

**Ethnographic Study on Feasibility of
SaniShops for Urban Poor in Andhra Pradesh**

APMAS, Hyderabad

March 2012

Context, need and focus of the study

Urban poor's access to sanitation- Magnitude of the problem

- Altogether 192.44 lakh population inhabit 110 municipalities and 15 Corporations according to 2001 census. There are 7520 slums spread across 31 municipalities in AP according to MEPMA.
- Three fourths (72.59 %) of these slums are notified slums
- Proportion of slum population inhabiting notified slums of a district varies across the regions. GHMC has 86.06 % notified slums, while it is 59.24 % in Rayalaseema, and 68.52 % in Telangana and 74.04 % in Coastal Andhra.
- About 43% of urban population of the state lives in slums

Tenurial security - varying access to civic amenities

- Infrastructure facilities including drainage, drinking water and public utilities as well as tenurial security are related to recognition of slum or lack of it.
- Non notified slums provide little incentive for the inhabitants to invest in housing or toilets. Access to toilets is low in non-notified slums.
- Inter-district variations in this regard are also very high, while Vijayawada Municipal Corporation has all slums notified, it is 18.29 per cent in Kadapa.
- Households without toilets in slums of AP varies from 4.63 % in GHMC to as high as 46.32 % households in Kadapa against the state average of 18.64 % households

Objective of the ethnographic study on sanitation practices

The study aimed at strengthening sanitation interventions by government and other agencies by understanding

- social background and cultural practices with regard to access and demand for low cost toilets,
- scope of involvement of SHGs in promotion of sanitation,
- constraints in regard to total coverage of ILCS,
- assessing market and policy landscape for total sanitation, and
- devising a business model of SaniShop for urban poor

Research components and approach

The study comprised the following:

- Customer research (sanitation practices, demography of the settlements, demand assessment, constraints in adoption of toilets, etc)
- Market study for low cost sanitation for urban poor (stakeholders, pricing, access)
- Business model parameters (product focus, technical aspects, pricing, marketing levers, distribution, financial aspects, breakeven analysis, role of urban authorities and government schemes)

Slums covered in the study

<u>Municipality</u>	<u>Region</u>	<u>Slums</u>	<u>Select slums</u>
GHMC	Capital city	2	NTR Nagar, Fatullaguda
Proddutur	Rayalaseema	2	Swaraj Nagar , Modempalli
Patancheru	Telangana	1	Ambedkar Nagar
RCPuram	Telangana	1	ICRISAT Fencing Area
Bhimavaram	Andhra	2	Ward No 7 and 27
GVMC Nagar	Andhra	2	Kobbarithota, Gandhi

Ethnographic Scenario of Access to Toilets

- Life in slums reflects diverse forms of deprivation and gaps in basic amenities like drinking water, sanitation, and housing among other facilities
- Slums vary in size (from 200 to 15,000 population) & age from 8 years (Fatullaguda- HMC) to 70 years (Kobbarithota- GVMC)
- Slums are settlements of the poor people in general and are also settlements of particular vulnerable communities
- SC and BC households form 36.4 % and 48.6 % respectively of the total slum population. Some slums have SCs constituting half to 80 % of total population

Pockets of rural communities in the city

Slums are distinct in terms of social composition. They are like transplantation of a village or a particular community in the city

- Ambedkar colony of RC Puram reflects pockets of Pitlam and Nizamsagar mandals of Nizamabad , Narayankhed mandal of Medak and Budaga Jangala community from Rangareddy
- Kobbarithota is predominantly a fishermen community and Balaji Nagar of Gandhi Nagar – GVMC is families engaged in buying old clothes, Madiga community in Modempally of Kadapa, Yanadi tribals in John Bishop Colony of Bhimavaram
- Social cohesion and solidarity based on community is seen in most of the slums

Indicators of urban poverty & deprivation

- Houses totally cramped in a space about 20 yards without any space for kitchen, bathroom and toilet in Kobbarithota of GVMC question standard definition of Pucca house (built of cement & brick walls with RCC roof)
- Around 90.4 % of the houses in Kobbarithota are built in area less than 50 yards. Ambedkar Nagar GHMC has 34.1% houses in less than 50 yards
- Residents are forced to use the street for cooking, bathing, play, etc. Street and home is inseparable in many slums
- Better indicators of quality of life – toilet, space of house site and access to drinking water by type of source

Slum residents- owners & tenants

- About three fourths (78.4 %) of the slum residents own a house. Often owners give portion of the house for rent to supplement their incomes
- In new slums the percentage of tenants is small (ex: Fatullaguda in GHMC, of recent origin and still faced with threats of demolition, has merely 4.9 % tenants)
- Average rent is Rs 950 per month ranging from Rs 300 to Rs 1500 in most of the slums
- Older slums and slums with tenurial security have relatively more tenants

Slum life- inclusion and exclusion

- Almost all households have electricity connection, 97.8 % have individual meters
- 87.9 % have ration cards among them 98.0 % have a white card. Slums with higher proportion of tenants (ex: Patancheru Ambedkar Colony), or with low tenurial security (Fatullaguda) have relatively more families without a ration card
- Firewood is the single most popular source of cooking fuel (43.9 % households collecting it from neighbourhood or buying firewood). Only 36.8 % households use LPG
- Only 57.1 % slum households are part of SHGs

Access to drinking water & toilets

- About half the slum population (49.8 %) collects water for drinking and other needs from public taps, and 10% from water supplied through tanker by the municipality
- Only one third of the slum households have individual tap connection for water supply
- Many slum residents collect water from multiple sources - public taps and bore wells
- Some slums depend almost totally on public tap (Swaraj Nagar and Modempalli slums in Kadapa)
- Some families in slums pay Rs 60 to 150 pm to collect drinking water from neighbours (Kobbarithota, Ambedkar Nagar)

Access to drinking water & toilets

- Lack of safe drinking water and poor sanitation in slums affects health of the residents besides causing loss of working days
- More than half the slum households (56.3 %) complained of one or more members of the family having fallen sick
- Water borne diseases sometimes cause catastrophic expenditure to the slum dwellers. There are cases of deaths due to jaundice and diarrhoea
- Women, children and old members of the slum households are most affected by water borne diseases

Half of slum population have no toilets

- Sanitation practices in slums have a trajectory or upgradation over a period of time with improving tenurial security -stages from open defecation to individual toilets connected to underground drainage system
- 45.4% slum households do not have individual toilets
- Some slums have more than 75% of households without toilets (54.3 % to 77.7% in Ambedkar Nagar GHMC, Kobbarithota GVMC, Modempalli - Kadapa & Ward 27 of Bhimavaram)
- ILCS Phase I to III toilets are abandoned now due to poor construction (Modempalli & Swaraj Nagar & Bhimavaram)

Trajectory of sanitation & tenurial security

- Households with individual toilets invested huge amounts on modifications of toilets corresponding with changing tenurial security and progress of infrastructure in the slum – toilets with cement rings or poor walls to brick walls & standard roof
- Households with a toilet have moved from twin pit toilet to septic tanks or have connected to the underground drainage
- Households pay taxes to ULB to get approval for connecting their toilets to underground drainage (R s 410 in GVMC)
- Some ULBs ask them to clear all tax arrears to be eligible to connect their toilets to underground drainage system
- Only 25.65% toilets are connected to underground drainage

Preferred toilet models in slums

- Bathroom-cum- latrine is most preferred model. Toilet design reflects local conditions and varies in regard to the design
- Toilets with septic tank, brick walls & asbestos roofing are common. Single pit, septic tanks may be as deep as 15 ft
- Cost of toilets due to water logging conditions is up to Rs 25,000 in many slums of Bhimavaram
- Space constraints require toilet designs that occupy less space -house sites with 20 to 50 yards don't allow having a toilet
- Some households add one more toilet or change to western commode with ageing members in family
- Maintenance of toilets costs Rs 360 to 1200 per annum

What do households without toilet do?

- Slum households resorting to open defecation constitute 32.86 per cent of total slum population
- It is a matter of grave concern that 72.40 % of these households without toilets practice open defecation
- Only 20.70 % of these households use community toilets. Four out of ten slums in study area have community toilets
- Similarly 6.90 % households use other's toilets
- Sometimes they use the toilet at work place

Problems of open defecation

- People going for open defecation face several problems due to growing pressures on open spaces in slums
- It is increasingly difficult to continue open defecation as open spaces are vanishing in most slums
- Open defecation is practiced in areas like agricultural land, railway track, adjoining private land, even graveyard.
- Deaths due to accidents on railway track are reported in Bhimavaram. There are also cases of snake bites
- Open defecation is a serious threat to health & safety of women due to menace of pigs

Open defecation- hardships of women

- Women and adolescent girls attend nature's call before daybreak or after it turns dark
- Carrying a pail of water before men is quite demeaning
- Women are afraid of being mugged and also attacked by snakes and scorpions when they venture in the dark
- There are incidents of pigs hovering around attacking women
- Life become even more wretched in rainy season as the entire area becomes slushy and stinks
- Women going for open defecation carry metal objects like sickle or knife to ward off evil sprits in the graveyard

Community toilets- a faulty option

- Community toilets are of two types viz., free and user fee
- Free toilets are relatively unhygienic and poor in maintenance
- Community toilets have user fee of Rs 2 per person (GVMC Kobbarithota & Gandhi Nagar) or Rs 50 for monthly family card (Balaji Nagar of Thotagaruvu area in GVMC)
- Slum residents using public toilets not only spend Rs 1500 to 3000 per annum but also suffer great inconvenience
- Women use the community toilets, while a few men defecate in the open

Community toilets- poor solution

- Community toilets are closed from 9.30 pm to 5 AM forcing the households to resort to open defecation
- There is long queue at the public toilets in the early morning
- Many households in Kobbarithota – GVMC use bathroom as urinals also
- Several community toilets built 10 to 15 years ago are now defunct due to poor maintenance
- Municipalities are not showing interest in constructing community toilets

Changing perceptions about sanitation

- There is growing importance for individual toilets in the slums
- Growing favourable attitude towards individual toilets is due to changing perceptions of self respect and declining possibilities of open defecation
- Toilets are becoming an inseparable element of life in slums
- Increasing number of slum households having toilets without any government support / subsidies for toilets during last decade is evidence of the importance attached toilets
- Almost all slum residents covered in customer research said toilet is important part of sanitation

Demand for individual toilets

- Slum residents are willing to meet cost of the toilets, although it would be really nice if some agency could subsidise it
- Very few households, 34 out of 1120 or 3.0% of the total sample have applied for government sanction for a toilet
- Only 9 (0.8%) households expect government to sanction the request
- Slum residents prefer toilets costing between Rs 10,000 and Rs 12,500 including super structure costing up to Rs 6,000
- Cost of the toilet will be less if it can be connected to underground drainage

Loan requirement for building a toilet

- A large section of the households who did not have a toilet considered taking a loan, if available
- 80.9% households planning for a toilet required a loan of Rs 5000 to 15,000.
- Those who required loan up to Rs 5000 constitute 17.2%
- 73.88 % households preferred repayment of time from 6 to 24 months. A small section (8.28%) liked 6 months repayment
- 12 to 24 months is preferred by most as it would not require significant diversion of resources from other needs

Stakeholders' feedback on SaniShop

SHGs' perception of sanitation & taking up SaniShop

- SHGs, present in every slum, play multiple roles in their interface with government , NGOs & financial institutions
- SHGs form critical element in poverty alleviation programs in AP. There are 9004 SHGs as part of MEPMA in AP
- All SHGs have 10 members and are 3 to 12 years old. Most of the SHGs are effective in regard to savings and repayment
- Total savings of SHG range from Rs.4920 to Rs.100000. Amount of latest loan for each member is Rs.10000 to Rs.40000

SHGs' perception of SaniShop

- All SHGs are positive towards SaniShop as it would help reduce the cost with right design and become collective enterprise for income generation.
- All SHGs expressed interest to work as employees in SaniShop
- Only six SHGs expressed interest to explore scope of taking up a group venture for manufacture /marketing of sanitation materials
- Two SHGs, associated with APMAS, are keen to try out SaniShop concept

Concerns & Needs of SHGs

- Three SHGs expressed interest to discuss the idea further with the members and decide possibilities
- Investment capacities are not major concern. SHGs in NTR Nagar and Fatullaguda are confident of mobilizing subsidies and bank loans
- Lack of earlier experience in collective enterprise is a major constraint
- All SHGs mentioned they need training and handholding to implement SaniShop

Masons' feedback

- Masons , the key actors in sanitation activity, are main agents of information for popular and feasible design for customers
- Toilet design is affected by their skill set and understanding of a desirable toilet
- Most of the masons are also residents of the slums
- Masons are favourable to recommending customers to SaniShop
- Masons are interested to take training in designs that reduce total cost of the toilet as it enhances demand for toilets & employment for them

Response of Sanitaryware dealers

- Sanitaryware shops expect increased demand for toilet construction materials with re-launching of ILCS programmes.
- Some of the shops did sell large number of toilet pans and other materials for ILCS programme
- Wholesale dealers, focused on product base or on a range of items of a sub group, or shops catering to the rich selling only branded sanitaryware do not see SaniShop as a competitor
- They are willing to sell any new product if the quality is good and competitive in price

Response of Municipal Authorities

- ULBs are important forces that drive the industry of low cost sanitation and toilet construction
- ULB authorities plan to launch ILCS Phase IV under which altogether 644,911 toilets will be built in two years period
- ULB authorities could engage SHGs/SLFs or NGOs in IEC and construction of toilets
- Proddutur Commissioner expressed interest to facilitate SLF to start SaniShop enterprise under USEP/ UWSP
- Bhimavaram Commissioner likes to train SHGs in toilet construction or in manufacture of sanitaryware products

Demand for low cost sanitaryware in slums

- Sanitation industry is fast growing and independent of the government policy, although support of the government adds additional market.
- Demand for sanitary ware is due to demographic factors as well as changing urban policy with regard to sanitation
- There is explosion of slum population in AP
- Growing importance attached to the toilet by urban poor
- Policy environment (Slum Free Municipalities, RAY, ILCS Phase IV) builds scope for additional demand for sanitaryware

Growing demand for low cost sanitation

- A massive programme for construction of 644911 toilets with an outlay of Rs 64,491 lakh is awaiting approval of Gol
- Re-launch of ILCS phase IV likely to increase demand for toilet construction material
- There is a small section of slum population who likes to add one more toilet with the growing tenurial security and as part of incremental housing typical of slums
- Cleaning agents are purchased regularly by all households having toilets.

End user – the slum resident

- About half of slum population in AP is market for low cost toilet material
- Urban renewal programmes and improving tenurial security promoting basic amenities increases demand for sanitaryware
- Reduced costs through design changes or competitive prices ensure s toilet construction within Rs 10,000
- Customers benefit by reduced cost of toilets with proper counselling on appropriate design
- Loan facility for construction of toilets by NGOs ensures urban poor to have toilets with or without government assistance

SaniShop- features

SaniShop is one-stop-shop for materials required for low cost individual toilet for slums.

- Unique feature of SaniShop is also that it is run by SHG of urban poor or NGO
- SaniShop also provides information on appropriate design that could reduce the costs of toilet construction
- SaniShop collaborates with NGOs like APMAS or SHGs/ SLFs that provide loans to slum residents to build a toilet
- SaniShop could be of two types viz., retail SaniShop or a blend of retail with manufacture of select materials

SaniShop products

- The product mix includes orissa pan, P trap, drain pipes, ventilator, asbestos sheet, door (wooden/ metal), red oxide, cement bricks and cement rings, cleaning agents
- Manufacturing can also be undertaken to make cement bricks, cement rings and ventilators
- SaniShop could start with retail activity and expand to manufacture or straight away have a blend of both
- A blend is ideal as it provides employment for SHG members which could mobilize resources for investment

Organisational options

SaniShop could have three kinds of entrepreneurs

- SHGs or SLF are not ready for collective enterprise. Existing groups reaching consensus on new forms of organisation/ activity requires preparation. SHGs/SLF may take up in future on seeing successful functioning of SaniShop
- Women with entrepreneurship may start group enterprise. Potential women may be identified and assisted. The group could access avail subsidies under USEP/USWP
- APMAS could pilot SaniShop strategically in select ULBs in 3 or 4 regions to demonstrate viability so that SHG/SLFs could come forward in future & mainstreamed by SHGs/ NGOs

Financing of SHGs running SaniShop

Funds required for SaniShop enterprise may be mobilised from:

- **Bank loan 60 %** (without collateral security & repayment schedule of 3 to 7 years after initial moratorium of 18 months)
- **Subsidy 35 %** under USEP & UWSP as group enterprise by SHGs/ TLFs with a minimum of 5 urban poor women. UWSP groups can avail a subsidy of Rs 3 lakh or 35 % of the project cost (or Rs 60,000 per member of the SHG) for income generation activity. There is no maximum limit of project cost.
- **Entrepreneurs' investment/** Margin money is 5 % of the project cost

Economics of SaniShop

Fixed costs: Fixed costs towards advance for the shop, furniture & fixtures require around Rs 50,000 (may be higher in GHMC areas and less in smaller ULBs)

Recurring costs: Costs on human resources (Manager -cum- accountant, an Assistant & an Attender) are estimated at Rs 10,500 per month.

- Other costs for rent, electricity, maintenance and hospitality @ 6500 pm
- Materials/ Stocks of 50 units of toilets are proposed @ Rs 275800 (Rs 5516 X 50 units)

Break even analysis for SaniShop

A loan of Rs 211,770 is required which carries 12% interest rate (to be on the higher side)

- If SaniShop plans to realize the initial investment of Rs 50,000 on furniture & fixtures within 1 year, then for that one year it should sell 17 units every month to break even
- It is required to sell 15 to 20 toilet units to realize their initial investment of Rs 211,770

Assumptions: A group of women entrepreneurs promoting SaniShop avail subsidy of 35% on initial investment of 3.26 Lakh

- Interest expense that is calculated is simple interest @ 12%

Thanks