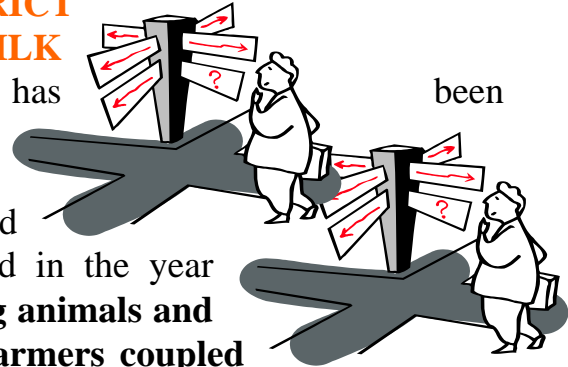


Valsad District Cooperative Milk Producers Union Limited Valsad

V **ALSAD DISTRICT**
COOPERATIVE MILK
PRODUCERS' UNION LIMITED has been registered in 1973 and initiated Dairy Development Activities on ANAND Pattern since 1975. A survey conducted by National Dairy Development Board in the year 1973-74 suggested that the **low yielding animals and poor economic conditions of tribal farmers coupled with adverse geographical conditions** would come in the way of developing this district as milk shed area.



The milk Union did not have any processing facilities of its own till November, 1981 and all the milk procured from the **Rural producers** of this District used to be sent to the neighbouring Dairy plant of Surat District at Surat. In 1981, Dairy Plant of 30,000 litres per day capacity was commissioned at Alipur village taking commercial loans from Financial Institution and assistance from the State Government.

In the beginning there was not enough milk in the District, even to meet the requirement of new 30,000 LPD capacity plant. People used to keep the cattle only for manure and whatever little milk they got was used for their own household consumption. The Milk Union took up the responsibility to develop Dairying in this District and introduced cross-breeding of the local un-productive animals to harvest a new generation of high yielding animals to achieve the break even point of the Plant's installed capacity. Milk started flowing as a trickle which subsequently became a stream over the years over-flooding the small dairy, compelling the management to expand the Plant's installed capacity. Subsequently, a **100 KLPD** capacity Dairy Plant came in to existence in the year 1993-94 under "OPERATION FLOOD-III" Programme, wherein National Dairy Development Board provided required financial and Technical assistance. Since then the Milk Producers' of the Valsad District particularly the women of small and marginal farmers and land-less laborers have strengthened the movement called "**VASUDHARA**". (the stream of Goddess Earth). Vasudhara grew from strength to strength and had to again expand its capacity from **100 KLPD** to **200 KLPD** during April, '01.

Today, “ **VASUDHARA**” stands tall for its pioneering concepts in Rural Dairying as well as Clean Milk Production drive.



VASUDHARA has its area of operations spread between 2 districts called Navsari and Valsad. The geographical and population details of its operational areas are shown below;

Particulars	Navsari District	Valsad District
Geographical Area	2196 Sq. Km.	2939 Sq. Km.
Population	10.85 Lacs	10.88 Lacs
Rural Population	72 %	79 %
Urban Population	3.04 Lacs	3.37 Lacs
Tribal population	48.35 %	60.33 %
Agricultural Dependent	57 %	61.37 %
No. of Milk Producing Societies [As on 31.03.2004]	416	265

The rural population particularly in tribal belt, under the Union’s operations is poor and have very meager agricultural income. The tribal areas are facing with water scarcity during the summer season. Hilly and rocky surfaces play crucial part in non development of this areas from agricultural point of view. The farmers are also marginal and do not have any other reliable source of income. “Vasudhara” has focused on this segment and today it gets nearly 80 % of its total milk from tribal societies. Dairying has become major activity and a reliable source of income for the farmers of this tribal belt.

The dairying has always been considered as a subsidiary income in agrarian economy and probably has not been given its due as a major economic activity. Vasudhara has demonstrated that dairying can play a pivotal role in development of rural areas, particularly among the weaker sections having poor resources base and low risk taking capabilities.

Today, there are around 60,345 tribal families [Out of total 1,04,000 members] in this districts directly participating in this dairy cooperative.

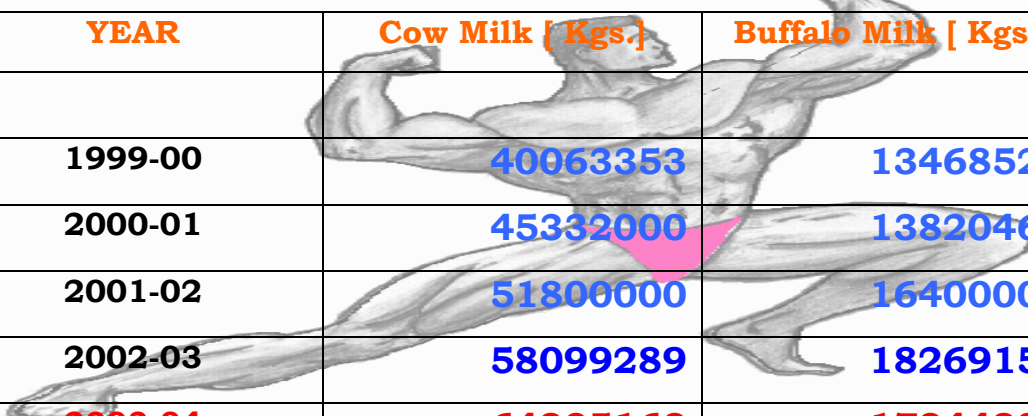
V **ASUDHARA** has grown as a pioneering oraganisatoin, which has charted its growth track thro' innovation and visionary actions in Milk Procurement as well as in the area of Milk marketing. Milk procurement has increased many fold. The network of Milk producing Village societies is expanding rapidly. The footprint of "Vasudhara" has covered majority of the villages in its area of operation. "Vasudhara" is having a strong presence in tribal areas of both districts. The focus of growth in fact, is in tribal belt. The population of Village societies as on 31st March, '04 is 681 societies. Out of which, 466 societies are managed and run by the women. Women societies in tribal belt is 417, which is around 72 % of the total tribal societies. **The details of Population of Village societies is shown below : [As on 31st March, 2004]**

Taluka	Tribal Soc.	Non-Tribal Soc.	Total Societies
Navsari / Jalalpor	39	32	71
Gandevi	29	27	56
Chikhli	199	00	199
Vansda	90	00	90
Valsad	75	43	118
Dharampur / Kaprada	81	00	81
Pardi	58	00	58
Umargam	08	00	08
Total village societies	579	102	681

V **ASUDHARA** has since its inception, focused on cow milk production and procurement. It has driven all its resources to encourage the farmers to go for cows rather than the buffalos for the obvious economic reasons. The strategy is paying rich dividend and farmers have also understood the benefits of cow milk to their earning.

The Thrust is on **Cross-Bred Cows**. The fruits of which can be seen from the following table. The milk procurement has grown consistently over a period of time. Majority of milk is coming from the backward areas of the Union's operations. To encourage the cross-bred cow rearing, Vasudhara has taken several steps.

Table showing trend of Cow & Buffalo Milk Procurement



YEAR	Cow Milk [Kgs.]	Buffalo Milk [Kgs.]
1999-00	40063353	13468521
2000-01	45332000	13820469
2001-02	51800000	16400000
2002-03	58099289	18269153
2003-04	64935168	17844999

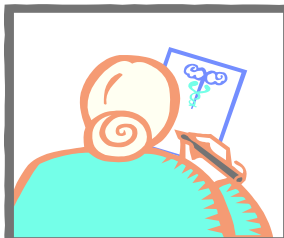
To meet with the changing expectations of the market, Vasudhara has initiated Clean Milk Production Programme. Under this programme, the focus is on Quality of milk at the production level. Special training is provided to the farmers and the Society members for improving the quality at the time of milking. The Hygiene factor is of prime importance in this drive. During the year 2003-04, 120 societies are adopted under this Programme. The out come is encouraging.

Another new terrain Vasudhara Dairy ventured in to, was to involve the **RURAL WOMEN** in to the business of dairying at village level. It is the woman who does all the work of grooming the cattle, feeding it, milking it and pouring the milk to village society. Taking a clue from this, Vasudhara decided to give the management rights of the village societies to women. Wherein all the activities of the milk society is taken care of by the elected management committee from the society which comprises all the women members. *What started as a novel concept has become widely popular and got accepted very well by the women milk pourers of the rural villages.* Today, Vasudhara boast of no less than 466 successfully run women societies out of the total of 681. Which turns out to be around 68 % of the total milk pouring societies affiliated with Vasudhara Dairy. The membership strength is around 50,000 women in these societies. This number is growing rapidly and the result of this concept implementation is very encouraging.

Sr. No	Year	No. of Women Societies
1	1999-00	315
2	2000-01	334
3	2001-02	373
4	2002-03	419
5	2003-04	466

✓ **ASUDHARA's** drive for higher yield per animal and improvement in the hygienic conditions around the farmers' residence and also around the cattle shed has germinated host of other schemes targeted mainly towards improving the productivity of milk.

➤ **SWAVLAMBI GRAMIN NARI** which aims at making the rural woman independent, self sufficient and to provide self-employment through milk business. Under this scheme, Vasudhara Dairy has till date covered 8483 women members and has arranged to finance worth of Rs. 1015 Lacs. The recovery rate of **82.6 %** of the finance is very high and also indicates the sincerity with which the women members have been utilizing this scheme for their benefit.



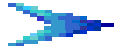
➤ **SELF HELP GROUP** scheme aims at getting best possible usage of the earned resources of the member women among themselves. This scheme permits the women members to generate and meet their own financial requirement from their earnings itself. The benefit is wide spread. It allows the woman member to save, borrow and use the finance as and when she requires to meet her social or developmental needs without obliging the lenders or relatives for her finance need. Till date, **Vasudhara dairy** has activated **421 self help groups**, covering **7169 women members** and **152 DCS**, generating savings of **121 Lacs** and internal lending of **86 Lacs** for **98 different purposes of members**.

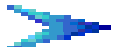



➤ **SELF HELP GROUP – GENERAL** This scheme aims at getting best possible usage of the earned resources of the member women among themselves. This scheme is operational in Milk Societies run by Gents. Women in such societies are encouraged to come up and form such groups. This scheme permits the women members to generate and meet their own financial requirement from their earnings itself. The benefit is wide spread. It allows the woman member to save, borrow and use the finance as and when she requires to finance the




purchase of Cross Bred Cows and also to meet her social or developmental needs without obliging the lenders or relatives for her finance need. Till date, **Vasudhara dairy has activated 85 self help groups in 38 Societies. covering 997 women members and financing almost Rs.194 Lacs.** The recovery stands at **Rs. 61 Lacs.**

 **CALF REARING SCHEME** is aimed at improvement of the breed of cow at farmer level. Rather than buying the cows from outside agencies, the women farmers are encouraged through this scheme to nurture the Cow calf, right from its birth in scientific way. Vasudhara dairy provides all the guidelines and required support for this scheme that includes the **vaccination, Insurance coverage, Nutritional feed and finance.** This scheme has been in implementation since last 5 years and has been accepted by **2909** women Members, taking finance of **Rs. 81 Lacs** and repaying **Rs. 23 Lacs** after successfully utilizing the fund. The offspring is **710** calf calvings till date.

 **FODDER BANK** This scheme aims to provide Dry Fodder to the Society members all round the year. Through this scheme, members are provided finance to purchase and stock Dry Fodder which can fulfill the requirements of the cattle round the year for food. The scheme was launched in 1997 – 98. during the year 03-04, through 96 Women DCS, **17000 Women Members** are given Interest Free Loans to the tunes of **Rs. 62 Lacs.** Which should be repaid in Eight Installments to the Dairy.

 **VERMI COMPOST SCHEME** The purpose of this scheme is to provide Know How to produce the Organic Fertilizer by utilizing the Agriculture, Cattle and Kitchen wastage at farmer's place. Vasudhara Dairy provides necessary Training and Technical Inputs to the Interested Members. This scheme is run under Self Help Group. In the year 2003-04, **15 Vermi Compost Pits** are established at members' place. The produce of this scheme will be utilized by the members to Increase the yield of his / her farm produces. **In case of surplus production of such fertilizer, Vasudhara Dairy will buy back such production and will do the marketing of this fertilizer to the farmers' community using its vast network.**

 **BIO GAS PLANT**
This scheme aims at serving multiple



purpose i.e. Hygiene, savings on fuel and preservation of environment. The waste and manure that the cattle shed generates are utilized in best possible way by generating methane gas, which is used for cooking purpose. The left over manure after the gas separation is again used as fertilizer for agricultural purpose. Till date, Vasudhara Dairy has helped put up 3900 Bio gas plants to Women members. The finance deployed was Rs. **108.5 Lacs** and the recovery is to the tune of Rs. **96 Lacs**.



LOW COST SANITATION Vasudhara Dairy has paid due

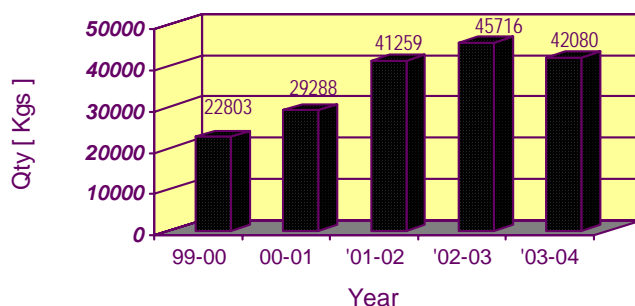
attention to the health of the farmer members and the surroundings in which he / she lives. It has focused on all possible factors which has direct or indirect bearing on the quality of the Milk. Sanitation being a vital issue of the rural dwellers, has also been taken up on sound footings. Vasudhara Dairy has a special scheme for improvement / creating of sanitation facilities. Under this scheme, low cost toilets are financed and constructed by a team of experts. The Dairy has financed **530** such low cost toilets at the cost of Rs. **18.55 Lacs** and has successfully recovered Rs. **15.05 Lacs** from the women members. Effective from **1999-2000**, Vasudhara Dairy has tied up with UNICEF in this matter and has put in to practice a plan to erect 500 such low cost toilets per year. The project is under implementation and will be spread over the period of 5 years



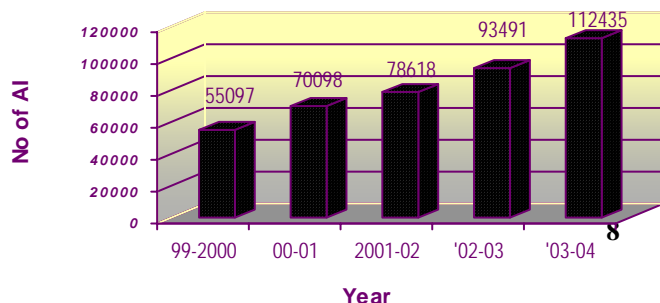
ASUDHARA also provides **TECHNICAL INPUT SERVICES** to farmers for their animals viz., **Artificial Insemination, First Aid, Vaccination, De-worming of**

cattle, Infertility Treatment, Insurance Coverage, Cattle feed, Quality fodder Seeds, Urea treatment of Paddy straw, Chaff cutters etc. Vasudhara also helps farmer members on aspect of Wasteland Development, Water shed Management and Compost Pit etc. Farmer members are given protection of Insurance cover under respective scheme.

Fodder Seed Sale



No. of AI - Growth



Under Productivity Enhancement Programme, various programmes are implemented aimed at up gradation of Cattle through network of 192

A.I. centers spread throughout Milk shed area. Our union, from the very beginning has believed in preventive way to increase the milk production like Vaccination, De-worming, Calf Rearing, Pregnant Cow care, Conservation of Fodder, supply of Balance Cattle feed, Fodder seeds and Mineral Mixture.



**SETTING TRAIL
BLAZING RECORDS IN
UNCONVENTIONAL
MANNER**

Vasudhara Dairy has always looked and thought beyond the conventional boundaries for doing business. **Innovation** has been the “Mantra” of the Management. Setting up a trust devoted to facilitate the farmers’ oriented

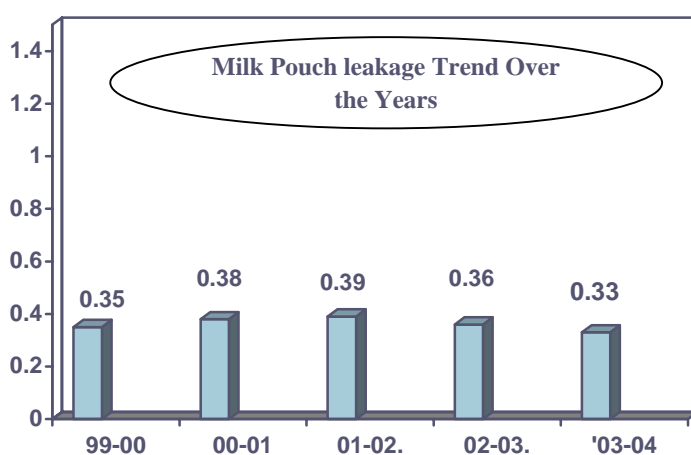
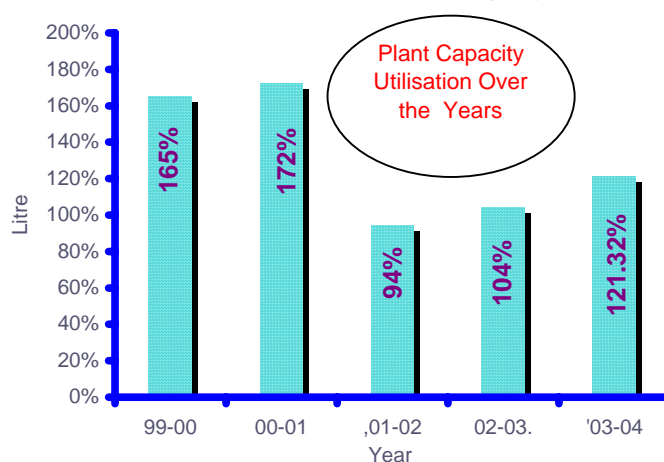
activities and giving scientific inputs to the rural farmers for upgrading their Farming and Milk Business activities and utilizing the available resources in best possible manner. It is amply evident by the objectives and activities of the **VASUDHA** Trust. The trust is a collaborative efforts of B.A.I.F. and Vasudhara Dairy. This trust is being managed by the Vasudhara’s proficient personnel. The financial requirement of the trust is being met by Vasudhara Dairy whereas the Technical inputs are provided by **B.A.I.F.** This trust carry out the activities like Bio gas plants, Cost effective Toilets, Vehicles’ loans to A.I. Workers, lending for fodder [Fodder Bank], Calf rearing, Compost Pit, Model animal Shed, Vermi culture etc. Till date, this trust has disbursed **Rs. 15.57 Lacs towards erection of 653 cost effective Toilet** units. It has also given around **Rs. 96 Lacs** towards fodder disbursement. 35 Model Animal sheds are made operational by this trust too.

A full fledged Laboratory is also made operational within the premises of Vasudhara Dairy which supplements the activities of the trust by carrying out required tests related to Animal Health to maximize the yield to the beneficiaries. This trust also has groomed a vital link between farmers and Dairy’s expertise in the field of Artificial Insemination and De-worming of cattle. This **Change Agents** are based in rural areas and are thoroughly trained by the Dairy for their assignments. They are also given basic resources to carry out the wok more efficiently. As on today, nearly **53** change agents are actively taking care of the farmers’ requirements towards their cattle care. Introduction of change agents between dairy and farmers has reduced the time period to attend the cattle and has also enabled more coverage and speedy spread of services. Vasudhara has also activated **10 Resource Persons** in rural areas. This resource persons look

after Self Help Group activities and coordinate the efforts of Dairy with the beneficiaries.

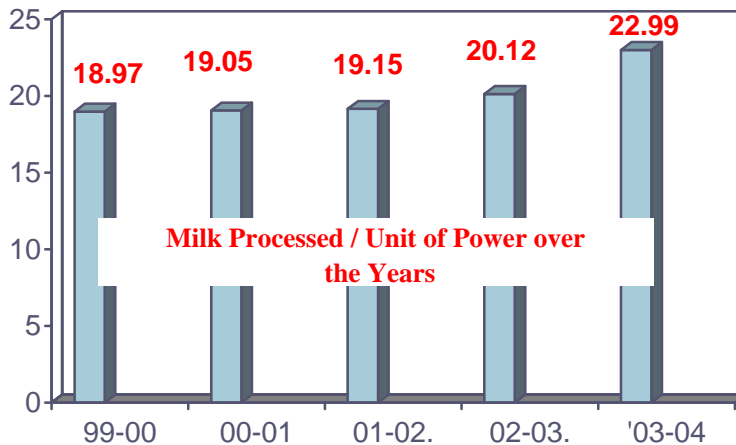
Attitude for **Growth** ~ Plant Management

The state-of-the-art Milk Processing plant located at Alipur is operational since 1981 and has been growing in terms of capacity as well as advancement in Machineries. This highly automated plant has undergone vertical capacity expansion along with modernization at Raw Milk Receipt level, Processing level and Quality Control level. The plant is being used above capacity level with a set of Skilled Personnel who have inherited 'Can Do' philosophy in terms of Innovations, Improvements, Cost Reduction and



efficient utilization of available resources. Milk processed in this plant quenches the thirst of wider spectrum of customers in western India including Mumbai, Nagpur, Boisar, Thane and

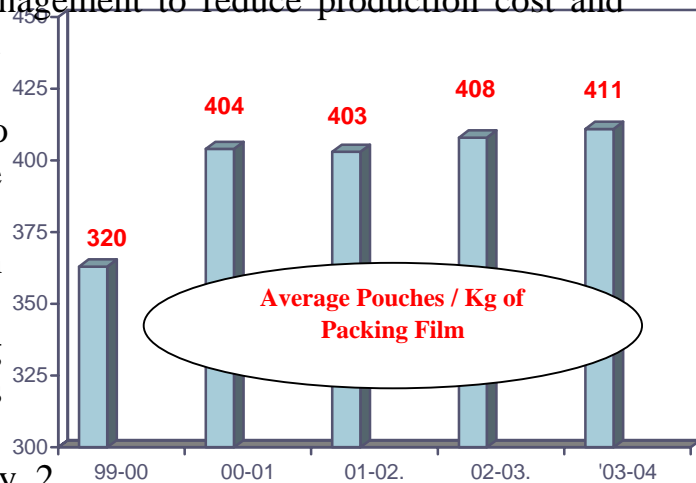
Pune cities, apart from local markets of Navsari, Valsad and Dang districts including the U.T. of Daman & Silvassa. The foot print just keeps on expanding. Vasudhara meets stringent of Quality standards for Liquid Milk and has won the accolades of AMUL



and most importantly of the Consumers. Over the period of time, new concepts like **HACCP, TQM, ISO, KAIZEN** and **TEM** have been put in to practice with a view to improve productivity and

reduce cost. The improvement is evident in various areas of Operations and has been contributing positively to the overall performance of the organisation. Concern for Environment is also of high priority. Vasudhara is also focusing on Energy management to reduce production cost and also to Improve productivity.

Game plan for this campaign is drawn out and the findings to improve the energy usages are being implemented in phased manner in close association with the experts of this field. On quality front, the Keeping Quality of processed Milk is exceeding the requirement of 8 Hrs. at ambient temperature by 2



Hrs. the MBRT of Raw Milk at Dairy Dock is 51 Mnt. Which is higher than the requirement of 30 Mnt. The average Bacteria count in Market Milk is also being monitored and worked upon with various Quality improvement programmes. The Keeping Quality of Market at ambient Temp. is 12.6 Hrs. which was 10 Hrs. during 02-03. the benchmark for this Quality parameter is 8 Hrs. Ice Cream Plants located at Boisar and Nagpur are also provided with quality processed Milk in Loose and packed form by this Dairy Plant. At present, the plant is being updated with new production facilities to cater to the ever changing demand of the market.

MILK MARKET

Where The Heart Rules!!!!

On consumer front too, Vasudhara is grooming the market with utmost care. It has spread its distribution in all directions and has established sales offices in all the major and strategic towns / cities. Currently, Vasudhara has 6 Sales Offices taking care of the Customers as well as of the milk selling agents across the width and length of its operational territory. Some of the areas i.e Saputara, Ahwa, Umergam, Sanjan, Madhuban, Khanvel, Dahanu, Daman, Krishnapur, Umarsadi, Onjal and Maroli are located at distance in all directions from the dairy plant. However, Vasudhara has made an arrangement wherein the customers in these far flung areas also get milk round the year on a twice-a-day basis.

The **COLD CHAIN** concept also was adopted as early as in 1995, when Vasudhara became the 1st Cooperative dairy in Gujarat to employ Insulated Vans to transport milk to the customers. Today, all the offices

are getting their milk through Insulated Vans /

also ground by cold the place



requirement

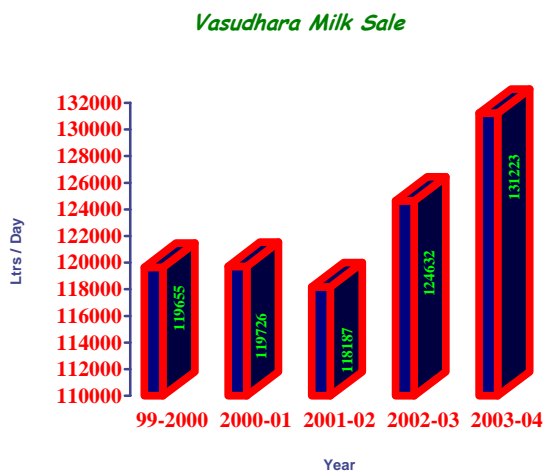
Insulated Tempos.

Vasudhara broke the establishing storages in market

rather than

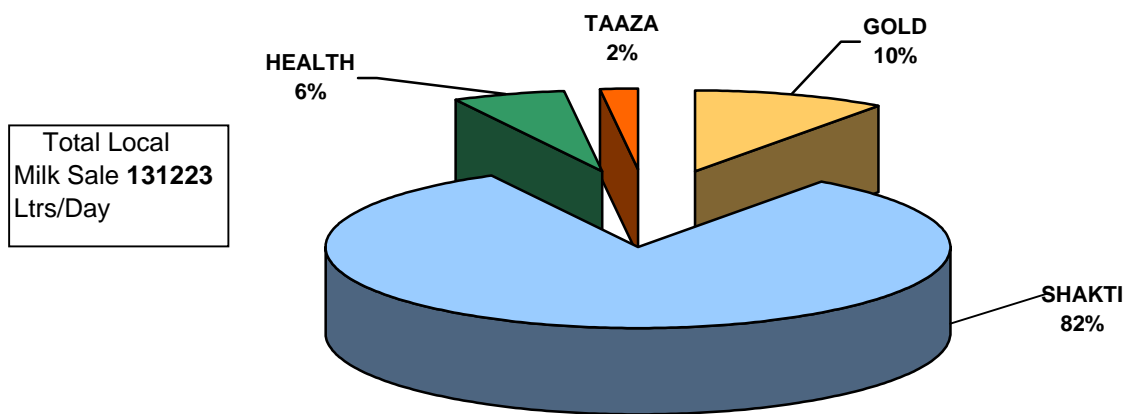
expanding the cold room facility at its plant. In July, 1999, **2 Cold Rooms of the capacity of 30,000 Ltrs / Each**, became functional at Navsari and Valsad. The purpose was very clear – Make Milk available to the market round the clock and ensure that the milk goes to the customer with best possible quality as the temperature of milk is kept under 8° C during storage period in cold rooms. In the next phase, Vasudhara is targeting the Retail points, which sell its milk. These retailers will also be given Freezers / Coolers based on their requirement in order to complete the cold chain and also to ensure that the milk delivered to the customers, in true sense, will have best quality.

A part from this, **Vasudhara** is working relentlessly towards the consumer education and awareness creation about the processed milk and the drawbacks of unprocessed milk. Vasudhara draws Housewives from the nooks and corners of the market to the dairy premises, shows them the dairy plant, Interact with them, Learn their expectations, Provide vital information about the hygienic values of Processed Milk and solve their problems / myths about Milk and allied products. By 31st March, 2004, **5000** housewives [30 % Users & 70 % Non Users of Vasudhara Milk] from all levels and religions of the society have visited the Vasudhara Dairy plant and have enriched Vasudhara



about their expectations. The out come is very encouraging. This programme has helped in gaining 2200 Ltrs / Day of additional Milk market. This programmes are conducted jointly by Marketing, Plant Operations and Quality Control personnel and ably assisted by the Administration staff.

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Contribution of Various Milk in total Local Milk Sale



During the year **2003-04**, Vasudhara also Initiated the **Milk Packing and despatch to Mumbai & Boisar markets under the Brand of AMUL**. The response was very encouraging and the demand soared to a dizzy height of **71,951 Ltrs / Day**.

This rapid spurt in AMUL Milk demand in such a short time in a highly competitive Mumbai market speaks for itself about the customers' acceptance of the Quality of Milk being procured and processed at Vasudhara Dairy.

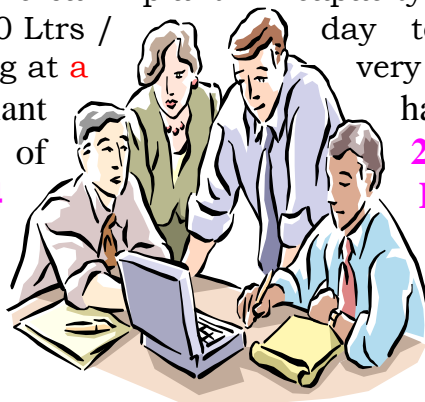
To cater to this fast growing requirement of **AMUL Milk**, Vasudhara also acquired on rental base, a Milk Processing and Packaging facility at Navi Mumbai [**IGLOO Packing Station**] for effective execution of Milk distribution with the best possible quality of milk at customers' door steps. At present, Vasudhara Processes and packs AMUL Gold, Shakti, Taaza & Slim N Trim in various pack sizes ranging from 500 ml to 5 Ltrs.

*Vasudhara Dairy is embarking on a brand new, high tech & highly automated Dairy Project of **2,00,000 Ltrs. / Day** capacity, to be based at Boisar. This Dairy project will cater to the ever increasing Milk Demand of Mumbai market. It is expected that this project will go on stream by the August '05. going by the present Milk demand situation in Mumbai, this new Dairy Project will kick off with a market demand in excess of **1,50,000 Ltrs./ Day**, making it a operationally viable venture from day one.*

ICE CREAM PLANTS




To sustain the viability of this dairy project, the management of the union has taken certain decisions which has a Lasting and strong influence on its financial performance. The decision to manufacture Ice cream is one such example on commercial front. Vasudhara Dairy took up an ice cream manufacturing facility in November, 1997 at **Boisar** and upgraded it to a level of best production facility in the industry. Initially, the production capacity was 10,000 lts of Ice Cream per day. A green field project of this capacity would have cost us around Rs.9/- crores and would have taken approx. three years of time. Ice Cream manufacturing commenced in this plant from 1st November 1997 under the Brand name of “**AMUL**” and is being marketed by GCMMF. This Ice cream plant capacity has been beefed up from 10000 Ltrs / Day to 20000 Ltrs. /Day and is operating at a very high level of efficiency. Boisar plant has produced Ice cream at an average of **22,824 Ltrs / Day** and Sold **22,878 Ltrs / Ltrs/ Day** for the year 2003-04. During the Year, the average **AMUL Milk** Sale stood at **18,992 Ltrs /Day**.



The 2nd **Ice cream manufacturing facility** is **acquired** and **commissioned** at **Nagpur** in the month of **May '02**. This plant had the production capacity of 2,500 Ltrs/ Day of Ice cream. The plant has been expanded to a capacity of 5000 Ltrs / Day for Ice cream manufacturing. This plant also Sells AMUL Milk. During the year the average Ice Cream Production was at **4,626 Ltrs/Day**. While the average sale of Ice Cream was **4,505 Ltrs / Day**. The Long Life “**AMUL KOOL**” Flavoured Milk Sale during the year was **3,144 Ltrs./ Day**. Nagpur plant also sold average of **20,702 Ltrs. / Day** of **AMUL milk**.

GROWING BEYOND BOUNDARIES BY ACCEPTING NEWER CHALLENGES


' Can Do '


 **ASUDHARA** has paid equal attention to the utilization of resources, up gradation of skill set for Employees through Training and its commitment for the Customers by taking series of Innovative and successful steps.


In order to match with the changing time and scenario of the market and the economy, Vasudhara is gearing up its business practices and implementing new and modern practices in order to be eligible and competitive on global scale.

Adherence to **TQM** and **ISO / HACCP** norms for conducting business are the examples of the vision and commitment of the management to grow in the future.

Vasudhara has also initiated **Clean Milk Production** as well as **Good Manufacturing Practices** that improves the Quality of the end products. Introduction of **Automation** at various level on precision equipments to safe guard the quality of Products.

 Energy savings is also on the agenda to control costs. Range of initiatives have been taken to reduce the operating costs. Installation of Solar water heating system for feed water to Boiler. An advance programme Called – **Total Energy Management** is introduced in phased manner during the year.

 Introduction of latest **UASB** { Up-Flow Anaerobic Sludge Blanket } technology for treating Dairy Effluent. This technology is introduced for the 1st time in Cooperative Dairy Sector in our Country. This technology enables us to reduce power consumption in treating the waste water and Methane gas is generated from the effluent, which again is the source of energy.

 Winning **National Productivity Council** awards seems to have become a habit at Vasudhara Dairy. Vasudhara has won this prestigious awards as 2nd best Liquid Milk Plant in India for the years – **1993-94, 1995-96** and **1996-97**.

✧ Received **ISO – HACCP** certification from QAS- Australia for Alipur Dairy Plant. 4 surveillance audits have taken place and the drive for Improvement keeps rolling on. During the year, Vasudhara Dairy successfully qualified and achieved more stringent **ISO-9001:2000** Certification.

✧ Boisar Ice cream plant already had its **ISO** certification for the **ISO-9001:2000**.

✧ Boisar Ice Cream Plant has been awarded the **Best I C M U** in **Stock-Age Monitoring** by **GCMMF** during the year 2003-04.

✧ During the year, Boisar Ice cream plant also received the Award for **Exceptional Manufacturing Performance** for the Year 2002 from **Tarapur Industrial Management Association [TIMA]**.

✧ Boisar & Nagpur Ice cream plants are **modernizing themselves with State-Of-The-Art modern Automatic Ice cream manufacturing machineries**, being imported from the world renowned manufacturers of Ice cream machineries.

