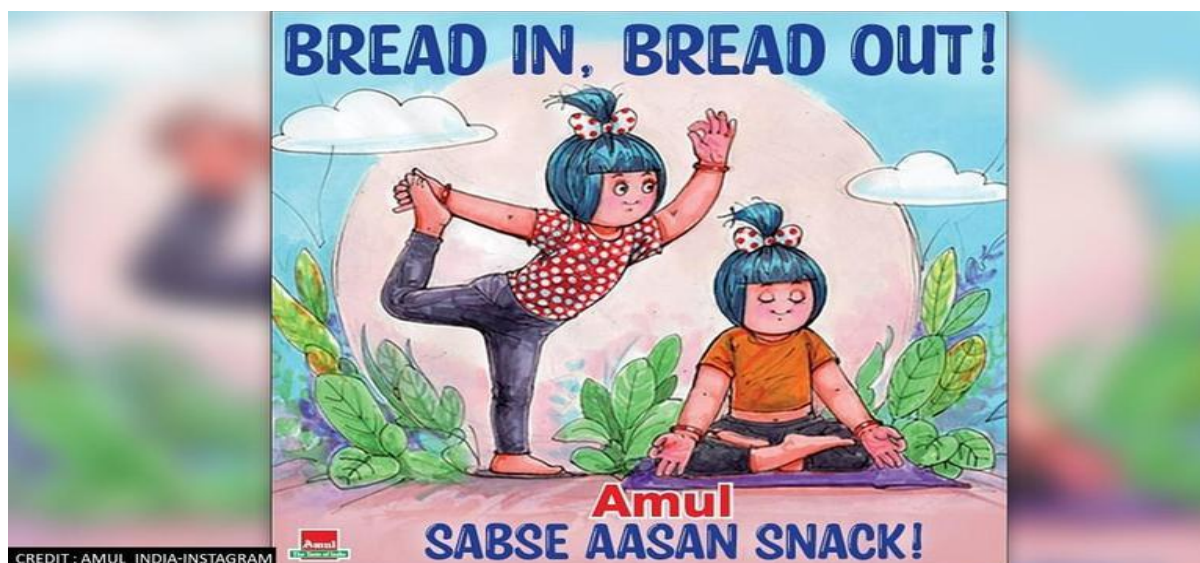
Commendable progress has been made by Amul Federation on the implementation of the Amul Automatic Milk Collection System (AMCS) application at Village Dairy Cooperative Societies (VDCS). a complete of 13,300 village societies are covered within the project so far . the appliance has helped integrate the Cow-to-Consumer (C2C) IT Value Chain. On a day to day , quite 15 lakh (1.5 million) messages (SMS) are being sent to exploit producers sharing information on the standard and quantity of milk poured.

5. Exports

As you're aware, last year there was an outsized skimmed milk Powder (SMP) surplus which was exported. This, also because the excellent growth of consumer packs, has added greatly to the performance of your Federation. During the start of the fiscal year , exports of bulk butter helped us to stabilise prices for both fat and powder, which successively ultimately resulted in better price realisation for Amul farmers.

Amul export turnover touched INR 365 crore this year. We are happy to notice that exports of consumer packs increased within the last two months despite the difficult times thanks to the worldwide impact of Covid-19.

Initiative taken by Amul



1. Cooperative Development Programmes

Amul have continued to supply technical, managerial and marketing support to the Jamnagar Milk Union for the establishment and strengthening of the dairy cooperative structure in their district. It has continued to supply support to exploit unions of Saurashtra and Kutch regions to organize farmers to create and develop cooperatives and increase milk production and procurement.

In the last 19 years, Amul member unions are implementing the interior Consultant Development (ICD) programme for promoting leadership among member producers. Till date, 12,292 VDCS have prepared their Mission Statement and Business Plan under the Vision Mission Strategy (VMS). During the year, 381 Dudh Utpadak Mandali Sanklit Vikas Ayojan Karyakram (DIVA) programmes are conducted and 27,450 milk producers have involved their action plan.

Every year, on Independence Day, the milk producers of Gujarat Dairy Cooperatives conduct a mass tree plantation drive and within the last 13 years they need planted quite 733 lakh (73.3 million) trees.

2. Strategic Calf Rearing Programme:

To create awareness among Milk Producer Members to adopt scientific calf rearing practices and also to make good replacement stock and high productivity animals, Amul have initiated the Strategic Calf Rearing Programme.

3. Strategic Productivity Enhancement:

To improve the progeny of the upcoming generation of dairy cow, the Strategic Productivity Enhancement Programme (PEP) has been initiated in 2,986 villages, covering 31.04 lakh (3.10 million) animals. FIP-XII, the Fertility Improvement Programme (FIP), is being successfully implemented in 3,385 selected villages covering 2.83 lakh (0.28 million) animals.

4. Entrepreneurship Development Programme:

Young and educated milk producers are trained in commercial dairying and management under the Entrepreneurship Development Programme (EDP). Amul have conducted 43 programmes and trained 2,488 milk producers during the year.

5. Ethnoveterinary Preparations Programme:

Amul member unions have implemented the Ethnoveterinary Preparations (EVP) programme as an alternate medical stream; taking into consideration its cost, availability of ingredients at farm level and effectiveness in treatment of varied diseases/conditions at the sector.

6. Skill Enhancement Programme for Dairy Cooperative Services Consultants (SEPDCSC):

Consultant staff of Milk Unions act as an important link between Milk Unions and VDCA to make sure Standard procedure for milk procurement. Hence, Amul have initiated the SEPDCSC programme with the focused objective of strengthening and upgradation of data and skill of the consultant staff of Amul milk unions. It have conducted five programmes and trained 120 consultant staff members of milk unions during the year.

7. Doodh Sanjeevani Yojana:

The Government of Gujarat entrusted GCMMF and its member unions with coordinating and facilitating the distribution of Double Toned Pasteurized Homogenized Fortified Flavoured Milk to children of anganwadis and schools, and also to pregnant and lactating women of Gujarat. Under the Doodh Sanjeevani Yojana (DSY), GCMMF and its member unions have implemented distribution of milk in 81 talukas of 20 districts in Gujarat and have covered around 23.80 lakh (2.38 million) school children.

8. Take Home Ration:

The Government of India provides 'ready to cook' bring home Ration (THR) to young children, adolescent girls, and pregnant and lactating mothers, through its Integrated Child Development Scheme (ICDS). GCMMF has availed the chance for the assembly of THR and its supply to those beneficiaries; and has entered into a tripartite agreement with the govt of Gujarat and three member unions – Kaira, Banas and Surat – each of which established plants of 200 MT/day. GCMMF has started the availability of roughly 14,500 MT/month of THR products (Balshakti for youngsters, Matrushakti for pregnant women and Purnashakti for adolescent girls) from these plants to around 53,000 anganwadis of Gujarat.

Nature of problem (Situation analysis leading to problem definition)

Due to the unpredicted pandemic and the wide spread of the virus the procurement and the supply chain was affected this has caused the problem in the prime times.

Milk is the essential commodity and this category has been given relaxation in the time of crisis and this made the companies to operate despite been in the middle of the deadly virus

Any business is basically dependent on one thing which is supply chain and distribution system is the backbone of a business.

So, like any other pandemic or I can say a unfortunate event it disrupted the supply chain and the subset distribution system.

In India Covid 19 effect started in February but the restriction come a bit late which is 23 of march when the Indian government imposed countrywide lockdown.

The COVID-19

As the coronavirus has been the most important disruption to the planet economy ever since the 2008-09 Global Financial Crisis, the Indian economy's condition during the pandemic outbreak also can be measured by taking 2008 as a point of reference. While India entered the 2008 crisis coming off years of strong growth, the story is different this point around, with the economy browsing a slowdown, pre COVID-19 The nationwide lockdown imposed across India to prevent the spread of the coronavirus has led to widespread chaos and suffering, especially among the country's 300 million poor.

Among the foremost affected states as of July 2020 – Maharashtra, Tamil Nadu, Delhi, Andhra Pradesh, Karnataka and Gujarat – which became the hotbeds of COVID-19 positive cases, also happen to be the key industrial and business epicenters of India. This has further dampened the economic recovery sentiment. Overall, even before the onset of COVID-19 pandemic across

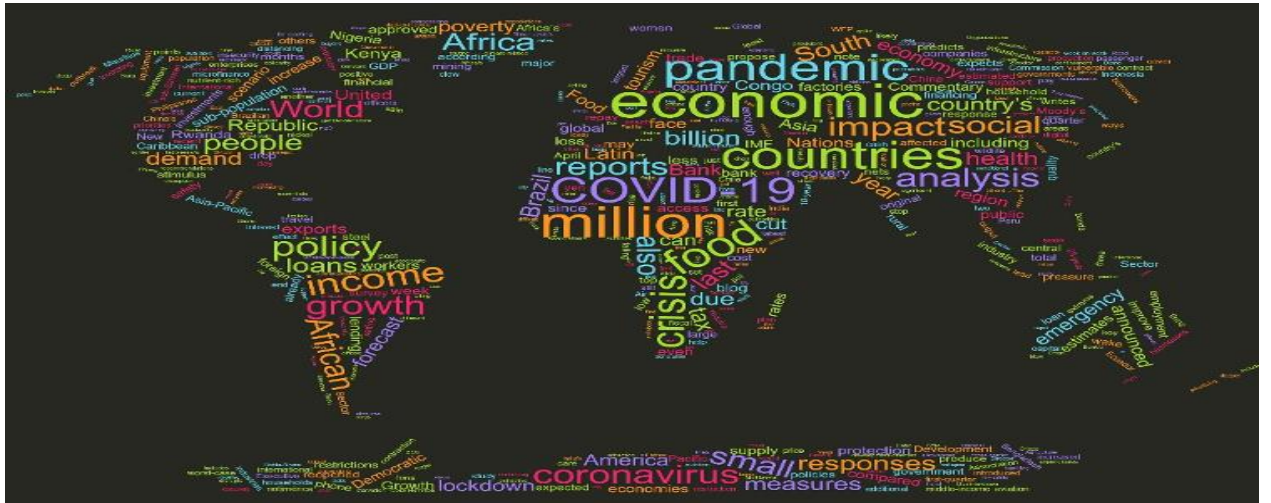
the world and in India, the Indian economy was slowing down with a true GDP rate of growth of 4.7% in 3QFY20. The GDP growth rate further fell to three .1% in 4QFY20, rock bottom since

2008-09 Global Financial Crisis. However, the 4QFY20 growth rate only partly captures the impact of pandemic because the nationwide lockdown was announced on 24 March 2020. The

impact are going to be significant in 1QFY21 because the entire country was almost within the lockdown phase for over two months so as to curb the spread of coronavirus.

The only grace for India from the event within the global market is that the sharp fall in global crude prices. A lower global crude price has the potential to profit the Indian economy by reducing the quantum of its overall import bill and lowering inflation.

Covid impact on Milk industry



After the announcement of complete lockdown on March 22, 2020, the Indian dairy industry initially witnessed a sharp contraction in demand from bulk consumers as Hotels, Restaurants and Cafes (HoReCa), sweet shops and tea stalls were completely shut. This was including limited clarity on lockdown regulations and provide chain issues, which disrupted the sales of milk and milk products. Meanwhile, dairy cooperatives continued to source milk from dairy farmers, possibly in volumes above usual, which led to oversupply of milk within the market. The slump in institutional demand was somewhat gradually offset by rise in demand from retail consumers as at-home consumption of food increased. The growth within the industry is predicted to be primarily driven by increase within the demand for value-added milk products.

The value-added products market is under-penetrated, thus having tremendous scope for the expansion and is predicted to grow at much faster rate as compared with the commodity market. An equivalent has led to the diversification of the dairy category as consumers are looking beyond pouched milk and demanding various other dairy products. Value-added products are expected to grow at 14% -15% within the next three fiscal years and liquid milk is predicted to take care of rate of growth of 3% -5%.

The expected increase in demand of liquid milk also as other dairy products augurs well for MMPCL.

On May 14, 2020, the Centre announced Rs. 100 crore interest subvention scheme on capital so as to assist milk co-operatives and farmer-owned milk producer companies (FPC) battling excess milk supply following restricted procurement by private dairies amid the nation-wide lockdown over coronavirus (Covid-19). This is often aimed to help dairies convert the excess quantity of milk into high shelf-value products. With decline in demand for milk and milk products from bulk consumers thanks to imposition of lockdown in light of the outbreak of pandemic, the surplus milk procured was converted into SMP and Butter leading to excess stock pile. However, SMP prices have remained largely stable moderately of only 10% from Rs.295/ Kg in February 2020 to Rs.265/ Kg in August 2020.

Further, within the Union Budget presented on February 01, 2021, the GoI increased the agricultural credit target to Rs. 16.50 lakh crores in FY22 with attention to reinforce credit flows to farming, dairy and fisheries. This increased credit flow to the dairy industry, among others, is predicted to positively impact the dairy farmers and increase the funds available at their disposal to supply and market the milk.

As per CARE reports, milk production increased by about 3.9% in FY20 reaching 195 million tonnes. Also, between FY19 and FY23, milk production is predicted to extend at about 4.8% CAGR to succeed in 226

million tonnes by FY23 while the per capita availability is predicted to witness a CAGR of about 4.6% during the amount to cross 470 grams per day by FY23.

The long-term outlook of the Indian dairy sector therefore seems favourable on account of accelerating population, increase in per capita consumption, increase in expenditure on package food, brand awareness, urbanization & increase in nuclear families and government support.

Situation analysis of India

Demand side impact

- Travel restrictions have severely impacted Transport, Tourism, Hospitality and Aviation sectors.
- Estimated overall losses to India's tourism sector is INR 5 trillion and 50 million job cuts
- Branded hotels/tour operators are cumulatively expected to incur INR 1.6 trillion loss
- Closing of theatres and shopping complexes has affected the retail sector\
- Drop in disposable income and consumption due to job losses. Steep drop in consumer confidence
- deferring of purchase decisions

Supply side impact

- Disruptions due to supply chain breakdowns emanating from China, South Korea, Italy, Spain, France, Germany, the UK and the USA.
- Manufacturing and sectors like auto, pharma, electronics, chemical prod. etc. face an imminent raw material and component shortage due to shutdown or delay in supply of goods from China. This is hampering business sentiment and affecting investment and production schedules of companies.
- Besides impacting imports of vital raw materials, the slowdown in manufacturing activity in China and other markets of Asia, Europe and the US is also dampening India's exports to these countries

Impact on international trade

- Trade disruptions with China has impacted Indian exports of sea food (anticipated INR 1,300 crore loss). petrochemicals (34% export to China), diamonds (36%), gems and jewellery etc., resulting in a price reduction
- Imports from China alone account for 18% of India's import (FY19) especially those related to ceramic, glass wear, machinery, electrical equip.
- Germany and the UK account for a significant share of Indian exports of leather products, footwear, machinery and instruments while Iran is a major export destination for vegetable products.

- The cancellation of four major trade events between February and April is likely to cause an estimated loss of INR 8,000-10,000 crore in terms of business opportunity for Jaipur alone.

Impact on financial market

- Financial markets have become extremely volatile due to uncertainty about the future and repercussion of Covid-19, leading to huge crashes and wealth erosion, which in turn is impacting consumption levels.
- Following the trend of the global equity markets, domestic markets have been extremely bearish. With equity markets likely to remain volatile in future as well, further wealth erosion of investors is expected

CASE Study



This project is going to be done for the city Vadodara which is the 3rd largest city in the Gujrat state. In this project we have to look into the loopholes in the supply chain and where are any scope for improvement. We have to look into the contact point and how to supply more safely in the time of crises. In the time of a pandemic the supply chain is deeply distorted and as the life is on the line for many people who are working in these conditions it is very tough for a company to maintain the confidence of a worker, as the worker are not willing to work and this breaks the chain which results in the bad supply chain and loss of revenue.

This pandemic has taught us a lesson and showed our vulnerabilities which are uncertainty intimes like these have made us think or other channel and way for supply.

In the time of pandemic Amul has emerged as a market leader and has increased its valuation as well as made a impact on the society.

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The long-term outlook of the Indian dairy sector therefore seems favourable on account of accelerating population, increase in per capita consumption, increase in expenditure on package food, brand awareness, urbanization & increase in nuclear families and government support

Objective of study

The objective is to find the issues of area of improvement in the supply chain for the city Vadodara.

various mode of Distribution to reach out consumers effectively and analysis our existing mode of DISTRIBUTION as well as competition and need to identify needed improvements area which can help on better distribution in current scenario.

The company who will manage distribution in this situation will be more recognized in consumer minds and this will also help in future business.

To suggest the holistic steps to take in time of disruption and prepare for the worst.

1. To find a feasible way to work in the times of a pandemic
2. How to be resilient and flexible at the same time
3. Future course of action by Government as well as Company to ensure the strength of supply chain in hard times

Expected benefits

1. This study will help in making decision for Supply chain domain
2. The outcome of the study will guide companies for designing the Supply chain structure
3. This case study will be able to answer to distribution channels for dairy industry as well as other FMCG sector

Methodology adopted/Approach

This is a qualitative study which is based on the understanding gained during the interaction, published material, research reports and articles including those which has been included in this portfolio, the knowledge relating to Distribution system and the problem faced by companies in the time of a Global Pandemic is gained from research paper and witnessing it closely.

In order to know the real-life scenario, we have talked to vendors and managers and some of the key officials in order to know the insight and help them any way possible. induction and deduction methods were used to understand and draw conclusions.

How information related to the problem was collected?

THE information is collected from many sources like internet surfing and a talk to the key official people who are closely working with the firm and delivering good result.

Company's official press releases

Operation management papers

A Survey is conduct for the people who are living In the area

And information from papers is collected.

1. An overview on the supply chain of Amul

Supply chain strategies of AMUL are:

Core activities and third-party service providers: Amul chose a technique to specialise in core dairy activities and believe third parties for other complementary needs. for instance , AMUL focused on the processing of liquid milk and conversion to a spread of dairy products and associated research and development. On the opposite hand, logistics of milk collection and distribution of products to customers was managed through third parties.

Assistance to stakeholders: To the wholesalers and retailers, Amul offers reasonable margins on a high volume good. It offers support in demand prediction, reducing the potential bullwhip effects which may arise from inexperienced sales partners. It also offers easy repayment programs for capital investments in infrastructure (freezers etc) by the retailers.

Increasing the availability of Milk: Increasing the availability of products results in better economies of scale (optimizing sunk costs). to the present end, the unions provide various aids to the milk producers (like cattle-feed, veterinary aid, technical training) obtained at a coffee cost thanks to large-scale sourcing, to extend supply. Aids also are aimed toward overall community development.

Bridging Gaps during a hard time and unfragmented Supply-Side Market: Given the fragmented nature of the producers, supply tends to vary supported by various factors, but demand remains fairly constant. The unions have invested in cold storage facilities to make sure that surpluses are often stored and redistributed to village-level centers that face a shortage of supply, efficiently reducing supply instabilities.

Technology Initiatives: An automatic Milk Collection System was established that would identify and test the quality/quantity of milk. This results in time-saving since over 1000 producers enter a village cooperative every day and increased transparency.

Enterprise-wide Integrated Application Systems were there to align various sub software systems in situ . A Geographic data system was also established to look at supply disparities in real-time. This is also helping Amul in managing the supply and also have centralized the management decision making. Cyber stores are recently launched also.

2. Vadodara as a city



Vadodara is a big city in Gujrat and Vadodara is around 100 km form the capital and is around 50 Km form Anand which is the birth place of this company or I can say a revolution which has changed Indian dairy sector.

Vadodara At a Glance

1. Area – 7546 Sq. Km.
2. Population – 41.7 Lakh
3. Talukas – 8
4. Sex Ratio – 934
5. Maha Nagarpalika – 1
6. Average Literacy – 78.92
7. Nagarpalika – 4
8. Density/km sq. – 552
9. Villages – 694(Revenue)
10. Total Child Population – 499811

Baroda is another name for Vadodara, a magnificent city in Gujarat. It is located on the banks of the Vishvamitri River. It is the state's most populous city. It is home to some of India's top universities. This was previously a state that gradually transitioned to a city. Vadodara is a well-known tourist destination, attracting a large number of visitors.

3. Talked to senior manager how they manage supply in the times of COVID

Data collected form company personnel

- i. In Vadodara the supply chain is strong and the distributors have no problem in distributing the goods, all product manufacturing unit is near by and that act as major source of supply. For the record all different manufacturing unit is appx 100 to 150 km away from Vadodara.
- ii. Vadodara district corporative union SUGAM it has it's own brand and it is a sister union to AMUL so it make amul products as well as his own product like (GHEE SHRIKHAND)
- iii. Vadodara union facilitates the milk making and packaging distribution
- iv. Dahi is a flagship brand in Vadodara (100% market penetration)
- v. Retail business grown by 20 % Demand increased for some selected products like **cheese block 200 gm** 3 times the normal demand **Srikhand** demand shoot up to 1.5 times
- vi. Ice cream got a hit due to pandemic and the sells shifted to dairy products
- vii. **Type of product**

Product	Temperature
fresh	Room temperature
Frozen	-20 degree
Dairy cold	0-6 degree
Dairy Ambient	Room temperature

viii. Competitor in different segments

Product segments	Companies
Shri khand , Butter	Sugam
Cheese	Govardhan, Britannia

ix. Number of retail outlet in Vadodara

Place	Number of outlet
Vadodara new city & railway station	1800
Old city Vadodara	3000
HORECA(hotel, restaurants)	500
MFS (modern format shops)	30+

4. Analyze the current steps taken by Amul and their effectiveness

Management in the time of covid has a dilly dally situation in the beginning most

precisely 6 days but when the government cleared the rules and regulation company top management took proactive actions which ensure the supply chain is at it optimum because in the time of crisis the essential goods are in greater demand and it is the competency of the management that in these time they have managed to stay at the top shape.

Some of the steps taken by top management: -

1. Disjoint the touch points
2. Start taking measures from the start
3. Given proper support to the ill peoples
4. They make a bio bubble in the day-to-day activity
5. Every person has a designated work to do and they don't have to come to the center, they can go to home and all things went online
6. New App launched by small
7. Zomato and other delivery platform join hands in the time need.
8. Other product segment vendors are supported by giving alternate product to sell.
9. Every delivery in the time of pandemic is been on time and only few worker got infected by COVID

10. Awareness among Milk Producers in Covid-19:

During the Covid-19-triggered lockdown, Amul Milk Unions have administered various activities to extend awareness among milk producers by displaying posters at VDCS for necessary precautions to be taken for Covid-19; made arrangements for maintenance of social distancing at VDCS; supplied gloves, masks and hand sanitizers – beat order to still procure milk from villages without interruption.

Effectiveness of the action taken by Amul

- The action taken by Amul have a huge effect on the revenue as well as on it's market share. Amul have utilized the Covid 19 in a good way and used it to its advantages.
- Sale of many goods has increased and the trust of people on the company. This makes the brand recognizes as People's brand.
- Amul with its vast distribution network across Vadodara has managed to be in the time of need
- Amul sales of some selected product is increased and they

5. The Distribution Network

Amul distribution network is one of the best in its own kind Amul has a vast presence in Vadodara and have more than 5000 places where they have their presence and this makes the supply chain tough to handle.

Though Amul have ERP which is a helping hand in all the supply process but manage all supply chain with uncertainty of human world is going to be tough and this make this task tedious and inefficient some times.

There are many types of distribution system and we have to choose the best one

While studying about the distribution channel and going through the types of it I get to know that a distribution channels main goal is to facilitate on thing and only one thing which is Delivery of goods to the consumer.

We as a human have a tendency to complicate things and make things wrapped in many tough terminologies which are seldom in needed.

According to me and my research any distribution system is best till the time it is delivering the good when demanded by the consumer. Be it Omni channel or a single channel we have to consider the fact that every distribution is exclusive to the environment we can make it better day by day and this can lead to the best or I can say exclusive system for a place.

Amul has adopted ERP which is handled by IBM which has helped Amul to increase 10x performance and profit.

Types of Distribution channel.

Different distribution channels service different points or entities along the whole supply chain that extends from staple suppliers and makers all the thanks to consumers or other end users. the varied distribution channels need to consider various factors which will affect efficient distribution.

Wholesale distribution channels are business-to-business distribution channels charged with delivering goods from staple suppliers or manufacturers to wholesalers. for instance, oil companies must move their product to grease refining companies.

Retail distribution channels are concerned with the delivery of products from wholesalers to retailers, like a cosmetics company delivering goods to varied retail stores.

Exclusive distribution channels are people who deliver goods from a manufacturer only to specifically authorized or designated customers. for instance , auto manufacturers deliver their cars to authorized dealers.

Amul also does direct sales through it's own shops and food plazas.

Amul has Indirect Channels

(Selling Through Intermediaries)

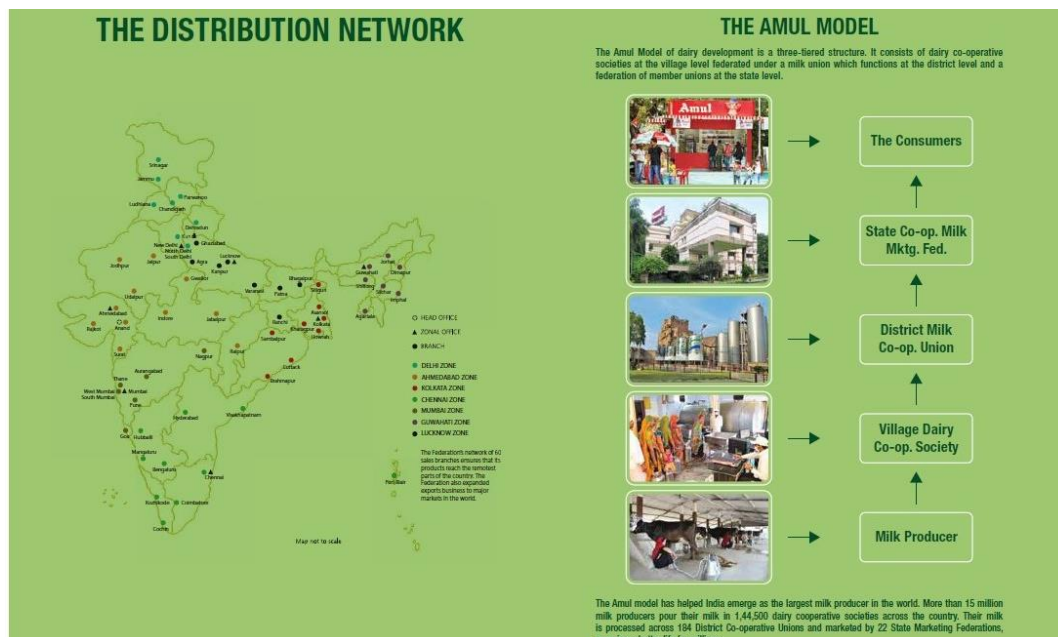
When a manufacturer involves a middleman/intermediary to sell its product to the top customer, it's said to be using an indirect channel. Indirect channels are often classified into three types:

One-level Channel (Manufacturer to Retailer to Customer): Retailers buy the merchandise from the manufacturer then sell it to the purchasers. One level channel of distribution works best for manufacturers dealing in shopping goods like clothes, shoes, furniture, toys, etc.

Two-Level Channel (Manufacturer to Wholesaler to Retailer to Customer): Wholesalers buy the majority from the manufacturers, breaks it down into small packages and sells them to retailers who eventually sell it to the top customers. Goods which are durable, standardised and

somewhat inexpensive and whose audience isn't limited to a confined area use two-level channel of distribution.

Three-Level Channel (Manufacturer to Agent to Wholesaler to Retailer to Customer): Three level channel of distribution involves an agent besides the wholesaler and retailer who assists in selling goods. These agents come handy when goods got to move quickly into the market soon after the order is placed. they're given the duty to handle the merchandise distribution of a specified area or district reciprocally of a particular percentage commission. The agents are often categorized into super Stuckists and carrying and forwarding agents. Both these agents keep the stock on behalf of the corporate. Super Stuckists buy the stock from manufacturers and sell them to wholesalers and retailers of their area. Whereas, carrying and forwarding agents work on a commission basis and supply their warehouses and shipment expertise for order processing and walk deliveries. Manufacturers choose three-level marketing channel when the userbase is spread everywhere the country and therefore the demand of the merchandise is extremely high



Amul Product range

Mithai

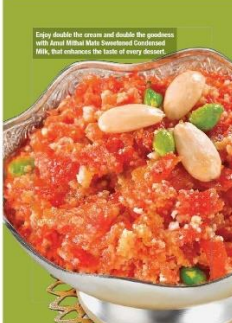


There is no better way to satisfy that sweet tooth than with mouth-watering mithai, made with fresh Amul Milk. Because they are ready to eat, when you are in for a treat.

MITHAI

- Frozen Mithai Range**
Vanilla, Dhuli & C. Milk Cake
100g
- Milk Cake**
100g
- Vanilla**
100g
- Dhuli**
100g
- Vanilla**
100g
- Dhuli**
100g

Shrikhand



Enjoy double the cream and double the goodness with Amul Shrikhand. Amul Sweetened Condensed Milk, that enhances the taste of every dessert.

SHRIKHAND

- Shrikhand**
Milk, Sugar, Raisin, Saffron, Cardamom
100g, 150g, 200g
100g
- Condensed Milk & Khoya**
- Condensed Milk**
100g, 150g, 200g
100g
- Khoya (Mawa)**
100g, 150g, 200g
100g

Braverages



From the great flavors of Butterkiss and Lassi, to the robust flavors of the chocolate dry fruits, with our Amul Milk. These beverages are sure to refresh you in an instant.

BEVERAGES

- Butterkiss**
Milk, Sugar, Raisin, Saffron, Cardamom
100g, 150g, 200g
100g
- Lassi**
Milk, Sugar, Raisin, Saffron, Cardamom
100g, 150g, 200g
100g
- Chocolate Dry Fruits**
Milk, Sugar, Raisin, Saffron, Cardamom
100g, 150g, 200g
100g

Dahi

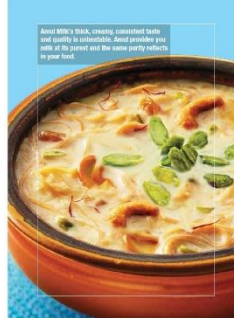


Amul Dahi has a thick, creamy and rich texture, and makes for a great companion to eat for a variety of dishes. It is available in different varieties that spoil you for choice.

DAHI

- Butter Dahi**
Single Serve Cup 100g
Pack of 5
100g
- Vanilla Dahi**
100g
- Vanilla Dahi**
100g

Milk



Amul Milk's thick, creamy, consistent taste and quality is loved across India. And provides you with all the purity and the same purity reflects in your food.

MILK

- Amul Milk**
100g
- Amul Milk**
100g
- Amul Milk**
100g

Happy Treats



Happy Treats are loved to make for happy moments. Made from the freshest Amul products, the convenience and easy-to-cook snacks are perfect for every occasion.

HAPPY TREATS

- Happy Treats**
100g
- Happy Treats**
100g
- Happy Treats**
100g



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HAPPY TREATS

- Happy Treats**
100g
- Happy Treats**
100g
- Happy Treats**
100g

Ice Cream



Amul's wide range of ice creams are a treat loved by everyone. It is the only real ice cream, made with the purity of real milk that enhances its taste.

ICE CREAM

- Amul Ice Cream**
100g
- Amul Ice Cream**
100g
- Amul Ice Cream**
100g

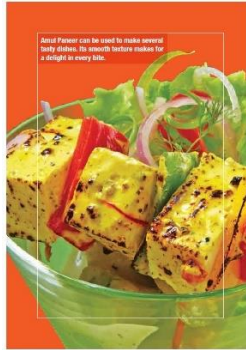


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ICE CREAM

- Amul Ice Cream**
100g
- Amul Ice Cream**
100g
- Amul Ice Cream**
100g

Paneer



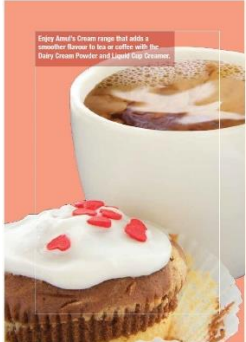
Amul Paneer can be used to make several tasty dishes. Its smooth texture makes for a delight in every bite.

..... PANEER

- **Mild Paneer (Fresh)**
Stick 1 kg
Stick 500 g
- **Fresh Paneer**
Stick 1 kg

Amul Paneer is up to 90% water. Creamy texture makes for a creamy, 100% natural cheese. Mild Paneer (Stick 1 kg) made under order at 20°C or below. Fresh Paneer (Stick 1 kg) made under order at 4°C. See other details at PC in India.

Creamer



Enjoy Amul's Cream range that adds a smoother texture to tea or coffee with the Dairy Cream Powder and Liquid Full Cream.

..... CREAMER

- **Liquid Full Creamer**
Can 10 g
- **Dairy Cream Powder**
Single serve 5 g, 2 g

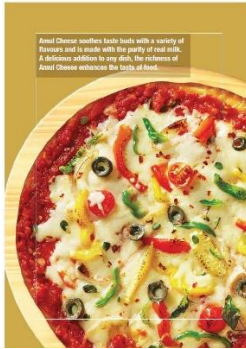
Amul Creamer is up to 90% water. Recommended for easy solubility. Shelf life 6-12 months.

..... CREAM

- **Fresh Cream**
Stick (Pack 1 L)
- **Whipping Cream**
Stick (Pack 1 L)

Fresh Cream: Made from 100% fresh milk. Cream 100% (Fat 35% S.M.F. 4.2%). Shelf life 6 months for single-serve packaging.

Cheese



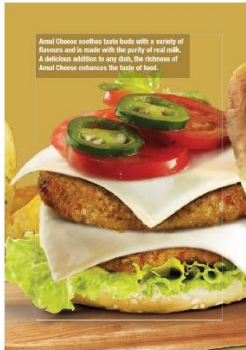
Amul Cheese softens taste buds with a variety of flavours and is made with the purity of real milk. A delicious addition to any dish, the richness of Amul Cheese enhances the taste of food.

..... CHEESE

- **Mozzarella Cheese**
Stick 1 kg
Stick 500 g
- **Processed Cheese**
Stick 400 g, 100 g
- **Swiss Cheese**
Wheel 200 g, 1 kg

Standard solubility. Perfect blending. Even melting.

The only Indian-made Commercial Cheese with 100% natural taste and natural aroma. Natural Cheese as good as its Swiss origin.



Amul Cheese softens taste buds with a variety of flavours and is made with the purity of real milk. A delicious addition to any dish, the richness of Amul Cheese enhances the taste of food.

..... CHEESE

- **Processed Cheese**
Stick 400 g, 100 g
- **Processed Cheese**
Stick 200 g
- **Cheddar Cheese**
Stick 1 kg
- **Cheese Spread**
Stick 100 g, 50 g

100% vegetable processed cheese. Made using stabilised cream.

Chocolate

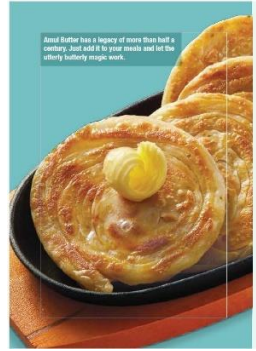


Savour the flavours of the world with Amul's range of rich, premium dark chocolates. Specifically selected to bring you the best in both texture and taste, the chocolate match the best in the category.

..... CHOCOLATE

- **Peanut Chocolate**
Stick (Pack 100 g), Pack 500 g
- **Dark Chocolate**
Stick (Pack 100 g), Pack 500 g
- **Dark Chocolate**
Stick (Pack 100 g), Pack 500 g
- **Dark Chocolate**
Stick (Pack 100 g), Pack 500 g

Butter



Amul Butter has a legacy of more than half a century. Just add it to your meals and let the lovely heavenly magic work.

..... BUTTER

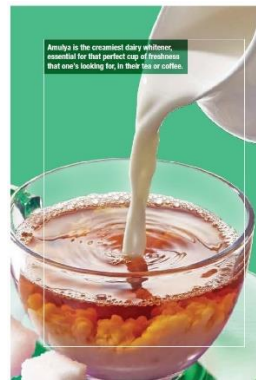
- **Butter**
Pack 10 g
- **Butter**
Pack 500 g, 15 kg

Just the right amount of butter for Ghee. Government in store, also get it in the morning.

Amul Butter is up to 82% water. Recommended for easy solubility. Shelf life 6-12 months.

Amul Butter is up to 82% water. Recommended for easy solubility. Shelf life 6-12 months.

Milk Powder



Amul is the creamiest dairy whitener, essential for that perfect cup of freshening that one's looking for, in their tea or coffee.

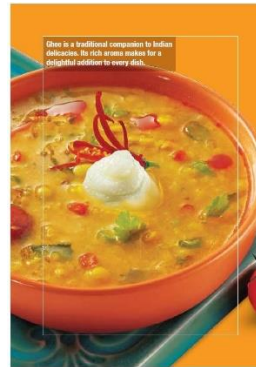
..... MILK POWDERS

- **Skimmed Milk Powder**
Bag 25 kg
- **Skimmed Milk Powder**
Bag 25 kg, 15 kg
- **Amul Dairy Whitener**
Can 250 g, 10 kg

Skimmed Milk Powder - On reconstitution in pure drinking water, 1 kg of Amul SMP provides 10 litres of skimmed milk mix.

Amul Dairy Whitener - 10g/ml milk fat content of 20% that makes it the creamiest Dairy Whitener amongst all the Dairy Whitener brands in India. On reconstitution in pure drinking water, 1 kg of Amul provides 10 litres of reconstituted milk mix.

Ghee



Ghee is a traditional companion to Indian cuisines. Its rich aroma makes for a delightful addition to every dish.

..... GHEE

- **Pure Ghee**
Stick 250 g, 100 g, 1 kg
- **Pure Ghee**
Stick 250 g, 100 g, 1 kg

Amul Ghee is up to 90% water. Recommended for easy solubility. Shelf life 6-12 months.

6. An survey to know the availability of Amul products

Amul
A survey to know the availability of Amul products
**Required*

Name *
Your answer _____

Place
Your answer _____

Do you find any difficulty in getting Amul goods? *

1 2 3 4 5

○ ○ ○ ○ ○

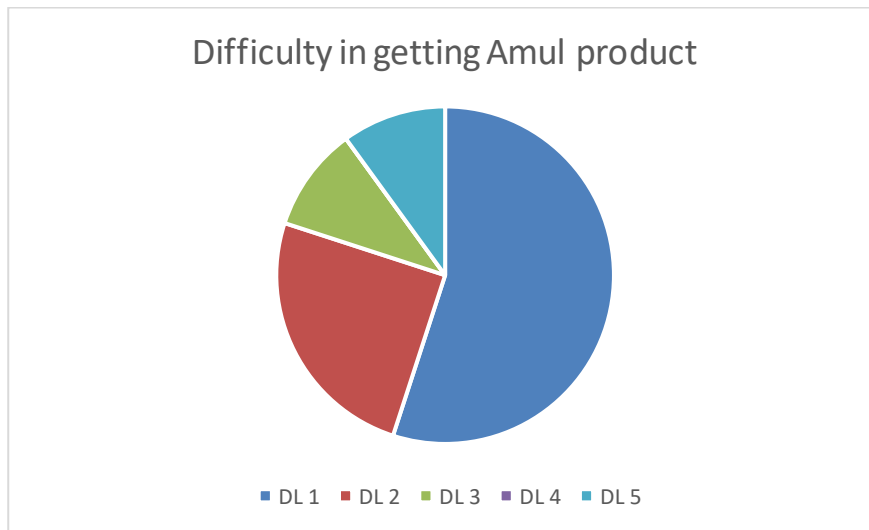
7. Talked to peoples for their feedback on the supply in their area

1	Name	place	do you find any difficulty in getting amul goods? rate at the scale 1-5 1 means no difficulty	Products you are getting easily
2				
3	Shreyas Jain	vadodara	1	milk, curd
4	Yashil Shah	ahemdabad	1	milk, curd
5	Rohan Deshmukh	rajasthan	2	milk, buttter
6	Soumya Bakshi	ahemdabad	1	milk, chees
7	Shivani Rana	vadodara	1	milk, curd
8	Akshita Kothari	ahemdabad	1	milk, butter milk
9	Manushi Sharma	vadodara	1	milk, buttter
10	Arpit Patidar	vadodara	1	milk, chees
11	raghuveer singh tomar	ahemdabad	1	milk, butter milk
12	Chahat Goyal	Gurugram	3	milk, butter milk
13	Rishabh Laad	Indoor	2	milk, butter milk
14	Aryansh Sinha	ahemdabad	1	milk, butter milk
15	Kaival Radadiya	ahemdabad	1	milk, butter milk
16	Gourav Vijayvargiya	ahemdabad	1	milk, curd
17	Nabarupa Sen	Indoor	2	milk, chees
18	Ayush Dutt Sharma	rajasthan	1	milk, butter milk
19	Hemil Joshi	Mumbai	1	milk, chocolate
20	Ridam Jain	rajasthan	2	milk, curd
21	Shivangi Bhargava	vadodara	1	curd, milk

Findings from Survey

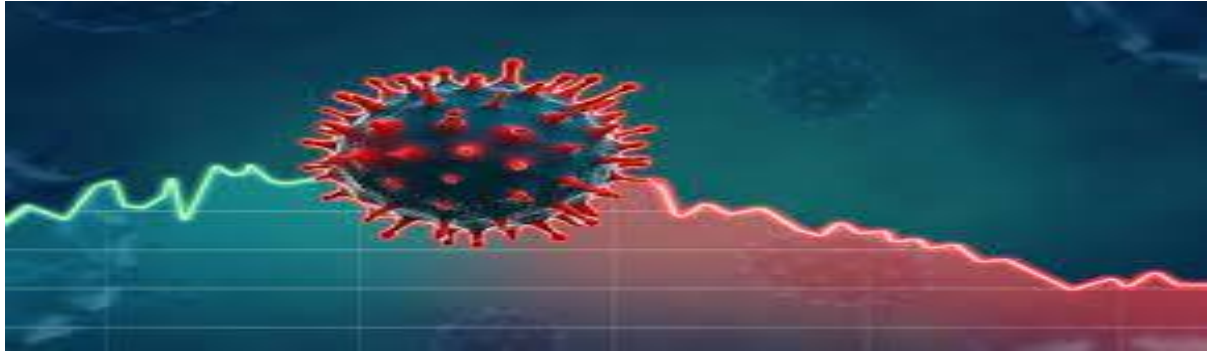
1. Most of the people from Vadodara have access to the milk and other dairy products.
2. 55 percent of people have no problem in getting essential products
3. 35 percent people find slight difficulty in getting Amul product

While talking to people I get to know that many of the small vendors and the companies stopped delivering goods but Amul was there and the prices also dropped in the time of pandemic.



8. Refer to the research papers and articles for more information in the supply chain and distribution. Link given in the references

Problem faced in the time of COVID:



Two Segment hit in the time of COVID are hotel restaurants and catering and MFS (modern format stores) these segment are venerable because these segment are connected to the masses by their habit but in the time most of the people are quarantine and this made these sector to stuck for an unknown time which will cost much and make these shops of other mall to go bankrupt.

The coronavirus pandemic may go down within the history books because the costliest crisis (so far). While World War I and war II were costlier, the COVID-19 crisis isn't over yet. The economic impact of COVID-19 is going to be a function of the magnitude and speed at which it spreads and duration over which it lasts. Overall, demand effects will probably be much larger than the initial supply shocks. Figure below shows the impact of COVID-19 on the economy. Typically, with supply side disruptions and a large price, a large-scale uncertainty creeps in among households and businesses which, in turn, leads to drop in consumption and investments. This ultimately results in dehydration of corporate cashflows and forces firms into bankruptcies, resulting in workforce layoffs and a large-scale unemployment within the economy. Finally, as labor income falls and bad debts spike up, the general financial health and aggregate demand within the economy is adversely impacted. The uncertainty tends to feed on itself and thus, the economy is subjected to depressing loop.

As per the International Labor Organization's March 2020 report, the present containment measures are affecting on the brink of 2.7 billion workers, representing around 81% of the world's workforce. Furthermore, the United Nations' economists estimated a US\$ 50 billion (INR 3.75 trillion) decrease in manufacturing production in February 2020, while the international fund has warned that the negative economic effects are going to be felt "very intensively" in developing countries that export raw materials. UNCTAD has projected that developing countries as an entire (excluding China) will lose nearly US\$ 800 billion (INR 60 trillion) in terms of export revenue in 2020

Findings

In the time of covid the supply chain did well and there are no problem as on in the time of covid and in normal scenario all things went well for supply chain department of Vadodara.

Every segment of the product have different time and ways to keep so the distribution isdependent on the timely production and all the manufacturing unit is nearby which help in the all-time availability of the products.

The distribution team is efficient and the worker at the last touch point have a proper knowledge of what upper management is doing and the idea is correctly conveyed by the management which help in the smooth running of the company.

Departmentization and dividing the task have a good impact on the process which also save many lives and help the company to perform well in Vadodara

People are able to get the product and have no issues in getting them.

Exploration of Alternatives

There are many new ways to improve the supply chain but as we can already see that Amul is doing great in distribution system and all the things are working perfectly but to an extent we can see that there is scope in everything.

So AMUL can do some changes in the distribution strategy.

- **Try to install milk vending machine in prominent place**



A milk vending machine is going to be a profitable way to introduce just in time for peoples. Where Amul can have there branding and put the milk and other product at singular place

A vending machine can be put in the societies and can be filled daily and can work as 24x7 milk ATM for peoples.

As per the insights people need for milk is not bounded by time so why we cannot give a all-time solution. A vending machine will also help in reducing milk waste it also can make it self carbon neutral I some time. We can save Earth by reducing the plastic waste.

Benefit of having A milk Vending machine

1. Easily available and can be used to enforce the branding
2. Will be a one stop shop for all the Amul product
3. Will help reduce the plastic use in packaging and help nation be reducing plastic pollution
4. Can make a significant change In the society

Problem in having vending machines

1. Can be stolen
2. Capital intensive
3. Might increase the cost of milk

- **Use third party distributor**

Apart from distributing the product by themselves Amul can make a drastic change which is using a third party seller which will be responsible for product availability and all the branding will be taken care of by the distributor,

Similar to the mobile companies where they have an exclusive partner who is responsible for the delivery.

Advantages of having a 3rd party distributor

1. Less work and easily manageable
2. Cost of having/ owning physical store is now over
3. Availability is not an issue to worry

Disadvantages of having 3rd party distributor

1. This will dilute the brand value
2. Amul may lose all control over availability of product which can be disastrous for a company who has this massive image/ reputation

- **Use coupon system for milk delivery or for monthly subscription model**

Using a coupon system will make an additional reinforcement of the Amul. Using coupons can work in metro cities where people can pay early that may add value to the whole system. Coupons are used by Brand Nandini in South India where there are places where you can find the coupon and use as a person pleases.

Advantages of having Coupon system

1. This will add profit to the consumer and the money will be a surplus because the money will be there early which will in turn add interest.
Let say 0.001 paisa per packet but that value will add up to a huge money.
2. Using Coupons can have a positive effect on people which will in turn add brand value to the consumer.
3. Can easily be implemented on a mobile platform

Disadvantages of having Coupon system

1. Using coupons for distribution may add a new type of problem in the system which is Duplication of Coupons and people who can duplicate the coupon
2. Can raise false alarm which will end up in high production

- **Amul can use milk man technology**

This is something which I have come across while going to the branding and thinking on ground. It is similar to the past days. Where Doodwalas come to home and deliver the product. This will make a impact in the consumer and Amul will go to every home with the Goodwill of a person.

By using this Amul will be having a wide range and It is like having a van out there which is having all the product at one place and help in making availability affordable and easy for many people.

Advantages of having this milk man technique

1. This technique will make amul reach to the end consumer and have a huge user base
2. This add work force to the people who want to come to delivery and want to sell Amul product at door steps.
3. Having this customization to the need of a consumer and reaching home to home will work in the favour of the company

Disadvantages of having the milk man techniques\

1. This will add a problem of quality and can result in degrading the delivered quality of Amul product.
2. Managing people has its own cost and problem.
3. And union problem will make it problematic to handle \

- **Use online presence and delivery partners**

Using market (online) companies which are having their own delivery system (ZOMATO / SWIGGY). Amul has its own distribution system but looking to the current trend it will be easy to hier them to do the duty and this will add value to the supply chain

Using delivery partner where they are reaching to the consumer will also work in the hard times since we have witness in the COVID times the way supply chain worked and things are available at door steps which is going to be the future for all essential product companies are going to home.

Advantages of having delivery partners

1. It will add profit to the companies by increasing the sale.
2. Door to door facilities are much appreciated and now going to be the future because we all as person have witness the pandemic which make us think of our time outside
3. This will reduce the excel expenditure of having all the stores and big parlours

Disadvantages of having delivery partners

1. Many delivery company add value to the product and increases the cost of the product. Which make the product costly when we see in terms of amul where the whole model is based on low price and high quality.

Amul is doing like TATA salt where they are competitive by pricing and if there price rises people can shift to the new brand because Indian market is very price sensitive

- **There can be a monthly subscription model for milk and other products**

We have see this in some parts of India where there is monthly subscription and this is good because we have a our fixed pool of people who are going to buy any time.

Here we can see that the need of consumer is good product all the time so here we can facilitate them with a subscription model where they can save money and be our loyal consumer.

As I have said earlier Indian market is price sensitive and milk product is always in demand where a person has to spend money all the time so he will prefer subscribing it once and make

Advantages of having Subscription model

1. This will help in tracing the consumer and know consumer base
2. Add value to company and profit too
3. Can carter to the current need fo consumer because to go and buy always is a tedious task.

Disadvantages of having subscription model

1. Not come up with one ----

- **Centralized all the distribution channel**

Having a centralized distribution model and using ERP by partnering IBM is the best deal it helps company add 10 timed the profit and help Amul in creating more profit in the past year

Having centralized system will be helpful and add value to insight for further product making.

Criteria for Evaluation

1. Feasibility: how feasible an idea is because an idea should be
2. Adaptability: Is the current resources are good enough or we have to change some thing into it
3. Usability: Is the idea usable in the organization
4. Scalability: How much an idea is scalable
5. Integration: How much the new idea go with the older one there should be no disruption in the current supply chain
6. Profitability: every decision should be taken in consideration if profit which is the central theme of a business

Evaluation of Alternatives

Idea/ evaluation crieteria	feasibility	Adaptability	Usability	scalability	Integration	Profitability
<ul style="list-style-type: none"> • Try to install milk vending machine in prominent place 	High cost	Depend on area	Have good utility	Can cover all areas	Highly integrable	Costly at first but
<ul style="list-style-type: none"> • Use third party distributor 	Easily feasible	Can cover all the distribution channel	High	Can be used at all places	Highly integrable	Decrease in profit
<ul style="list-style-type: none"> • Use coupon system for milk delivery 	It might add an extra work	Can be used at all places	High	Can be used at all places	Highly integrable	Increase many fold
<ul style="list-style-type: none"> • Amul can use milk man technology 	Needed proper channel	Less	High	Depends on availability	Highly integrable	Not sure
<ul style="list-style-type: none"> • Use online presence and delivery partners 	Easily feasible	Can cover all the distribution channel	high	high	Highly integrable	Will decrease
<ul style="list-style-type: none"> • There can be a monthly subscription model for milk and other products 	It might add an extra work	Can be used at all places	High	Can be used at all places	Highly integrable	Increase many fold
<ul style="list-style-type: none"> • Centralized all the distribution channel 	Can work in current scenario	Less adaptability	high	Can be used at all places	High	Not sure

Conclusion and solutions

Overall performance of distribution and supply chain was best in the time of COVID. The supply chain is at its best possible state. As Amul has good hold in the state and have all the companies nearby and the availability is always there so in the month wide upsurge Amul managed to deliver products

While looking in the unpredictable future the supply chain has to be resilient and flexible to cater the needs of consumer because overall we are working for consumer. We have to switch to all the channels where we can sell our product.

But while managing all these I can say many people don't want buy milk products from all places (platforms) so Amul has to look into the mode / channel they are going to and using for delivery.

Using any mode of delivery is going to cost us and this will add or increase the cost of product so we have to choose a delivery partner

While going through the review from people we get to know that the things are easily available and collaboration with the ZOMATO and other delivery partner is a hit(win win).

Amul also has launched a new app which is a very good initiative for any time like pandemic.

Nature of Solution

Solution is an advice which can be taken to improve the efficiency of distribution system. It is subjective in nature and implementing it may take many different approaches in determining the utility of this advice,

Solution

The solution to the problem faced in the time of covid or any type of pandemic can be solved by getting hold to the communication because it plays an important role in getting in touch of your consumer and workers.

So the first thing a company must do in the time of crises is that they can communicate to its consumer by any means possible. Then taking care of the need by getting the best solution possible for the consumer.

The solution can be on the platform where the consumer is like Facebook, Instagram or social media forums so a company has to look for its consumer and help them to get the product in any way possible.

Some examples are

1. shift to social media for selling goods in the time of lockdowns
2. Home delivery for all essential and non essential goods
3. Contact less making and delivery of goods comes into existence only because of pandemic

So, company can try to utilize the communication channels to know where there consumer are and can use wide range of the new food delivery systems and can cut

short the amount expended on supply by a significant amount.

Supply chain can ramp up by using new technology by having different type of dispenser and in coming days there are new type of pasteurization process is going to be used which increase the shelf life of milk then the company can use dispenser machine in many societies Which will also save plastic the major pollutant of earth and a reason of global warming.

A Milk dispenser / vending machine is a going to be best way to be present to a place where consumer wants.

As the technology is getting cheaper day by day Amul can install dispensers all over places like in a society building and at a central place of societies.

Because we know that people need milk daily and by having milk in close will increase the purchasing and this will also add Amul space in the society where women/ men can gather to buy milk products.

Recommendation

Amul can work on reducing the use of plastic in their packaging and use an alternative because lacks and lacks of pouch never return to the recycle bin and this is an area of concern.

Amul as a company has a good reputation in the industry and has a obligation towards earth.

An alternates way of reaching to consumer is needed some of then I have written in the research paper. We have to help earth heal because we cannot live without it.

We can have dispenser or we can have many other types of technology to prevent milk form packaging and making plastic packed milk.

Amul can also start incentive for not throwing the sachet to the drain and store them and in return Amul take 1 rupee less in the next purchase.

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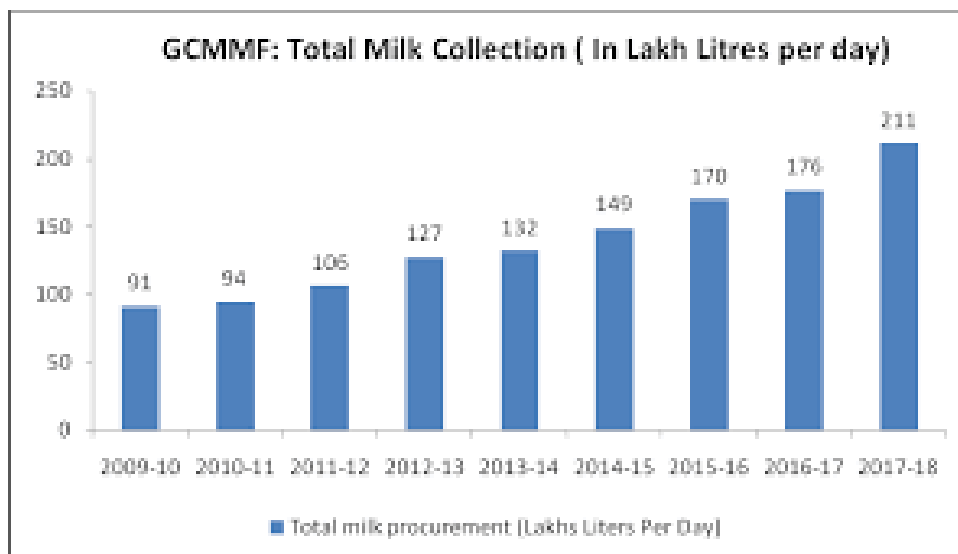
Annexures

1. Different type of vending machine

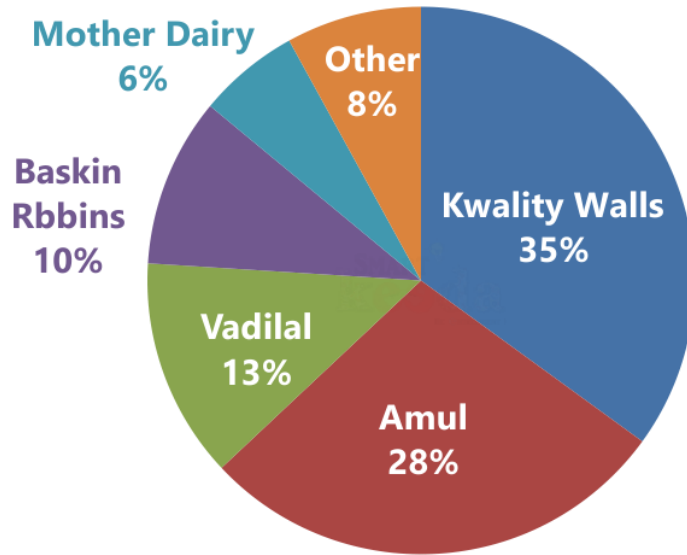




GCMMF total milk collection



Ice-cream industry market share



THANK YOU