



KHEDA DISTRICT CO-OPERATIVE MILK PRODUCER'S UNION LTD. ANAND

AMUL Going Eco-Friendly Through Sanitation





AMUL : Safe Sanitation Drive as a part of Clean Milk Production

In 1946 in Kaira District , a group of farmers organized a meeting to form a dairy cooperative. This was done so that the farmers can get fair price against the milk they supplied in the market. The outcome of this farmers meeting was the establishment of Kaira District Cooperative Milk Producers' Union Ltd, Known as AMUL Dairy. Amul dairy is one of the pioneering milk producers' union which has best standard right from procurement to marketing of milk and milk products. It has made possible for millions to transform their economic and social condition. Amul through its various programme had impacted the lives of landless, marginal and small farmers who are engaged in milk production. Amul has provided economic boost and increased employment opportunity.

At present Amul's milk production is backed by 1195 dairy cooperative societies. Out of these milk societies 1050 have ISO certification and same number of societies have bulk chilling processors. Amul encourages participation of women dairy cooperative and ensures their active presence in the governance of the society. There are exclusive women dairy cooperative societies (15) where they are authorized to make their own decisions in meeting. The villages milk societies and the bulk milk coolers are maintained to keep them in clean and well lit condition.

Next to milk societies, it is also important for dairy members to stay in sound and hygienic living condition as it has direct impact on quality of milk they supply. Therefore needs to change their behavioral practices by accessing sanitation systems and its usage. One feels shame to go out for open defecation an also hazardous to environment and public health, which can spread dangerous diseases, 80% water borne diseases occur due to absence of sanitation system. In absence of toilets especially women and girls in particular has to face many challenges and are put to shame. Toilets provide them safety and shields them from infectious diseases. To get pure water, pure air and nutritious food, it is necessary that human excreta be disposed in scientific and simple manner which is only possible by constructing toilets at each household in village. So we design a simple 3x3 feet toilet that can last for 20-25 years.

As a part of Clean milk production programme Amul started an initiative focusing on generating awareness on safe sanitation . During the course it was realized that apart from awareness generation, the community required financial as well as technical support to establish safe sanitation system. Amul started Total Sanitation Campaign Scheme in 2011-2012 and constructed 14000 toilets at door step of milk producer member, in its milk shed area at the end of December 2013. (Anand & Kheda)

Our Supporters : (1) District Rural Development Agency, Anand & Kheda, (2) National Housing Bank, Ahmedabad, (3) Finish Society, New Delhi

National Housing Bank : To promote safe sanitation AMUL has secured development loan from National Housing Bank, it extends zero % interest loan to members. Amul through its own funds repays the interest to NHB. The members pay ₹ 100/- per month irrespective to the loan amount. Amul has secured a loan of INR 7 crores in two installments. INR 2.4 Crores for construction of 5000 toilets (Phase I) and INR 4.6 Crores for the construction of 10,000 toilets (Phase II)

District Rural Development Agency Anand and Kheda:

Amul put efforts to link the community members with Total Sanitation Campaign which is government

assisted programme to facilitate sanitation activities. DRDA provides subsidy ₹ 3200/- to BPL beneficiary and ₹ 2000/-to APL beneficiary.

FINISH Support to Amul:

1. Support for conducting base line survey.
2. Support for the developing IEC materials,
3. Film Show 'Lets Make it Right' for community members.
4. Animator and Mason Training Programme.
5. Provides incentives for animators & project coordinators to enhance the awareness & importance of sanitation in rural India.

Selection of Sustainable and Affordable Toilet at village level :

AMUL prefer to construct leach pit pour flush toilets which are low cost, sustainable, requires less water and affordable to common man in rural area. Unit cost of toilet was ₹ 7200/-

Its break-up is as:

| Particulars | BPL Beneficiary (₹) | APL Beneficiary(₹) |
|---------------------------|---------------------|--------------------|
| Beneficiary Share | 700 | 700 |
| Govt. Subsidy | 3200 | 2000 |
| Amuls' Interest free loan | 3300 | 4300 |
| Total | 7200 | 7200 |

Interest free loan provided by Amul will be recovered by deduction of ₹ 100/-per month from milk bill of beneficiary. (BPL-33 month & APL-43month)

Estimated Rate of material for unit of Toilet

Toilet Size :- 3' x 3' inner dimension 6'5" height.

Single bricks partition wall, two bricks Column pf 9"x9" including inner & outer plaster with Foundation of 0.5 Mt Depth.

Requirement of material for Toilet super structure block and Leach pit

| Sr. No. | Description of Item | Qty. | Unit | Rate (₹) | Estimated cost (₹) |
|---------|---|-------|------|----------|--------------------|
| 1 | Dark Red color bricks (9"x 4.5"x 2.75") | 650 | Nos. | 4.00 | 2600 |
| 2 | Medium fine sand | 40.00 | Cft. | 15 | 600 |
| 3 | Cement | 3.00 | Bag | 230 | 690 |
| 4 | Rural pan/Orissa pan | 1.00 | Nos. | 130 | 130 |
| 5 | Chennai pipe / PVC | Nos. | 2 | 40 | 80 |
| 6 | Glazed White tiles 12"x8" | 2.00 | Box | 110 | 220 |
| 7 | G.I.sheet steel door (72"x27") | 1 | Nos. | 750 | 750 |
| 8 | Ventilator (1'6"x1') | 1 | Nos. | 30.00 | 30.00 |
| 9 | Top cover slab & leach pit cover (Rough Kota stone (4'5"x2') | 4 | Nos. | 150 | 600.00 |
| 10 | Labour cost for super structure & leach pit | 1.00 | Job | 1500 | 1500 |
| | | | | Total ₹ | 7200.00 |

General Specification of Toilet and its Design:

General Specification of Toilet

Toilet Size : Inner measure :-----36" x 36"

Outer measure :-----44" x 49"

Height :-----72.6

Foundation Masonry Work :

Constructing 23 cm thick brick masonry wall in foundation up to 45 cm height.

Brick Masonry work above plinth:

Front wall height 6 ft 4 inch and Back wall height 5ft 9 inch with thickness 11.5 cm & fixing of door frame between two columns each of size 23 cm. Fixing of precast ventilation (size:1 ft x1.6 ft) at the height of 4.5 ft on one of the side wall.

Earth Filling

Earth filling in plinth trenches, inner & outer sides of the foundation by excavated earth to the required level including watering, ramming, consolidating, dressing if required etc complete as directed.

Toilet roof / slab

For this use pieces of size 50"x24" two Kota stone or precast of size 50"x18" three precast slab and join them by filling cement mortar. Slope from front to back is up to 3 inch, on roof slab construction 11.5 cm thick one masonry layer with fixing of one water sputa in backside.

Toilet Flooring:

Providing and laying (1:5:10) Brick Bat Cement concrete of 10 cms thick (1:4) cement mortar bed and joints filling with white cement slurry etc complete.

WC pan for Toilet:

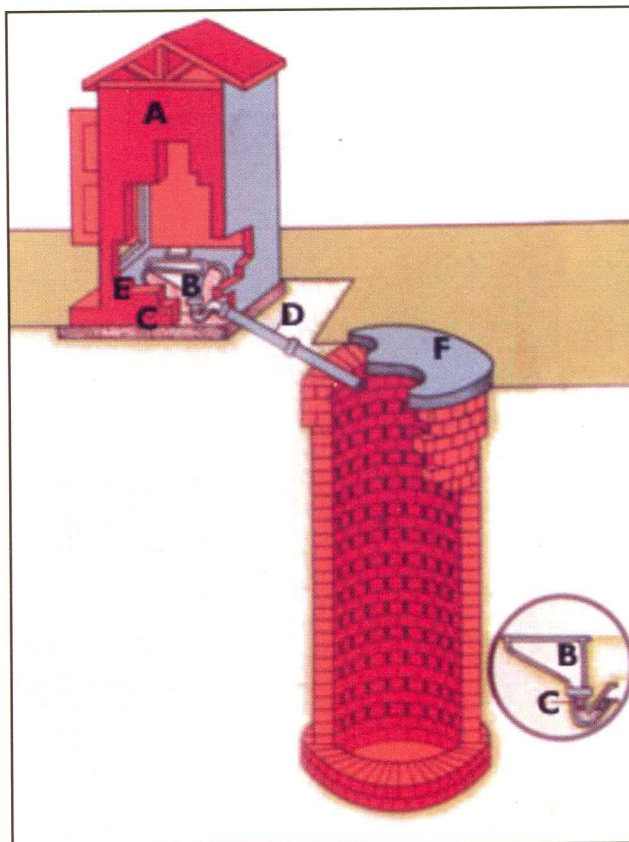
White Glazed Rural pan of first quality having integral flushing ring of suitable type with uniform & smooth surface.
(Pan size: 47.5cm long, 12.5 cm width in front and 20 cm in back with 7 cm depth.

Water Trap:

Fixing of P-Trap with Pan for mud flushing.

Drainage pipe:

Supplying and fixing of 4 inch diameter and 5 ft long PVC pipe or ceramic pipe with necessary slope.



Construction of leach pit:

Excavation of leach pit is 1.0 m far from the toilet plinth, depth of leach pit should be 10 ft and inner diameter is 3.5 ft.

Bricks masonry for the construction of leach pit in (1:6) cement mortar, makes the thickness of lining 10 cm to 12 cm. The lining in the brick work should be honey comb up to the invert level of the incoming pipe. The size of hole should be about 5 cm wide. If soil is sandy reduced it to 1.2 cm to 1.5 cm For simpler construction provide holes in solid brick work & plaster with cement mortar 1:3.

Cover Slab for Leach Pit:

Use (2 ft x 4 ft, 25mm to 37.5 mm thick) Dholpuri stone or precast block to cover leach pit. Joint of two stone with (1:4) cement mortar, filling of earth on leach pit.

Door:

Height of door should be 6 ft with 9 inch ventilation at top, angle use in door frame should be of size (25x25x3)mm. Angle use in door shutter is size (20x20x3)mm. Corrugated GI sheet of 22 gauge should be used. Weight of door should be 15 Kg.

White washing:

For white washing of toilet use 6 Kg. Lime, 1 kg Gum, 250gm indigo. Three coat white wash on wall..

Quality of material used:

Cement : Cement should be of ISI mark and standard 43 grade cement like Ambuja, Binani, Ultra-tech, J.K.Laxmi, Sandhi, Kamal, Siddhi.

Bricks : Bricks with ISI standard size (9"x4.5"x2.75") and should have regular shape & size.

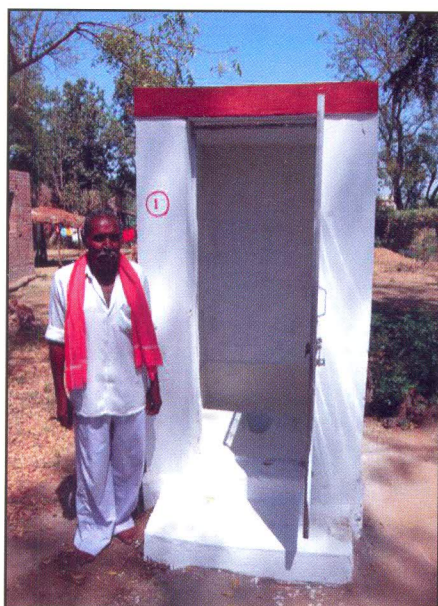
Sand : Fine sand should be used.

Glaze Tiles : White glaze tiles of standard size & quality should be used.

Door : Galvanized sheet use in door to avoid rusting and its weight is 50 KG.

Some points user must know while using the leach pit toilet:

1. Pour little quantity of water on pan before it is used, it helps excreta slides down on water seal & to pit easily.
2. Toilet should be regularly cleaned by brush or broom.
3. Do not use any chemicals & detergents to clean the pan, it kills microbes resulting in less degradation to waste.
4. Do not allow Kitchen water& bathing water to enter the toilet.
5. Solid materials like sanitary napkins paper, plastic items should not put into the pan as it blocks the water seal& to pit easily.
6. Vent pipe not required on leach pit pour flush toilet, gas produced in pit are diffused in soil through the honey combs, gases produced are mainly carbon dioxide & methane.



Completely Constructed Toilet attracts other producer members.

Challenges Face To Start Sanitation Project.

To implement sanitation project and make it a priority necessity, we have to face many challenges, as Awareness, Financial, Procedural, Technical, Design, Environmental and Construction but our Managing Director guided & advised our team at each corner nicely so that the complete project run smoothly.

As social challenges, to change existing mindset, beliefs and myths. Amul concentrate on IEC(Information, Education & Communication) activities, Amul brought out IEC material, mostly pamphlets, posters and toilet catalogue which contains the complete and detail information about specification of the toilet construction, this material was circulated amongst wider audience during meetings specially women, girls, aged & physically challenged persons, The pamphlets mainly focused on the importance of having household toilets along with the costs associated for its construction, its benefits pertaining to health aspect. How it reduces their medicinal expenditure, how it improves their social status and how it affect clean milk production. Through various informative materials, the community was also informed about the

government support/subsidy that the community could avail.

FINISH film, "Let's Make it Right" was shown to community members which has great impact on women and girls. Film show also arranged in schools to aware the children about self cleanliness and sanitation importance, to develop good habits and get shields from infectious diseases.

Animators Training Programme

To implement project effectively we engaged 20 animators for the awareness programme in village, Special three days training programme was arranged for these animators, Experts from FINISH Society and WASTE conducted this training programme, they share their knowledge and experience & equal opportunity given to all animators to show their talent. These animators along with local society staff arranged awareness meeting at village level, arrange road show and puppet show to imbibe sanitation importance, this make the scenario demand-driven rather than target-driven.



Training Programme for Masons

To construct good quality, sustainable, uniform, technically perfect toilet, Amul with Finish Society arranged 3 days Training Programme for Masons (30 masons) in village Ankalavadi near Anand. Theoretical as well as practical training carried out under the guidance of qualified consultant from FINISH Society, New Delhi. While training 15 toilets were constructed by masons under the guidance of consultant. Consultant gave some new ideas useful in fitting toilet tub, trap & pipe. They observe skill and talent of each mason, check and correct their mistakes. As all masons are well trained and have no any confusion about toilet construction all the toilets constructed in AMULs' milk shed area have a uniform shape, size, height and attractive in look.

Peoples Participation and Interest:

In beginning peoples hesitated to participate in our project as they believed it was the same as proposed by various governments earlier which couldn't satisfy their needs. They were not ready to contribute the specified sum of ₹ 700/-. With constant encouragement and motivation we convinced our first 10-15 beneficiaries from a village and start construction work of toilet at their house. Completely constructed toilet attracts the other villagers, as the constructed structure satisfied their needs at affordable cost with negligible installment of interest free loan, they becomes ready to construct toilet at their house. Like-wise slowly by mouth to mouth publicity we are able to convince entire village and other near by villages. Women and school children played main role in promoting and convincing their relatives, friends in other villages to join this project & be benefited. Now our project started gaining momentum and demands for toilet construction increased from villages. The completed toilet score till date is about 14,000 in 300 villages in Anand and Kheda district of Gujarat. Most importantly during the construction work, the cooperation and help from villagers enabled us to achieve our target in time. It is encouraging to note from the feedback from the villages, that they have instantly started using the toilets and keep them clean also. We are looking forward for future scope, because of interest free loan by Amul more and more villagers taking interest in constructing house hold toilets. Our managing Director decided to construct 40- 50 thousand toilets in coming 3-4 years.



"Aaj Tak Care Award" for Amul's Initiatives

Amul's initiative to set up toilets in rural area of Anand and Kheda district of Gujarat as a part of its hygienic milk production programme has been recognized and appreciated by all. This social mission of Amul and its work captured the attention of media. Tv. Today Network Limited , New Delhi has awarded AMUL for this social work with " Aaj Tak Care Award" on August 27, 2013 in New Delhi.in Health Care Category.

